

# Conference Proceedings

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Multiple Voices in Democratic Education:  
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## INTRODUCTION

The papers contained in the Conference Proceedings represent scholarly work completed during the academic year 2004-05 by first-year graduate students enrolled in the Master in Teaching Program. These teacher candidate authors worked through a series of phases in bringing their papers to the production stage. They started with annotated bibliographies, selected and developed topics, conducted reviews of research on their respective topics and ended their papers with recommendations for practice. Authors followed the documentation guidelines from the American Psychological Association. To reach the stage of inclusion in these proceedings, papers had to meet required performance levels as articulated by their faculty in a detailed conference paper assessment rubric. For this Winter 2006 conference at which these papers are being presented, teacher candidate authors were required to enhance their oral presentations with professional posters and projected media in order to emphasize key aspects of their papers.

As the Table of Contents to the *Proceedings* attests, the students of the Master in Teaching class of 2006 have investigated a wide range of critical issues that face teachers and their schools. Topics range from specific classroom applications to broad policy issues.

A huge congratulations is extended to these authors from all of the faculty who have been involved in this process.

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## **English Language Learners and The No Child Left Behind Act: Supporting Students within the Confines**

*This paper examines the No Child Left Behind Act of 2001 (NCLB) with specific regard to English language learners (ELLs). ELLs are a growing population; under NCLB, they are held to the same academic standards as their native English-speaking peers, which presents challenges for both students and educators. Peer-reviewed research about specific educational needs of ELLs and the effectiveness of standardized assessment as a measure of achievement for this population of students is considered. The article concludes that while ELLs can and do meet high standards of achievement, the full picture of their learning cannot be measured within the confines of a standardized test designed for native English speakers. Alternative forms of assessment are considered and recommended for further inquiry.*

The No Child Left Behind Act (NCLB) of 2001 was signed into law by President Bush on January 8, 2002. According to the U.S. Department of Education, NCLB ensures accountability, flexibility, and increased federal support for public education. The Department claims that under this Act public schools will be more inclusive, responsive and fair: "The law ensures that all children—from every ethnic and cultural background—receive a quality education and the chance to achieve their academic potential" ("Guide to Education," 2004, p. 16). NCLB promises the opportunity to succeed to all children, but it does not follow through on this promise. This paper examines the unique situation of English language learners (ELLs) in relation to NCLB with specific regard to standardized assessment.

Exact projections of the number of ELLs in the United States vary greatly, but all agree that the population is increasing rapidly. In the face of this growth and current NCLB regulations, public schools must be prepared to work with ELLs in ways that best accommodate their particular strengths and needs. This paper begins by examining some of those particular educational needs, which are both linguistic and socio-cultural. It is important to keep in mind throughout this discussion that, "ELLs are not a single population sharing a single trait; they are a varied population with varied and constantly changing levels of proficiency" (LaCelle-Peterson, 2000, p. 32). English Language Learners range from recent immigrants arriving from countries around the world, to citizens born into families where a language other than English is spoken at home. Some ELLs come to U.S. classrooms with a great deal of formal educational background and others come with very little; the diversity amongst ELLs, on all levels, is great.

A look at the term "proficiency" is in order before continuing. Cummins (2000) argues that there has been a shift from seeing proficiency as a "trait that individuals possess in varying degrees to seeing it as inseparable from the contexts in which it will be manifested" (p. 67). In other words, proficiency is not linear nor hierarchical but contextual. Yet, proficiency continues to be measured and judged by linear and hierarchical techniques in public schools. Students are administered tests of English proficiency, which determine, in part, the classes they take. When placed in ESOL (English for Speakers of Other Languages) programs, students are later tested on their proficiency again to determine if they are ready for mainstream classes. Proficiency tests, however, cannot represent the whole picture of a student's language capabilities or lack thereof, which can result in erroneous placements.

Standardized testing is a contentious issue in today's public schools. This paper examines the emerging use of standardized tests in "high stakes" situations and the effectiveness of these tests for ELLs. Although ELLs face many of the same problems with mandated standardized tests as mainstream students, they also face particular challenges because of their shared circumstance of being English learners. Title III of the NCLB Act, which pertains directly to ELLs, is examined in this section of the paper. Testing practices in three states; -Massachusetts, Texas, and Washington-, provide specific examples of current trends in testing and the impacts of those testing practices on ELLs. The validity of standardized tests in English for ELLs is explored next. The paper ends with a discussion of alternative assessment methods that can supplement standardized tests to better illustrate actual learning and achievement of ELLs.

## Literature Review

### Some Educational Needs of ELLs

For ELLs, education is a chain of complex interactions between language, culture, and power structures. Among the unique circumstances facing some ELLs, immigrant status and social economic status (SES) are two of which educators should be aware. Immigrant status, documented/undocumented, can affect both sense of security and cultural identity, which in turn can impact academic success. Many English language learners come from economically disadvantaged backgrounds and attend schools with high concentrations of poverty, which poses the double challenge of learning a second language in a school that lacks economic resources (Walqui, 2000).

Cummins (2001) suggests that group status and inter-group relations must be considered when looking at the academic success of students of color. Since many ELLs are considered students of color in the United States, this is an important discussion in relation to their education. Positive orientation toward home culture and language is an important factor in academic success for students of color; it is, therefore, an important role of educators to value the cultures and languages of their students and to empower students to do the same. Four structural elements can contribute to the empowerment of students of color as well as ELLs: incorporation of students' cultures and languages into curriculum, inclusion of parents and communities in the educational process, critical examination and adjustment of the assumptions and practices that drive instruction, and valid, culturally appropriate assessment (Cummins, 2000). Integrating the languages and cultures of students of color into the classroom is one aspect of increasing academic achievement of ELLs; another aspect of increasing academic achievement centers on methodology of language instruction.

In developing cognitive skills in English, ELLs need context. Language learning comes in two stages of development, Basic Interpersonal Communication Skills (BICS), or conversational ability, and Cognitive Academic Language Proficiency (CALP), or academic language ability (Cummins, 2000). According to Ovando, Collier and Combs (2003) CALP can take far longer to develop:

Research has shown that when immigrants in the United States and Canada are schooled

only in  $L_2$ , it takes a minimum of 5 to 10 years to attain grade-level norms in academic  $L_2$ , and it takes even longer when students do not have a literacy base in  $L_1$ . (p. 129)

Developing CALP in a second language is largely dependent on the extent of cognitive development a student has achieved in his/her first language. Basing judgment of a student's English proficiency on oral fluency alone can be very misleading, which is why non-immigrant students who speak a language other than English at home must be brought into the discussion. These students may have developed a *conversational* proficiency in English as well as in their native language but an *academic* proficiency in neither. Educators may assume that these students are proficient in English and place them in mainstream classes when, in reality, they do not have the academic language proficiency needed to master academic content (Cummins, 2000; Walqui, 2000; Zanger, 2002).

The level of proficiency a student reaches in his/her native language ( $L_1$ ) is an important predictor of academic success in their second language ( $L_2$ ). In Thomas and Collier's (1997) extensive longitudinal study of ELLs, it was found that the minimum time required for students to reach grade-level standards in English is four years, and that this time frame is only valid for ELLs with at least four years of schooling in their  $L_1$ . Students with no schooling in  $L_1$ , "are not able to reach grade-level performance in  $L_2$ . The strongest predictor of  $L_2$  student achievement is amount of formal  $L_1$  schooling. The more  $L_1$  grade-level schooling, the higher  $L_2$  achievement" (p. 334). For this reason, the student's age at immigration is a factor:

Students who immigrate between the ages of eight and eleven are able to catch up with their English-speaking peers on achievement tests in English faster than language minority students who immigrated at a younger age or were born in the US. (Zanger, 2002, p. 56)

The later immigration occurs, the more time students have to develop cognitively in their  $L_1$ , which plays a role in their success at acquiring a second language and performing academically in that language.

### The No Child Left Behind Act and Testing

The central focus of NCLB is accountability. Under NCLB, every state must set standards for

grade-level achievement and develop a system to measure the progress of all students, and subgroups of students, toward those state-identified standards. Each state must establish a definition of adequate yearly progress (AYP) and then ensure that each school in the state is meeting that standard. Under NCLB schools are required to disaggregate their data, meaning that data is broken down and reported by ethnicity, gender, socio-economic-status, language proficiency, and ability, rather than being reported only as a lump sum number representing all students in a school. In order to meet AYP, every group of students within a school must meet the state-identified standard. If AYP is not met for two consecutive years, the school in question will be identified as “in need of improvement,” and will face the prospect of losing a portion of its federal funding. In other words, if one group of students, English language learners for example, does not meet the state identified standard for two consecutive years, the whole school faces penalties. Adequate yearly progress is determined through the results of state mandated standardized tests (Simpson, LaCava, & Graner, 2004; “Guide to Education,” 2004).

Despite growing concern that standardized tests may not be the most accurate or valid means of assessing student achievement or of challenging students to meet high cognitive standards (Bernstein, 2004; Darling-Hammond, 1994; Horn, 2003; LaCelle-Peterson & Rivera, 1994), they are required under NCLB. Standardized tests, particularly when they are in a multiple-choice format, only measure a very narrow range of knowledge, which excludes the measure of higher order thinking or performance skills. When standardized test scores are used for government decision-making purposes, teachers are compelled to teach to the test, which means that students are exposed to limited bits of material in ways that encourage lower order thinking and memorization skills rather than conceptual thinking. Standardized multiple-choice tests limit student learning and performance; in order to assess a student’s full range of capabilities, transformation of assessment practices must be considered (Darling-Hammond, 1994).

While standardized assessment may have its place, it cannot be considered an end in and of itself:

At the center of the K-12 testing fury is the myth that testing alone is able to raise

standards and rates of learning. Certainly, testing assures that what is tested is taught, but tests cannot assure that things are taught well. (Hillocks, 2002, p. 204)

If one of the goals of education is for students to learn material well, then focus must shift to teaching. Teachers are in a position to ensure that material is taught well and that students have access to the knowledge and skills they need to be successful. It is, therefore, teachers’ responsibility to provide an opportunity for learning to occur and to give students the chance to demonstrate their learning in a low-risk environment before they are tested using a standardized format (Gottlieb, 1999). Assessment should not be comprised only of one-time standardized tests that are high-risk; students need various opportunities to exhibit learning.

Large-scale standardized assessments are increasingly used as prerequisites for high school graduation (LaCelle-Peterson, 2000). This is referred to as “high stakes testing” because of the great consequence associated with not passing. The rationale behind this kind of testing is that students must show that they have mastered the “minimum skills” needed for employment, or future education. Darling Hammond (1994) argues that a set of minimum skills is an illusive concept that cannot be adequately captured on a standardized test. Furthermore, if the set of minimum skills includes those necessary for reading, writing, and critical thinking, then, as Bernstein (2004) illustrates, not all students attain those skills even with the test requirement. It is not clear that the use of high-stakes tests provides a social benefit that outweighs the immense personal and societal costs associated with them (Darling-Hammond, 1994).

### **The No Child Left Behind Act, ELLs, and Testing**

The stakes are particularly high for ELLs who face the added barrier of performing on a test that is written in a language that is not native to them. While it has been argued by many researchers that standardized tests in English, whether high stakes or not, cannot offer a complete picture of the cognitive level of ELLs (Darling-Hammond, 1994; Gottlieb, 1999; LaCelle-Peterson, 2000; LaCelle-Peterson & Rivera, 1994; Short, 1993; Walqui, 2000), NCLB requires that these students take the state mandated tests as early as their first year of school attendance in the United States (Zehr,

2004). Yet, the Department of Education acknowledges that, “children learning English face some of the greatest educational challenges due to language and cultural barriers” (“Guide to Education,” 2004, p. 16).

The issue in question for ELLs is not whether they have the ability to achieve academically, but whether their scores on standardized tests developed for native English speakers are a valid representation of that ability: “While ELLs can and do learn in accordance with high academic standards, their accomplishments will likely be underestimated if they are assessed in the same way as their monolingual peers” (LaCelle-Peterson & Rivera, 1994, p. 57). A low score for an ELL on a content area test does not necessarily mean the same thing as a low score for a native speaker on the same test; it cannot be determined by the score alone whether the student is lacking knowledge in the content material of the test or in the language of the test (LaCelle-Peterson & Rivera, 1994). Yet, under NCLB ELLs *must* be assessed identically to their peers, and more so, their scores determine, in part, the status of their schools with regard to AYP.

In her study of the implications of high stakes testing in Massachusetts, Horn (2003) concluded that:

The 10<sup>th</sup> grade results from the Massachusetts Comprehensive Assessment System (MCAS) English Language Arts and mathematics exams show that minority, limited English proficient, and disabled students will be deeply impacted by the upcoming diploma sanction. Up to 84% of limited English proficient students may not receive a diploma. (p. 37)

With such significant potential consequences for ELLs in Massachusetts, it must be examined whether such consequences will extend to ELLs in other states. Researchers must explore this issue further and if such consequences are likely for a high number of students, other assessment options must be considered. Horn (2003) concludes that, “using state-mandated large scale testing as the single measure for student-level high-stakes purposes is unadvisable” (p. 34).

In order for ELLs to be genuinely assessed, the widespread assessment methods must change. LaCelle and Rivera (1994) define assessment as, “the gathering and interpreting of information about students’ knowledge, achievements, or accomplishments in relation to

an educational goal or goals” (p. 66). Language proficiency should not be valued over content area development; as LaCelle-Peterson (2000) notes, this practice only promotes a fixation with language learning and does not encourage a balanced education. Educational goals for ELLs must include both language acquisition and content knowledge: “The story of ELLs’ education is never only about language, but at the same time it is always about language” (LaCelle-Peterson, 2000, p. 30). The challenge for educators is to focus equally on language and content: “Successfully teaching immigrant adolescents to speak English alone is not sufficient to enable them to succeed in American middle and high schools, where they will be required to perform at sophisticated cognitive levels in subject-specific areas” (Walqui, 2000, p. 26). This issue is pivotal at this moment in time, when ELLs are required to pass standardized tests in subject areas, increasingly for high school graduation. It is not the practice of assessment that is problematic; if used correctly, assessment can help improve teacher, student, and school performance (Gottlieb, 1999). The problem lies in the format and use of standardized assessments.

High-stakes testing was implemented in Texas prior to the national mandates that came with the passage of NCLB; a brief look at research conducted in this state can offer insight into the current issues on a national level. In her ethnographic study of the impact of high stakes assessments on high school learners, Bernstein (2004) found that standardized writing tests are not necessarily representative of ELL writing abilities nor do they necessarily prepare students for college: “While the emphasis of the tests seems to focus on a process-based approach to writing, ‘correctness’ in standard American English is emphasized over and over again” (p. 8). This emphasis on “correct American English” is clearly an example of testing students’ language proficiency on top of their writing ability. In the space of the time allotted for completing the test, ELLs are tested on twice as much material as native English speakers. Under these circumstances, one writing sample might not clearly represent the whole picture of a student’s progress in writing, but it can determine whether or not a student will graduate from high school. The overt focus on standardized testing may also prove a disservice to ELL students as they progress on to college and other forms of higher education (Bernstein, 2004). According to Horn (2003), “English



language learners are among the groups most deeply affected by high-stakes testing” (p. 30). While NCLB does not require high-stakes testing, the Act does require standardized assessment, and several states are choosing to make those assessments high-stakes.

Title III of the NCLB Act pertains to English language learners in particular, laying out specific issues to be addressed in relation to their education. Part A of this section is referred to as the “English Language Acquisition, Language Enhancement, and Academic Achievement Act” (“No Child Left Behind Act,” 2001). The first major purpose of this act is to ensure that ELLs “attain English proficiency, develop high levels of academic attainment in English, and meet the same challenging State academic content and student academic achievement standards as all children are expected to meet” (NCLB, Sec. 3102. ¶ 1). States are required to develop annual measurable achievement objectives (AMAOs) to show that English language learners are progressing toward these goals. The AMAOs must include “annual increases in the number or percentage of children making progress in learning English, annual increases in the number or percentage of children attaining English proficiency, and making adequate yearly progress for limited English proficient children” (NCLB, Sec. 3122. ¶ 3). English language learners, therefore, are not only required to make the same AYP in grade-level content material as native speakers in general education classrooms; they are also required to show that they are making yearly increases in their English proficiency as demonstrated through “a valid and reliable assessment of English proficiency” (NCLB, Sec. 3122, ¶ 3). Essentially ELLs are held accountable for twice as much learning as students in general education classrooms.

In the last couple of years two attempts have been made at the federal level to ease the standardized test burden on ELLs. The first gives a one-year exemption to immigrant students who have been enrolled in a public school in the U.S. for less than one year. The exemption, however, is only on the reading/language arts test. ELLs are still required to take their state’s standardized math test in their first year of attendance (Zehr, 2004).

The second change addresses the question of who is to be counted as an English language learner for AYP purposes. ELLs are exited from ESOL programs after they have reached “proficiency” in English, so the question is: should these students still be counted as ELLs

after they have been exited? The policy until February 2004 was that students were not counted as English language learners after they had been exited from ESOL programs. This policy, however, created a situation where the group of students being tested under the heading of ELL was always at a beginning/intermediate level of English proficiency because students with higher levels of proficiency had been exited from programs and were then counted as part of the general student population. The Department of Education changed regulations to permit states to include students who have become “proficient” in English within the past two years in the calculations of adequate yearly progress for ELLs. According to Patricia Loera, the legislative director for the National Association for Bilingual Education in Washington, these changes are “a short term fix. The more substantive issue is that most states still don’t have available academic tests that are valid and reliable for testing the academic achievement of English-language learners” (Zehr, 2004, p. 25). This issue is illustrated in the test results for ELLs in Washington State.

Problems with the implementation of NCLB are not isolated to Washington State; a closer look at circumstances in this state can, however, offer the reader a sense of the larger picture. All English language learners are not meeting the primary goal of Title III of the No Child Left Behind Act in Washington State. In fact, according to data from the 2002-2003 school year, ELLs are achieving well below other groups in the state on grade-level content material as measured by the Washington Assessment of Student Learning (WASL). Washington State’s *Consolidated State Performance Report Part 1* for school year 2002-2003 shows that ELLs, or “Limited English Proficient Students” as they are referred to in the report, are consistently at the bottom of the achievement ladder. The highest percentage of English language learners to reach proficient or advanced status on math or reading/language arts tests occurred in the 4<sup>th</sup> grade, with 19.9% reaching or passing standards in math, and 23.7% reaching or passing standards in reading/language arts. These percentages decrease dramatically in 7<sup>th</sup> grade, to only 5.9% meeting standard in math and 6.7% in reading/language arts. The scores increased again but only slightly on the 10<sup>th</sup> grade test with 8.1% passing in math and 11.7% in reading/language arts (OSPI, 2003b). It cannot be determined through these scores if students

have not adequately mastered the content material of the tests or if the problem lies in the language of the tests, but we must be clear that any test given to an English Language Learner in English is a test of their language skills in addition to an assessment of their content knowledge. The WASL, for this reason, is not a valid or reliable test of academic achievement for ELLs.

*The Washington State Proposal to Ensure Successful Implementation of No Child Left Behind* is a response to issues that Washington educators have faced in relation to NCLB and ELLs. The Office of Superintendent of Public Instruction (OSPI) (2003a) claims that the WASL is not fair or valid for ELLs for exactly the reason cited above: it is as much a test of their language proficiency as of their content knowledge. OSPI (2003a) argues further that the NCLB requirements for setting one AYP to be met by all groups of students results in a “one size fits all” accountability measure that assumes that all schools, districts, and each group of students will progress from the same baseline score” (p. 5). As the authors argue, however, that is not the case; schools do not start from the same baseline scores, and students do not start from the same baseline position in creating those scores. English language learners have twice the distance to cover: they not only have to learn another language, but they also have to make the same grade-level progress as their native English-speaking peers.

The OSPI (2003a) argues that setting the same AYP for everyone puts undue pressure on struggling schools and students, which has the “unintended consequence” of penalizing the exact student population that NCLB claims to help (p. 5). Schools do not have equal access to resources for helping to increase student achievement. The authors of this proposal argue that educators and administrators need flexibility to design programs that sufficiently value and give credit to the authentic progress made by ELLs. This flexibility could be realized by developing “alternative accountability mechanisms” under Title III of NCLB for ELL programs; it is argued that these alternative mechanisms should replace the existing AYP requirements for ELLs (OSPI, 2003a, p. 4). One of the problems at the heart of the standardized test issue for ELLs is the question of the validity of these tests for this group of students.

### **Validity of Standardized Testing for ELLs**

There are several reasons to question the validity of standardized tests administered in English for ELLs. Some of these reasons that have already been discussed in this paper include: the difficulty in isolating a test of language from a test of content, the lack of preparation available to ELLs because of the limited number of content areas classes offered to them, and the fact that standardized tests are not created for ELLs and therefore cannot accurately assess this population of students (Darling-Hammond, 1994; Gottlieb, 1999; LaCelle-Peterson, 2000; LaCelle-Peterson & Rivera, 1994; Short, 1993; Walqui, 2000). Yet, ELL students continue to be included in mainstream standardized assessment, which Cummins (2000) argues can provide “largely meaningless and potentially harmful data” (p. 142). If standardized, mainstream tests must be used, they should at least be accompanied by alternative assessment procedures that reflect the actual academic growth and accomplishments of ELL students (Cummins, 2000).

In order for assessment of ELLs to be valid, language must be isolated from content so one does not adversely affect the other. One way to address this issue is through implementing a wide range of assessment procedures in the classroom. According to Short (1993):

Variety is particularly important for language minority students because they are often unfamiliar with the type of standardized tests usually required in US schools, and they may be unable to demonstrate the extent of their knowledge at a single sitting on one designated testing day. (p. 634)

If students are assessed in a variety of ways, there is a better chance of determining if a problem is the result of lack of language skills or lack of content understanding. ELLs should also be given more time to complete standardized tests because they must process both the language and the content information embedded in the test (Short, 1993).

### **Alternative Assessment**

The answer is not to do away with standardized assessment of ELLs but to develop assessment policies and practices that validate and enhance ELLs’ learning. This could mean supplementing standardized tests with other forms of assessment or restructuring the tests to better meet the specific needs of ELLs.

According to LaCelle-Peterson and Rivera (1994):

The best means of safeguarding the interests of ELLs and assuring that the assessments are valid and useful to educational practitioners and policymakers is to create working groups of ELL specialists and assessment specialists to develop, monitor, and revise the assessment programs. (p. 70)

People in the field of assessment and in the field of English language instruction must work together to create effective assessment practices for ELLs. There are many alternative assessment options that can be used instead of, or in addition to, standardized testing to provide a more complete and valid picture of ELL achievement.

Performance based assessment is an alternative assessment method that is gaining momentum and appears to work well with the particular needs of ELLs. Gottlieb (1999) defines performance assessment as “the act of using direct means of gathering information by having students demonstrate firsthand what they know and are able to do” (p. 179). This definition is echoed in Short’s (1993) discussion of authentic assessment, which “requires students to conduct tasks that mirror the use of the concept or operation or manipulative in the real world (p. 631). Performance based assessment can complement standardized tests in the case of the current NCLB policy under which standardized assessment is required (Gottlieb, 1999). The performance based assessment results could be factored into AYP requirements and be used in place of high-stakes tests for graduation requirements.

One example of a performance-based assessment is the portfolio. Other varieties of alternative, authentic assessments can include performance-based tests, journals, projects, and observation checklists (Short, 1993). Walqui (2000) suggests that “Long term projects and portfolio assessment systems, which give greater flexibility and closer link to instruction may bode well for ELLs because they open the possibility of assessing students’ knowledge through a wider range of modalities” (p. 101).

Assessment methods need to be developed with individual groups of students in mind. In the case of ELLs, the whole range of learning, both linguistic and academic, needs to be assessed in a manner that explicitly distinguishes between the two. Assessment practices must be equitable; a system that assesses only ELLs’

content knowledge, ignores a whole other aspect of learning that has occurred. A uniform approach to assessment will not work; what works for native English speaking students will not necessarily work for ELLs. Even after ELLs have acquired some proficiency in English, they will not necessarily fit into an assessment system designed for native speakers. LaCelle-Peterson (2000) argues that “Standardized assessment is based on the doctrine that identical treatment of what are assumed to be practically homogeneous learners will yield equally accurate and comparable data,” yet once the varied and dynamic levels of language proficiency among ELLs is recognized “one sees that any attempt to implement standardized assessments in a fair manner demands a great deal more than most standardized testing programmes can deliver” (p. 31). Assessment should promote and facilitate educational achievement; it should not be just another thing to do.

### Conclusions

English language learners are a rapidly growing segment of the population of the United States. These students come to U.S. classrooms with unique experiences and abilities as well as with special needs and concerns. ELLs are a widely diverse population. Students differ with respect to ethnicity, native language, years of schooling and literacy in first language, and age at immigration, amongst many other things. Linguistic and cognitive development in a student’s first language is an important indicator of academic success in another language, but many ELLs do not have the resources to continue cognitive development in their first language after arrival to the United States. Upon entering U.S. schools, most ELLs are sent down one of two paths; they are either placed in mainstream classes with minimal English language support or in English-only ESOL programs that provide zero first language support. When students are supported in English language acquisition, emphasis is often placed on Basic Interpersonal Communication Skills (BICS) over Cognitive Academic Language Proficiency (CALP), even though CALP is an indispensable element of academic success. ELLs who are not given sufficient time to develop CALP enter mainstream classes with a significant disadvantage; this disadvantage also transfers to achievement on standardized tests (Cummins, 2000; Thomas & Collier, 1997). Language is only one element of the complex experience of ELLs; there are other

psychological and social issues that play heavily into their school success including immigration status, social economic status, and group status within the school structure (Cummins 2001; Walqui, 2000). These issues, and others which are not included in the scope of this paper, must be taken into consideration in any discussion of the academic success of ELLs.

In the wake of ever-changing educational policies and mandates, educators are left to figure out how to best accommodate the needs and abilities of ELLs while working within political confines. The No Child Left Behind Act, with its strong emphasis on accountability and standardized testing, presents particular challenges with relation to English language learners.

Under NCLB, ELLs are held accountable for the same amount of content knowledge as their English-speaking peers. They, for example, are expected to achieve the same passing score on the same subject-area standardized tests as their native English-speaking peers. Furthermore, under NCLB the scores that ELLs achieve on these standardized tests are directly linked to school funding. A school could potentially be labeled “in need of improvement” and eventually lose a portion of their federal funding based solely on the standardized test scores of English Language Learners.

Under NCLB ELLs are held accountable for twice as much learning as their native English-speaking peers. As noted, they are expected to master the same amount of content knowledge while learning an entirely new language in which to express that mastery. When an ELL receives a low score on a standardized test administered in English, it cannot be determined whether the low score represents a lack of content area knowledge or a lack of English language knowledge, yet this low score can have great implications both for the individual student and for the school at large. With the increased use of ‘high stakes’ testing in which a student’s high school diploma is based, in part, on his/her passage of a standardized test, ELLs are particularly vulnerable. Research suggests that the link between success on standardized tests and later success in life is weak (Bernstein, 2004; Darling-Hammond, 1994; Horn, 2003), yet the use of high stakes tests may prohibit a high percentage of ELLs from graduating high school (Horn, 2003), which could very realistically impact their later success in life.

While ELLs can meet high standards and should be held accountable to do so, tying

accountability to school funding and high school graduation is not the answer. Alternative forms of assessment, such as performance based assessment, which can include portfolios, journals, and projects, are being increasingly used on a classroom and school-wide basis to illustrate student achievement. These forms of assessment may prove to be a better fit for the needs and abilities of ELLs. Further exploration into the applicability of alternative assessment for fulfilling state and national assessment requirements for ELLs is needed. We may find that through alternative methods of assessment more ELLs can meet state and national accountability requirements. Under the current system, ELLs are being left behind despite NCLB’s promise to ensure that all children receive a quality education and the chance to succeed.

### **Recommendations for Practice**

Staying in line with current educational policies and mandates, teachers and administrators can help increase ELL achievement in several ways. First, ESOL teachers must be aware of the particular circumstances and challenges faced by ELLs. Teachers and administrators can attend workshops and trainings to increase their awareness and understanding of the issues related to immigration and the special needs of immigrant people. Teachers must recognize the importance of first language support and can work with families and community organizations to encourage sustained cognitive and linguistic development in a student’s native language. As Thomas and Collier (1997) note, sustained development in a student’s first language will support cognitive and linguistic development in their second language as well. Teachers should encourage parents to continue to speak, read and learn with their children in their native language. Teachers can support the development of academic language proficiency in English in their classrooms by assigning cognitively challenging, subject area tasks that encourage both academic language acquisition as well as cognitive growth. All ESOL teachers need to focus on content area material as well as language skills with their ELLs; any subject area lesson can be modified for use with ELLs. Teaching language within a content area makes both subjects more meaningful and, therefore, more interesting for students.

With regard to NCLB and standardized testing requirements, ESOL teachers should de-

emphasize the test while emphasizing the skills students will need in order to be successful on the tests. Since ELLs are in the process of learning a new language with new rules, conventions and uses, teachers must be explicit about language expectations. Teachers must illustrate differences between social language and written language, for example, and give students access to the skills and practice to be able to use each accordingly.

State mandated, high stakes standardized tests that are linked to school funding are inappropriate and detrimental to the learning of ELLs. This situation cannot be remedied with suggestions for how to better prepare ELLs for tests or for how to make them learn English faster or better. These suggestions only address symptoms of an underlying social issue. In order to truly remedy the situation teachers must work for alternative forms of assessment that are not high stakes. English language learners deserve an education that strives to include them, not one that serves to keep them on the margins of society.

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## Improving Science Literacy Through Multicultural Education

*Science literacy is fostered through multicultural science pedagogy that is representative of the students' experiences and cultures. Western science has traditionally reflected Eurocentric values and beliefs. Multicultural science classrooms create an environment that invites all participants to share their voices and experiences. The curricular materials, physical classroom, and texts should be representative of all students. The Earth Systems Education (ESE) programs and the Science, Technology, and Society (STS) programs both emphasize examining local and global issues and working towards social justice. Another goal of these programs is to encourage critical thinking skills. Through the inclusion of multiple perspectives and authentic problems within the community or larger society, multicultural science education presents science as a relevant, critical undertaking for all students.*

In an effort to increase scientific literacy many educators and researchers have argued that a traditional science curriculum no longer connects to the experiences of today's students. When women and students of color have trouble finding representations of their communities in the traditional science classroom, students are tempted to consider science irrelevant to the skills needed for their futures. Descriptions of scientific literacy encompass many capabilities, including understanding scientific concepts and being able to form predictions or explanations of natural phenomena. A student literate in science possesses the ability to apply this knowledge and create solutions to social issues. Scientific literacy also includes the ability to evaluate scientific arguments based on the research as well as potential biases within the research (National Research Council, 1996).

As classroom populations continue to diversify, Western science will appear alien to an increasing number of students. In order to reach the modern science classrooms, the traditional Western viewpoints should be balanced with multicultural science perspectives. A multicultural science curriculum will nurture critical thinking and problem solving skills, which are increasingly demanded by the workplace environment (National Research Council, 1996). Banks (2001) states that an Anglo-centric curriculum negatively affects people of color; any cultural deviation from the mainstream within a student's own culture will be portrayed in an adverse manner. In addition, students learning English as a second language would find better representation in a science curriculum that embraces linguistic and cultural variations. Therefore, a multicultural science

curriculum can incorporate students' perspectives and cultures while displaying a respect for multiple viewpoints and approaches. In this paper I argue that multicultural science pedagogy will foster scientific literacy in all students.

Multicultural science education encompasses many definitions and perspectives. While most agree that multicultural science education includes the goal of science for all people, the standards and terms used in this field include many variables. Atwater and Riley (1993) define multicultural science education as an educational reform development, a construct, and a process in which the goal of such a movement is to provide quality science instruction for culturally diverse student populations. Banks (2001) describes five integral parts to multicultural education; (a) content integration, (b) a discussion on the knowledge construction process, (c) prejudice reduction, (d) a pedagogy of equity, and (e) a school culture and structure that empowers all participants.

Hodson (1993) argues that multicultural science education includes both local and global knowledge, develops critical analyses of social injustices, and works to eliminate racism. When building a learning community within the classroom, he suggests accounting for differences in customs, beliefs, traditions, and languages when constructing the topics covered, and also utilizing students' knowledge whenever possible.

Many who argue for multicultural science education include the concept of anti-racist science education. Anti-racist education involves a review of curriculum, text, and other teaching materials to eliminate discriminatory or racist

statements and replaces these materials with culturally empowering and religiously sensitive content (Hodson, 1993).

Vavrus (2002) argues that antiracism commits to questioning any form of privilege or dominance. This questioning would include a discussion of the concept of *race* as a social construct, and also of racism. Racism is an essential element within a social and economic system including all its institutions (Gill, Singh, & Vance, 1987). By including a discussion of power and privilege in relation to the concept of race, teachers can empower students with a critical analysis of its political and ideological significance, in relation to the implications of race to rationalize genocide and economic exploitation. However, Vavrus (2002) also states that often institutions adopt the rationale of avoiding discussions of racist manifestations rather than confronting them within the school structure.

Critics of multicultural and antiracist science education argue that the structure of the scientific curriculum is weakened by the inclusion of scientific understandings from non-Western cultures. Siegel (2002) suggests including *ethnic science* perspectives only as support to science lessons based in Western knowledge. However, most of the research presented here finds that cultures and peoples outside of the mainstream society will enrich the science classroom environment and will not diminish scientific accuracy.

### Literature Review

Multicultural education has evolved throughout the twentieth century as a greater number of marginalized groups began to voice their demands for equal treatment and representation in the classroom and curriculum. James Banks (1992) argues that the concept of multicultural education initially grew out of African American scholarship, from the first schools after emancipation to the subsequent subjects of African American studies or other ethnic studies.

Banks (1992) explains that early African American scholars embraced the Western science paradigm in order to attach authority to their research. African American scholars maintained that if science could be used to justify racism, then that same science could also be utilized to construct knowledge that would contribute to empowerment and justice for African Americans. The use of Western science became a powerful weapon against the present

stereotypes in the mainstream society. However, he also notes that African American scholars still face criticism when their research findings confront existing paradigms.

Many marginalized cultural groups have historically received an inferior education. Although school segregation was declared unconstitutional in 1954, different methods of tracking have placed students in different classes according to ability, occupational intention, or by prerequisite (Kahle, 1982). This practice was also declared unconstitutional in 1967, although evidence of tracking surfaces in many schools possessing diverse populations. Due to these practices, children from marginalized cultures are underrepresented in upper level science classes, as well as in careers pertaining to science or technology (Rosenthal, 1996).

Western science has traditionally reflected the Eurocentric values of the White, male colonists. When European scientific and technological advances are compared with economic, social, and political activities from the time period of European expansion to the present, one can witness a strong correlation between colonization, exploitation, and the advancement of Western science (Harding, 1998). In this way, the current social, economic, and political climate shape the direction of science and technology. The mainstream culture benefits from scientific developments and justifies these advantages through perceived cultural superiority.

Throughout the evolution of Western science, the technological and scientific benefits have largely been enjoyed by the Northern Hemisphere and their allies and the costs of these benefits have been placed on the Southern Hemisphere (Harding, 1998). An anonymous collection of authors known as the Science Teaching Group (1980) compare Western scientists to high priests, stating that scientists speak in ritualized manners and impose on society the assumption that Western scientists represent experts. The Science Teaching Group also argues that these *priests* maintain their positions of power and privilege through intimidation and through their impressive *rituals*, such as sending a man to the moon (1980).

By portraying Western science as a neutral endeavor, the powerful economic forces have used Western science to improve the lives of the privileged, without extending the same advantages to other cultures or countries. This image of Western science serves to justify the social ambitions of economic development and



technological determinism. These scientific goals are often set in motion at the expense of the competing democratic goals of equity and critical review (Taylor & Cobern, 1998).

Science reflects the attitudes and beliefs of the dominant culture; therefore, scientific conclusions carry the subjective cultural biases of the scientist. In fact, Rosenthal (1996) argues that the mainstream culture characterizes the educational system, which subsequently reinforces mainstream values, beliefs, language, and culture. This cycle of transmitting cultural values into the schools is perpetuated generation after generation.

To critique these mainstream values and culture, multicultural science education should incorporate the students' cultures, languages, and lives in order to welcome all students into the realm of science and technology. Lee (2003) argues that the aim in multicultural science education is to encourage students to question and inquire while acknowledging the norms and practices of their communities and respecting differing perspectives brought to the science classroom.

Banks (2001) defines four levels of multicultural education approaches. The first level is named the contributions approach. A curriculum at this level would only include ethnic heroes and cultural holidays. Discussion of oppression or victimization is excluded at this level of multicultural education; multicultural topics are limited to positive but harmless subjects like celebrations or important figures. The next level is the additive approach; an additive curriculum would include content and perspectives from marginalized cultures, but the underlying structure of the curriculum and classroom would not change.

The third level of multicultural education is the transformative approach. This approach involves changing the curriculum structure as well as the content in order to represent students from all cultures (Banks, 2001). Once the multicultural science curriculum has reached a transformative level, teachers should be encouraged to advance to the final level, the social action approach. Students learn about important social issues in their communities as well as global concerns, and make informed decisions concerning solutions to the existing problems.

Therefore, it remains the goal of the teacher to create an encouraging, open atmosphere of trust and safety in order for all students to feel comfortable in the exploration of science,

especially since the structure of traditional science may conflict with their personal cultural norms or roles. Teachers should possess an awareness of the students' cultural backgrounds, in order to meet the learning needs of each student. Although some educators would argue for identical treatment of each child regardless of cultural or linguistic backgrounds, in reality this practice fails to provide the best education for each individual (Rakow & Bermudez, 1993).

A major focus of multicultural science education is incorporating students' experiences into the science lessons to display the relationships between science knowledge and the cultural contexts of society. Hodson (1993) reviewed two case studies examining students' *street science*, the first located in the Caribbean and the second comparing children in Zimbabwe with children in the Netherlands. Both studies questioned how the students' outside environment affected their knowledge of science concepts. Both studies concluded that the children's culture had an influence of their development of varying scientific understandings (Hodson, 1993).

By encouraging students to share their *street science*, teachers can tap into the students' prior knowledge in a contextual framework the children are familiar with, and build onto that existing framework. When educators interpret scientific understandings utilizing students' linguistic and cultural knowledge, science can become both accessible to students as well as maintaining scientific accuracy (Lee, 2003).

Because all children utilize different learning styles and strategies, teachers should vary both their assessment approaches as well as their teaching methods in order to represent the varying cultural and linguistic elements present in the classroom. Ovando, Collier, and Combs (2003) recommend four standards for the multicultural science classroom. The first standard states that a science classroom should embody an environment representative of both the English speakers and the English language learners (ELLs). The second standard suggests age-appropriate instruction as opposed to a watered-down curriculum. The authors recommend using multiple modalities in the science curriculum, such as experiments, demonstrations, and other hands-on approaches. These approaches can assist ELLs in the contextualization of new information in their second language.

The third standard recommends appropriate use of the primary language as well as science

content instruction in English. Ovando, Collier, and Combs (2003) assert that teachers should encourage contributions in the science discussion in whatever language the child speaks best, so that all children will participate. The child's ideas may then be restated in English if necessary so that every child's ideas and questions will be heard and understood. However, the authors also emphasize that the best method of building science literacy involves instruction in the child's primary language, so that the child can construct a bridge into science literacy in the second language.

The final standard proposed by Ovando, Collier, and Combs (2003) emphasizes multiple opportunities for students to demonstrate their abilities. Especially for English language learners, the assessment itself can create difficulties in success in science. Rakow and Bermudez (1993) state that even though there are many factors that might contribute to any differences in performance, the testing instrument itself should not be dismissed as a potential cause of those differences. They also suggest that some cultural groups may possess an inherent hostility toward the exam, because that assessment may represent to them another example of the mainstream culture imposing upon marginalized cultures. Therefore, the teacher must review the assessment instrument thoroughly before using the test in the classroom in order to avoid assessment bias.

As the population continues to diversify, the teacher's instructional styles must continue to change in order to meet the cultural and linguistic needs of the students. The teacher must also remain aware of the cultural biases that he/she possesses, and continuously work to eliminate those biases. David Hess (1995) offers the solution of faculty training workshops to help foster an awareness of variations in intercultural communication and provide examples of other instances in which unconscious bias can surface in teachers' and students' behavior.

In addition to these workshops, teachers need to transform the physical classroom to be representative of the students' cultures. Many students look around the science classroom and do not find any representation of their culture or ethnicity represented in the room. This lack of representation could lead students to assume that science is a discipline reserved for white males only. Kahle (1982) states that the public school system needs to supply people of color with more role models within the fields of science and mathematics. One solution for public schools is

to increase the number of teachers from marginalized cultures in math and science classrooms during the secondary years.

Another reason that students are discouraged from science is related to the students' preconceived notions of what science represents. Textbooks often perpetuate outdated, racist notions that can alienate many students from the entire concept of science (Vance, 1987). In order to avoid such alienation, additional sources can supplement the science text in order to provide the students with multiple perspectives. Osborne and Barton (2000) recommend focusing on transforming the classroom, the teacher, and the students beyond assumed positions of power and stereotyped roles to help women and people of color become empowered through the formation of multiple perspectives and critiques of scientific understandings.

Researchers and educators have debated the importance of multiculturalism in science pedagogy, and also posed questions such as how should science be defined and whose views are included in science. Siegel (2002) attempts to join multiculturalism and universalism together in an interactive science education, and argues that the former concept supports the latter. However, Siegel's article displays many biases that the author does not address. In his article, Siegel (2002) questions whether any *ethnic science* could produce testable, predictive, or explanatory knowledge that could transfer onto the existing structure of the scientific methodology of Western science. He later states that Western Modern Science (WMS) produces a more profound understanding of the natural world than any *ethnic science* produces, because WMS meets the criteria of producing testable, explanatory theories.

Critics of Siegel display concern that the strict imposition of WMS on students from minority cultures can belittle or leave out different cultures' approaches to explaining and understanding the natural world. For cultures that value naturalistic observation as opposed to the value of creating theories or testable hypotheses, this view of science through the dominant cultural lens can devalue the knowledge construction of other cultures (Siegel, 2002).

Some researchers also argue that Siegel is serving the interests of the majority culture by advocating for WMS, since he is a member of the majority culture (Siegel, 2002). By attempting to combine multiculturalism with universalism, Siegel reduces multicultural

education to what Banks (2001) might label an additive approach. Siegel has not considered that a well-designed multicultural science education program includes a transformation of the entire classroom structure. Rather than attempting to force students into the mainstream science culture, teachers need to restructure school and science into the students' multiple images and cultures (Osborne & Barton, 2000).

Another opposing viewpoint to scientific educational equity can be found in certain research agendas and in whose goals that research serves. Jensen (1969) has argued for biological determinism, which attempts to explain achievement gaps in standardized test scores and school performance due to the biological makeup of different racial groups (McDowell, 1990). These ideas surfaced again in the 1990's with the publication of Herrnstein and Murray's *The Bell Curve* (1994). Herrnstein and Murray (1994) misuse intelligence research to justify claims that some racial groups such as African Americans and Native Americans are genetically inferior in intellectual abilities. Although these arguments have since been refuted, their lingering influence can shape the decisions made in both scientific and educational research (McDowell, 1990).

Therefore, multicultural, anti-racist science teaching should incorporate a discussion of intelligence and the theories of genetics and IQ proposed by the above authors. In order for science classrooms to welcome all cultures, genders, and classes, racist uses of science such as theses proposed theories need to be addressed. Students must possess an awareness of the historical and contemporary racist views of certain scientists, so that incorrect ideas such as these can be challenged in a supportive environment like the anti-racist science classroom.

Race, gender, and class directly affect a person's experiences in life. Those life experiences subsequently shape and manipulate the individual's schemata of the world (McDowell, 1990). Cesar McDowell (1990) executed a review of scientific research in search of studies primarily examining race, class, and gender issues. For his review, McDowell created four selection criteria: (a) titles of articles had to indicate the subject was based on children and science learning, (b) articles had to be published in a reputable journal, (c) they had to be published within a certain time frame (1980-1986), (d) and articles needed to consider children in grades K-12 (1990).

After examining over 250 articles, McDowell (1990) found significant gaps between educational research and race, class, and gender analysis. However, he did not conclude that the absence of these analyses was due to lack of sample size available to researchers. Instead, he concluded that in an effort to move away from Jensen and others' determinist models, most researchers ignored the possible effects of gender, race, and class on educational research.

When research fails to include race, class, and gender analysis, the conclusions may recommend changes in the science curriculum or structure that do not benefit children in marginalized cultures. While educators focus solely on how new programs are implemented, they could miss problematic situations that are caused by the design of the program, as well as by the structure of the research that informed the new program (McDowell, 1990). Therefore an analysis of race, class, and gender must be considered before any changes are ordered for any science curricula.

Multicultural science education involves a restructuring of the whole science curriculum in order to reflect representation of the entire planet. Several researchers have developed globally oriented science curricula to be implemented in the secondary schools. One such program is called Earth Systems Education (Mayer, 1997). Mayer's new science curricula became focused around the framework of studying the Earth wholly as a system, rather than separating into science disciplines. In his research, Mayer discusses his desire for science to reflect balanced social and cultural values, and to cease the Cold War rationale of science based in competition and violence. Mayer felt the new curriculum should reflect new priorities, including cultural cooperation and social and environmental justice, rather than conflict and the development of war technology aimed at a specific enemy (1997).

Earth Systems Education (ESE) has found success in middle and high schools in a few school districts in Ohio. One such version, entitled Biological and Earth Systems Science Program (BESS), was implemented as a two-year integrated program in several high schools starting in 1990, and has been described by Mayer (1997). The subjects of Biology and Earth Science were connected through realistic, international problems such as global warming, and cooperative learning exercises were implemented to collect information from science journals and various other sources. In addition,

students were encouraged to utilize computer technology as much as possible. The curricula and structure of this version of ESE was developed by high school science teachers, so the program produced a strong support system, utilizing monthly meetings to discuss continuous changes and critiques from all the teachers involved.

Even though the BESS program gained the continual support of the teachers involved, some parents disliked the structure of the program. Many of the parents whose children were placed in an advanced or gifted track resented the meshing of Biology and Earth Science, since students traditionally placed on that track would forego the first year of Earth Science and start directly with Biology. Parents also expressed some concern that this integrated program would not transfer well to college prerequisites, and if their children participated in this program, it might detriment their chances of attending college.

Administrators largely backed the teachers in their new science education efforts. Reports from some advisory meetings praise the BESS program as being consistent with contemporary ideas pertaining to the targets of science literacy and ideal instructional methods. However, administrators attacked the structure of the BESS program, stating by combining the two classes, scheduling difficulties would arise. Teachers also pushed for longer blocks of time for science instruction, but the district found that scheduling longer time periods would be impossible for the administration.

Throughout the BESS program, students were continually confronted with environmental and social issues across the globe. Because of this exposure to world problems, including the political and social consequences, students are encouraged to view the Earth as one system and to subsequently consider problems existing in any particular area as a global issue. By developing an integrated conceptual framework, ESE attempts to encourage global citizens to utilize science and technology for the improvement of the Earth system.

Although ESE does not implicitly state multiculturalism in its core philosophy, the emphasis remains on a global perspective. Another program with such an emphasis is called Science, Technology, and Society (STS) Education, as described by Waks (1991). STS programs were created in the late 1960s and early 1970s with the desire to promote the value of responsible citizenship within the science

classroom as well as outside of the school in a technologically dominated society. The STS task force created eight criteria for the curricula lessons and materials; (a) responsibility, (b) a relationship to social issues, (c) a balance of viewpoints, (d) responsible social action, (e) developing decision making and problem solving skills, (f) building science confidence, (g) integration of point of view and ethics, and (h) mutual influences of science, technology, and society embody the core principles of STS education.

STS programs were implemented in urban schools in an effort to include traditionally marginalized students into the science learning environment. The encouragement of students' participation in issues of social justice became a primary goal of urban STS programs (Waks, 1991). By providing multiple viewpoints and a relationship between science and social issues, the STS curriculum reflects the global scientific community. STS guidelines focus on beginning the curriculum with issues that are relevant to the students, and then to build on the students' knowledge base and include new issues that pertain to their urban community, and then finally expand to science and technology issues on a national and international scale.

Also pertinent to the STS curricula is the inclusion of material and references featuring scientists of color and female scientists. STS guidelines also stress presenting science through many perspectives, including African, Arabic, and pre-Columbian indigenous American societies' concepts (Waks, 1991). Also, perspectives other than Western can be a useful starting point for the social, political, and scientific analysis of serious global issues including global warming, drought, pollution, starvation, and overpopulation (Hess, 1995). These cultures' solutions to problems provide excellent examples to students who have only been exposed to Western Science. By providing women and people of color with relevant role models and scientific accomplishments of other cultures, typically underrepresented students can see themselves represented in the science classroom. High self esteem, academic achievement, inherent motivation, as well as knowledge of one's history remain deeply intertwined (Bailey, 1990).

Another goal emphasized by the urban STS curriculum is to foster critical thinking skills in the students, especially pertaining to issues of technology and culture. Students learn that all technologies possess both benefits and costs, and

are encouraged to evaluate who profits from the use of technology and who suffers. Such social and political problems prepare students to take action outside of the school and in their future lives after graduation.

In addition to discussions of social injustice, several researchers have examined the impact of service learning and direct community action on students typically not involved in science. Angela Calabrese Barton (2000) designed a research experiment with preservice teachers providing multicultural science instruction to homeless students. When Barton (2000) refers to service learning in her article, she states that service learning includes activities that combine social action and community service with classroom instruction in order to encourage development of students' knowledge base, practical skills, social accountability, and civic values. By taking preservice teachers out of the classroom and into an unfamiliar environment such as a homeless shelter, teachers are exposed to situations and realities that they would not have encountered in a school structure. This experience also creates a community context that assists teachers in their participation in collaborative science.

This exercise became beneficial not only for the preservice teachers, but also for the homeless students. Children who are homeless encounter additional difficulties in a school setting. Some of these achievement difficulties include irregular school attendance, lack of daycare resources, lack of tutoring opportunities, irregular eating schedules, and many others (Osborne & Barton, 2000). Because of this study, the homeless students involved gained additional science tutoring and also honed collaborative learning skills that will prove useful both in the classroom and in the workforce.

By combining science and culture, students progressed from thinking of transporting culture into the science classroom to viewing science as a manifestation of culture (Barton, 2000). This mental transition builds a foundation for the implementation of a multicultural science curriculum, in which science and culture are integrated together. Science transforms from an abstract, school subject to a way of knowing, dependent on each culture's construction of science.

The emphasis on collaborative groupwork in the service learning project allows students of many cultures and abilities to use each other as resources in the classroom. Rosenthal (1996)

argues that many students from minority cultures prefer global learning rather than sequential learning, and learn more when working cooperatively rather than competitively. However, it remains vital that the classroom teacher supervise the formation of groups when preparing for an exercise. In a science class, where there are statistically fewer women and students of color, allowing students to select their own groups can lead to homogenous grouping. Studies have documented that when students are given the freedom to choose their own groups, they tend to select students whom they know and who are culturally similar (Rosser, 1997).

Rosser (1997) also cautions against separating women and people of color from each other in the science groupwork. Although a teacher may be tempted to create groups that, for example, each contain a female or a person of color in order to promote cultural diversity, this may alienate these students already marginalized within the traditional science classroom. Studies have displayed that women show an increased likelihood to drop out of the group if they represent the only female, especially if the subject matter pertains to an area traditionally devoid of the female presence, such as science, engineering, or mathematics. A similar conclusion has been made regarding the isolation of people of color in groupwork (Rosser, 1997). Therefore, teachers should not haphazardly form groups, but should consider the potential dynamics of various students working together.

Rosser contends that teachers must not assign leadership roles initially (1997). She recommends that groups choose roles for each other during the first group assignment/activity, so that students who may not wish to assume leadership roles in an unfamiliar setting will not be forced to do so. However, Rosser also emphasizes that roles must be rotated, so that each member will have the advantage of practicing each role. Through this rotation, students will develop multiple science skills which will increase their ease in flexibility in the work environment.

Each of these studies emphasizes important components of multicultural science education. Incorporating students' existing knowledge, cultures, and linguistic variations strengthens the students' relationship with scientific understandings. Students are encouraged to contribute to the science activities using the language in which they possess the strongest abilities, in order to include students learning

scientific concepts in a second language (Ovando, Collier, & Combs, 2003). The focus of the multicultural classroom should also embody representative science curricula that include multiple perspectives on global issues. Also pertinent to the successful science classroom is the ability for students to feel comfortable, and free to share their perspectives. Only once this safe environment has been established can teachers begin to discuss important issues relating to racist ideologies perpetuated through false biological arguments (Vance, 1987). Cooperative learning has been shown to facilitate an environment where such discussions could be presented (Cohen, 1994; Waks, 1991).

### **Conclusions**

In order to address the overwhelming dominance of the majority culture in traditional science classrooms, multicultural science education attempts a balance of multiple perspectives and approaches to foster science literacy throughout the classroom. Western science has traditionally excluded women and people of color, and because of this exclusion, science has been thought of as a discipline centered in Eurocentric values and beliefs. Multicultural science education examines the mainstream values and culture prevalent in the traditional science classroom, and questions the norms and practices of Western science (Lee, 2003). Through the inclusion of multiple perspectives and authentic problems within the community or larger society, multicultural science education presents science as a relevant undertaking for all students.

Multicultural science classrooms must create an environment that invites all participants to share their voices and experiences. By utilizing students' prior knowledge, teachers are able to present the subject matter and simultaneously build onto their existing schemata, thus strengthening the topic's pertinence (Hodson, 1993). The classroom should embody a safe environment, so that all students feel comfortable sharing their experiences. To accomplish this comfortable setting, the physical classroom as well as the textbook and other resources must reflect every student's cultural and linguistic backgrounds (Kahle, 1982; Vance, 1987). Students should be able to look around the classroom and see themselves represented and included.

In addition to the physical environment and resources, students should feel free to provide input to the class discussions in whatever

language is easiest for expression. Many English language learners have been silenced in the science classes due to the inability to contextualize the abstract concepts presented in the traditional science classrooms. By encouraging participation in whatever language is appropriate, students learning English as a second language will not be marginalized (Ovando et al., 2003).

Essential to the multicultural science classroom is the discussion of racism and the social and political construction of race. Some historical and contemporary views of race have presented people of color as genetically inferior to the dominant white culture (Herrnstein & Murray, 1994). In order to combat these racist views, students need to develop an awareness of these views and the scientific arguments that refute them. Armed with this evidence, students and teachers can work together to eliminate racism from the school and community. The eradication of racism remains a critical goal of multicultural science education (Gill et al., 1987; Vavrus, 2002).

A science curriculum representative of multicultural perspectives should include authentic problems, either present in the local community or globally. The Earth Systems Education curriculum (ESE) described by Mayer (1997) and the Science, Technology, and Society curriculum (STS) described by Waks (1991) both confront authentic problems such as global warming, overpopulation, and starvation. These issues are considered through their social, political, and environmental implications using scientific concepts and equations. Both programs attacked these issues through research in cooperative groups, and used technology to supplement available materials and resources.

Schools executing programs such as these have found students display a greater motivation to learn scientific concepts once applied to authentic situations (Mayer, 1997). Another method of mixing science and real-life problems include service learning projects. Osborne and Barton (2000) describe the benefits of a service learning project between preservice teachers and homeless students. Through working with the homeless students, the preservice teachers not only gained an amazing learning experience, but also crafted a new perspective about science and culture. They learned that science is constructed through individuals interacting with the society and cultures around them, and is influenced by the social and political uses of science (Barton, 2000).

Table 1: Characteristics of a Multicultural Science Classroom

CHARACTERISTICS	DESCRIPTION
Structural Changes	Texts, resources, and all materials are free of racial, gender, and religious bias. Materials should be empowering to the students. Students should be represented visually throughout the classroom (posters, artifacts, etc.)
Student-Centered	Students' cultures, languages, experiences, and abilities are valued and encouraged. Students also contribute to topic and project selection for the class.
Teacher Attitude	Teacher is aware of own personal biases. Faculty workshops are utilized to educate about issues of equity.
Safe Environment	Students and teacher feel safe and free to express themselves. Students feel empowered, represented, and supported by the learning community.
Essential Discussions	The topic of race and racism is addressed; students understand the biological fallacies of race. The topic of science as a cultural construct is discussed; students understand the cultural biases inherent in scientific exploration.
Social Action	Topics and projects involve improving a local or global issue. Issues of Western dominance and privilege are addressed.
Linguistic Considerations	English language learners are supported and included in every class activity. Hands-on activities, visual aids, groupwork, and support in students' primary language are included.
Assessments	Assessments are varied to support multiple abilities, cultures, and languages. Assessments are reviewed for biases.

Source: Adapted from Hess, 1995; Hodson, 1993; Kahle, 1982; Lee, 2003; Osborne & Barton, 2000; Ovando, Collier, & Combs, 2003; Rakow & Bermudez, 1993; Vance, 1987; Waks, 1991.

These three examples of teaching science through authentic problems drastically changed the perspectives of science held by those involved. In order to support the benefits recorded in these examples, subsequent research in the direction of multicultural science education should be implemented. A continuation of research identifying real, local or global problems could solidify the benefits of blending students' prior and existing knowledge, authentic problems, and scientific concepts together.

### Recommendations for Practice

For educators interested in implementing a multicultural science curriculum, there are many essential elements that must be included in order to create a learning environment that is equitable to all students regardless of race, class, gender, religion, ability, or sexual preference (see Table 1). However, simply adding parts of these elements does not equal a multicultural science classroom; the curriculum, teacher attitudes, physical classroom, resources, texts, assessments, and content must be transformed to ensure that all students are represented and included (Banks, 2001).

Initially, structural changes should be addressed. The physical classroom should have representations of the students' cultures and languages, not just the dominant culture. The texts, resources, and other materials should be reviewed for any bias. Linguistic considerations must also be made for any English language learners present in the class. These students can be supported through visual aids, cooperative learning groups, and support in their primary language (Ovando et al., 2003). Once suitable materials are acquired, teachers must also check that the resources used are empowering to the students.

The teacher must also examine him/herself for any existing biases, reflecting on both his/her attitudes and teaching styles. Teachers should question whether they seek equal participation for all students, and if each student is included in the science curricula. The teacher must be able to treat each student as a valuable contribution to the learning community. If teachers need assistance with this reflection, faculty workshops can be designed to discuss issues of equity and privilege (Hess, 1995).

The multicultural science classroom should be student-centered. Students should feel safe and supported while expressing their ideas and experiences. Students should also select topics and projects, and have input concerning the curriculum. Students should also be directed toward social action. By selecting projects and lessons that address a local or global issue, students will learn the value of cooperation toward social justice (Waks, 1991).

Students must also understand the cultural biases inherent in science; they should learn that culture and society shape the direction of science and technology (Harding, 1998). The class must also discuss the relation of power and privilege to the topic of race and intelligence. The disputed theories of scientists such as Herrnstein and Murray (1994) must be addressed in order for all students to understand counter arguments and feel empowered in the science classroom.

Once all of these elements are implemented, both the students and teacher will feel empowered and primed to discuss important issues pertaining to the uses of science and technology by the dominant cultures at the expense of the marginalized cultures (Harding, 1998). If scientific literacy is truly the goal of science classrooms, then students must feel represented and included so that they are motivated to learn. Multicultural science pedagogy promotes these feelings of

empowerment, and gives students the tools and abilities to critically address local and global issues of science and technology.

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Katie Baydo

### **Multicultural Literature: A Catalyst Toward Critical Thought and Social Action**

*Using multicultural literature in the classroom can present a challenge to teachers. A paucity of quality literature, opposition from administrators and parents, as well as a lack of critical self reflection can all impede constructive utilization of multicultural literature. This paper examines some of the issues surrounding multicultural literature such as definitions of what constitutes multicultural literature, opposition and how to overcome obstacles, and ways for teachers to engage in practices that can ultimately provide a foundation to use multicultural literature as a catalyst toward critical thinking. The aim of the paper is to give teachers some background in how to identify quality multicultural literature as well as provide a starting point for teachers to find literature that can be used.*

It would be cavalier to assert that all students in all public school classrooms in the U.S. are the same. Moreover, one would be doing students a disservice were one to adopt that notion and use it as the foundation for their teaching strategies. It should go without saying that there is great diversity among students in terms of their ethnicity, language, gender, class, ability, sexual orientation, and race (Banks, 2001). The U.S. was ostensibly founded upon the ideals of freedom, individualism, and justice that in turn led to the rise of the public school system. However, many classrooms, schools, and school districts belie that heritage by functioning with the assumption that there is one way to teach all students.

This paper is not an examination into the issues surrounding the inherent inequities in the construction, administration, and interpretations of knowledge as it is presented in the public schools, although those studies exist. Rather, I pose that teachers are in a unique position. They hold a place in society that is simultaneously revered and undermined. On the one hand, immense pressure is placed on public school teachers to “produce” literate, critical young adults who, after twelve years in the system, are expected to possess the knowledge and skills to at the very least secure employment and support themselves and a family. And yet teachers, while given this monumental task of educating all the children that cross their paths, are often not allowed to teach those students the skills they feel can best serve them to succeed in society such as a strong sense of citizenship and critical thought. Many teachers feel this includes the ability to evaluate and judge the greater society and even act as an agent of change when social injustice is perceived.

As Ensign (2003) states, “If, as educators, we are really committed to social justice, then not only will we believe that all children can learn, but we will also embrace the conviction that *all* children deserve to learn *well*” (emphasis added, p. 105). The root tenet at the core of this paper is the precept that a multicultural education approach is the best way to teach *all* students. Scholars diverge as to what exactly constitutes multicultural education. Banks (2001) distinguishes between multicultural education and multiethnic education. He characterizes *multiethnic* education as a study of discrete ethnicities and races, whereas *multicultural* education encompasses a study which covers not only race, but also, class, gender, ability, language, and sexual orientation (pp. 41-43). Sleeter and Grant (1999) take this concept of multicultural education and add the component of agency to produce a *social reconstruction* approach to education. They purport that not only should education promote the academic achievement of all students, but it should also, if it is social reconstructionist, “promote social structural equality and cultural pluralism” (p. 189).

Sleeter and Grant (1999) place their argument in terms of the fundamental and real inequalities that exist within U.S. society, such as the percentage of persons of color who live below the poverty line in relation to whites who live below the poverty line; the life expectancy of people of color in relation to whites; and the wage gap that exists not just between equally qualified and experienced men and women who occupy the same positions, but between people of color and whites who occupy the same positions. They argue that a multicultural education that is social reconstructionist serves

to eliminate these inequalities and strives to create an equitable society.

Banks (2001) asserts that there are five dimensions to multicultural education: (1) content integration, (2) the knowledge construction process, (3) prejudice reduction, (4) an equity pedagogy, and (5) an empowering school culture and social structure (p. 5). Multicultural literature in particular can be studied in terms of any of Banks's dimensions. I examine multicultural literature as it is presented from a content integration point of view.

The question of multicultural literature is steeped in a quagmire associated with any social movement: definition, authenticity, self-awareness, and opposition. Multicultural literature is not a homogenous genre and has different meanings for different people and groups of people. This review first examines some of the ways in which multicultural literature has been defined in order to emphasize its dynamic nature. It then goes into some of the arguments both for and against using multicultural literature in the classroom. In addition this review covers some of the different ways in which multicultural literature has been used, which ranges from a cursory exposition of cultural stereotypes to a foundation for a more critical and action-oriented curriculum. There is also an examination of how teacher self-awareness influences if and how multicultural literature is used in the classroom along with some of the many obstacles to using multicultural literature in the classroom.

### Definitions

During the late 1980s and early 1990s a debate arose as to what constituted quality literature for children. This debate, the "canonical" debate, was a result of a more organic movement across disciplines to critique the dominant philosophy that had prevailed in institutions and society for decades (Sleeter, 2000). Feminists questioned why more women were not represented in the canon. People of color questioned where their voices were heard. Immigrants and children of immigrants wondered where their texts were being read. Out of this debate was spawned a critical look at the face of the canon and what constituted its augmentation. Some saw the debate as a question: "should we teach the canon or something else?" Many saw the debate not as one arguing for an exclusive canon *or* multicultural literature, but one that argued for the study of multiple voices in the classroom.

Any study of multicultural children's and adolescent's literature must begin with, first, an attempt to define what is meant by the term "multicultural literature," and, second, with a look at what constitutes a text to be classified as such. Definitions abound. Bishop (1997) points out that each "expert" comes up with his or her own definition of multicultural literature, usually based on the assumption that the literature in question is of and/or about peoples "other" than the dominant majority. Bishop chooses to define multicultural literature as works "by or related to people of color" (p. 3).

In another context, Cai and Bishop (1994) have chosen to define multicultural literature not in terms of any specific attribute such as the ethnicity of the author or the content of the book, but rather from the perspective of critiquing whether or not the piece fulfills some of the more profound components of a multicultural education, such as transformation and social action. When defining multicultural literature in this regard, it is perceived as one piece of an active approach to teaching, an aspect that is intrinsic to building active citizens and "[i]n this sense, *multicultural literature* is a pedagogical term, rather than a literary one" (p. 59).

Beiger (1995) also defines multicultural literature in terms of a more general multicultural education, and states that a literature-based approach to multicultural education is important because "people who find their own life experiences mirrored in books receive affirmation of themselves and their culture" (p. 309). Drawing from the *content integration* dimension as it is put forth in Banks's five dimensions of multicultural education, Beiger employs Banks's four-level typology of integrating ethnic content into the curriculum. She lists these levels in terms of how they relate to multicultural literature. They are (1) the contributions approach, e.g. "where students read about and discuss holidays, heroes, and customs," (2) the ethnic additive approach, e.g. "content, concepts, and themes that reflect other cultures are added to the existing curriculum without changing its structure," (3) the transformation approach wherein the "structure of the curriculum is changed to enable students to view problems, themes, concerns, and concepts from the perspective of different ethnic and cultural groups," and (4) the social action approach wherein students "identify social problems and concerns and then make decisions and take action to resolve them" (Beiger, 1995, pp. 309-310). This classification of multicultural

literature is echoed throughout the research on this topic.

Some of the studies that indicate the extent to which oppressed peoples see themselves accurately portrayed and identify with the text is also a criterion for designating literature as multicultural (Day, 1994). Issues of authenticity come into question when labeling literature as multicultural, because so many books written about people of color, or people who have historically been pushed to the margins of US society, have been portrayed in the literature stereotypically (Bishop, 1993; MacCann, 1993; Taxel, 1993). Examples of this include stories that are not consistent in their illustrations throughout the book. Bishop (1997) recounts the case of the book *Secret Valentine* in which a young Black girl is illustrated with the stereotypical “pickaninny” hairstyle, which is offensive to many people as the origin of this hairstyle is steeped in the history of slavery. Further on in the book, the character suddenly appears with two long, sleek ponytails. Books that are not overtly racist or classist in content often transmit negative messages in other ways such as in illustrations (Bishop, 1997; Hancock, 2000).

Norton (2001) prefaces her discussion of multicultural literature with an overview of how the racial composition of the general population of the United States is changing to represent an increased number of peoples of color and immigrants. Her argument is that multicultural literature reflects the voices of these diverse peoples. She emphasizes a five-phase approach to studying multicultural literature that will allow students to experience the literature at a variety of cognitive levels (p. 5). The changing ethnic make-up of the US population often precedes the call for increased multicultural literature, but focusing solely on this as the basis for implementing a more representative approach to literary study ignores the underlying basis in much multicultural literature, and that is the basis of creating voice and actively filling a void in the canon of today.

With this in mind, many authors choose to frame multicultural literature in terms of social justice and social action. For instance, Boyd (2002) frames her views on multicultural literature in terms of racial violence. She begins with a discussion of three hate crimes, one targeting a Haitian immigrant, one targeting a gay student, and one targeting an African-American man. Two of the three incidents resulted in the death of these men. She positions

multicultural literature firmly in a role of telling the stories of people like these, who often have been brutally and violently silenced in public life as well as in the literary canon.

The canon has been defined as that “officially sanctioned set of literary texts judged to be standard and universal” (Spears-Bunton, 1998, p. 19). Multicultural literatures defined in this context have been systematically excluded from the canon because the dominant majority does not write them and/or is not present in the content. In a sense, “canonical knowledge may be playing upon the paranoid sentiments of a population that views the demographic changes in the US as an encroachment upon an established hegemony” (Godina, 1996, p. 549). In this light, the changing US demographic is not seen as a phenomenon devoid of political repercussions that is best dealt with through “raising awareness,” but is instead seen as the source of a growing minority voice that is fighting to be heard.

In her writing, Sleeter (1996) points out that “many who are new to multicultural education do not see it as directly connected with political struggle. Rather, they tend to see it as a means if reducing prejudice and stereotyping among individuals” (p. 13). This same attitude has been documented in observations of how some teachers view multicultural literature specifically. When presented with the idea that multicultural literature may *problematize* social issues, rather than *coincide* with pre-existing teacher assumptions that discussions of culture, ethnicity, race, etc. should be presented in a positive light in the classroom, many teachers are frustrated and resistant (Ketter & Lewis, 2001).

### **Impact on Student Learning/Self-image**

There has been an ongoing debate as to what exactly is the purpose of incorporating multicultural literature into the curriculum. Some have argued that an inclusion of multicultural literature in an attempt to address political correctness results in a feeble curriculum that has little educational and literary value. Proponents of this theory argue that literature which includes non-English words as components of a story is not valuable because the texts often employ vocabulary, dialogue, and values that are divergent from the dominant norm. The use of these words “may confuse both the children in the class who do not speak the language the words come from as well as those who do” (Stotsky, 1999, p. 151).

Juxtaposed to this is the argument that multicultural literature is essential in effective and equitable education because it stands to benefit all students by presenting a more holistic and realistic representation of the world than the traditional literary canon (Bishop, 1997; Harris, 1993). However, among the sort of white educators who view themselves as *outside* of culture, there is resistance to implementing a multicultural education in their school. By this it is meant that many teachers who are white have been inculcated with the belief that they need not specifically examine European American ethnicities as cultural, or as possessing certain racial privileges, and therefore they view themselves as “raceless and apolitical” (Ketter & Lewis, 2001). Many of these teachers identify so closely to the dominant culture of the U.S. that they resist specifically utilizing the writings of authors who have defined themselves and write about issues outside of the dominant majority (De Leon, 2002).

The evidence that implementing a multicultural literature based program in a school setting benefits students is significantly positive. It is generally agreed that when students see themselves represented in literature which is being read not just by themselves, but by the entire class, those students receive validation and cultivate a more positive racial and cultural identity (Bishop 1997; Colby & Lyon, 2004; De Leon, 2002). Conversely, “students who do not see any reflections of themselves or who see only distorted or comical ones come to understand that they have little value in society in general and in school in particular” (Bishop, 1997, p. 4).

One way to look at this is to take the position that in reading about many cultures, students will inevitably find similarities and differences to themselves (Hancock, 2000; Norton, 1990). Boyd (2002) makes the point that “[m]ulticultural literature is one way to raise consciousness and awareness of differences between and among people across contexts, countries, and cultures” (discussion section, para. 10), but that the question then remains, “different than whom?” In other words, the students’ study of multicultural literature as a separate unit from the rest of the curriculum, i.e. the ethnic additive approach, is often an exercise in finding similarities to his or her own personal experience (Page, 2002). Classrooms absent multicultural literature have forced children of color to find within the traditionally European American

protagonists of most literature read in the school, a common or many common bonds.

On the other hand, it has rarely been the practice of the teacher to overtly make the connection between Emma Woodhouse in Jane Austen’s *Emma* and his or her poor students or students of color. There may be discussion on how the experiences of students today differ from a young woman in Britain in the 1800s, but that is often the extent of the instruction. However, when multicultural literature is used, it is a very general practice for the teacher to overtly point out how the main characters, who by definition are rarely white, middle-class, American boys, are “different” than the students in general. This sets up a very pronounced sense of “other” and “different” in the classroom when it comes to multicultural literature (Page, 2002, implications section, para. 7).

In order to avoid this problem, multicultural literature can be framed in two ways. One way is to ensure that multicultural literature is an essential component throughout the curriculum, not a separate unit, in other words, incorporating a *transformation approach*. In this regard, multicultural literature is used as a base not just for finding cursory similarities between students and literary figures, but also as an “impetus for acting in a positive fashion on that awareness and those values” (Rasinski & Padak, 1990, p. 580). This view is presented by Macphée (1997) who promotes the use of multicultural literature not just as a beacon to bring students’ attention to the problems of racial discrimination, but also to serve as a “catalyst to continue to encourage student dialogue about important social issues, making others’ voices as loud and vital as these students’” (conclusions and implications section, para. 3).

Another way to frame multicultural literature to is to provide a very accurate and appropriate background to the multicultural literature used in the classroom. Ketter and Lewis (2001) describe an incident in which the mother of an African American middle-schooler objected to the use of *Souther* as the only piece of literature about African Americans being studied that year. The middle school student was the only student of color in his class that year at a rural, predominantly white school. The mother objected to the use of this particular novel because she felt her son was being made to find all the answers and solutions that were put forth in the story, just because he was Black. She also criticized the lack of historical context that was given to the story. There was no explanation

given to the students as to why, in the face of the history of slavery in the U.S., that this particular text was important to read. Upon further investigation, Ketter and Lewis found that the teachers in the school felt it was not their place to inform the students of the political and historical inequities inherent in race relations in the U.S. and that it was the responsibility of the parents to let their children know what they felt was appropriate to know. In other words, several of the teachers felt that “focusing on the oppression of racial and ethnic groups in the United States could be seen as inappropriate for school study” (Ketter & Lewis, 2001, teaching neutral texts section, para. 3).

### **Teacher Self-Awareness**

There are several criteria from which scholars suggest that teachers draw in order to select multicultural literature. In choosing literature, it is imperative to determine for what purpose the literature will be used. In other words, one may ask what knowledge will the students gain by reading that text? Several scholars have suggested that a goal of multicultural literature is to increase awareness of both the similarities and differences among and between cultures (Boyd, 2002; Dyson & Genishi, 1994; Ford et al., 2000; Norton, 1990). Nevertheless, there seems to be a tacit understanding that merely recognizing these differences by adding a multicultural unit throughout the school year will result in a reduction of prejudice among students. Scholars of multicultural education argue differently. There must be a focus on critical thought and a background in the history of oppression in the U.S. in order for multicultural literature to transcend the cursory goal of building awareness. As Sleeter (2000) states it, “[i]ncorporating ‘others’ into the curriculum does not necessarily change anything” (para. 3).

Fuhler (2000) points out that “it takes more than talk and heartfelt wishes to make today’s society more equitable: It takes action” (p. vii). In their study of how multicultural literature can affect gifted black students’ self-awareness and pride, Ford et al. (2000) explicitly state that students should not be taught to simply accept forms of prejudice and negative attitudes toward minorities. The authors claim that students can be taught to “think more critically about hidden messages in what they read” (strategies for promoting multicultural awareness, para. 2). They further purport that the use of multicultural literature can cultivate thought, in addition to

bolstering empathy and strong racial identity. In this regard, they argue, the use of multicultural literature in the classroom actually can create a more critical individual who is capable of high levels of analysis and evaluation.

A common argument against this approach is that teachers often feel that the realm of politics has no place in their classroom. In Boyd’s (2002) study of how four students responded to multicultural literature, the teacher, Melissa, is described as not taking “an overt political stance for social justice issues in her classroom even when she wondered about such issues as reflected in her journal” (many tender mercies section, para. 1). In this instance, Melissa was aware of the systemic problems, but consciously chose not to address them in her class because she felt it was not within her realm as educator to bring these volatile issues to the table. In fact, the idea that the teacher is an apolitical entity who is separate from issues of social unrest is not a new one. In examining how the teacher has been historically sanctioned by the masses, Spring (2005) points out that the passivity of the teacher is firmly established within the American mind (p. 143).

In another case study, a teacher does not seem aware that there is a problem. She appeared so culturally encapsulated that she was unable to see how addressing anything about social justice could possibly benefit her students. This particular teacher sponsored the act of reading “to endorse ‘good’ values that ‘stable’ families hold” (Ketter & Lewis, 2001, teaching neutral texts section, para. 4). This teacher’s idea of “good, stable” families was the White, middle-class norm against which all other families are held in comparison. She preferred to read “multicultural” texts that depicted these values with brown skin.

Again, the practice of merely exposing one to some cultural and racial variety in literature does not directly translate into enlightenment. In his look at the telling of the story of Christopher Columbus, Taxel (1993) called for multicultural books to be “seen as part of an interpretive war, a long struggle to ensure that important narratives such as history and literature do not remain in the hands of ‘the people in charge’” (p. 30). Taxel gives many examples of children’s books that recount Columbus as a brave, heroic explorer who “discovered the New World.” Taxel took the 500<sup>th</sup> anniversary of the date of Columbus’s landing as an opportunity to display the blatant ignorance on the part of children’s literature texts to the reality and actuality of the

genocide that was a direct result of contact. Some of the stories mentioned that the land was occupied upon Columbus's arrival, but there was no discussion of the culture of the Taino and Arawak prior to the arrival of the European invaders. Contrarily, much emphasis is placed on describing the land of Columbus in terms of its politics, economy, and social orders. The disregard of these issues in the lives of the people who were terminated as a result of European violence implies that prior to Columbus's arrival, they were without those basic modes of civilization. The books which Taxel found that did recognize the existence of people before 1492 did so almost exclusively without going into how they were violently subjugated and murdered by the Europeans. Taxel calls for a much more critical look in children's literature at this event in the history of the Americas in order to understand the political dimensions of various interpretations of history (Taxel, 1993, pp 30-31).

In order to implement this kind of stance vis-à-vis multicultural literature, it is imperative that the teacher cultivate within him or herself a sense of understanding that goes beyond the recognition of heroes and holidays. Mathis (2001) suggests that teachers participate in reading discussion groups with other teachers and then have critical, in depth discussion surrounding the issues in that book. Her approach emphasizes the importance of teacher awareness and suggests that "the most important way to encourage insightful reading of multicultural literature is to model that behavior by keeping such books in the classroom, being an avid reader, and thinking aloud about one's own questions to show that one values such literature" (p. 158). By allowing students to witness educators' personal explorations into social issues through discussions of literature, they are more likely to examine these issues themselves. Educators then can benefit in their own intellectual growth as well as encourage critical thought among their students. In this context, critical thinking can lead students to act upon factors they see as unjust within the larger society.

Another way to avoid a mere cursory recognition of "others" in multicultural literature is to change the very structure of the way the teacher approaches the analysis of the literature. This involves using the literature as a reflection of a critical pedagogy. Grobman (2001) examined Maxine Hong Kingston's *China Men* and emphasized how studying multicultural

literature can in fact bring teachers to recognize that "the conventional methods may not work in a multicultural classroom setting" (para. 1). She added further that a significant shift in the power structure of the classroom will in itself reflect a more critical pedagogy. She suggests that, although traditional methods of teacher-centered instruction remain dominant, by "decentering authority in multicultural classrooms, teachers underscore the notion that knowledge is socially constructed, that the canon, too, is a cultural and political construct, and that a particular curriculum or syllabus is highly political and personal" (multicultural criticism, multicultural pedagogy section, para. 2).

Grobman's (2001) theory is based on the concept that standard methods of teaching are rooted in the canon and reflect the values of that canon. By shifting the power structures within the classroom, the teacher is in essence reflecting a fundamental component of multicultural literature which is resistance and a shift in recognizing often ignored sources of power.

### Opposition

There are three main reasons why authors have suggested teachers may run into difficulty in using multicultural literature in the classroom. They are (1) opposition from school administrators, teachers, and/or parents who are firmly rooted in the belief that the canon is the only route through which to teach literacy and critical thought, (2) opposition from students, and (3) lack of access to quality multicultural literature.

Godina (1996) recounts his personal experience in coming up against difficulty in providing his students with multicultural literature. He faced a reluctant administrator who, when he approached her about receiving funds to purchase multicultural materials for his students, "suggested that I abandon the idea of Chicano/a literature. If I wanted to pursue multiculturalism at the middle school, she indicated that I could be in charge of a week-long international fair where students could do activities such as taste food from other countries" (p. 546). Godina recounts that he scraped together the necessary books and began a study of two novels by Chicano author Rudolfo Anaya. Although the administrator's reluctance to accommodate Godina's request was ostensibly based on her fear that the parents would disapprove and that the leap to a multicultural-based curriculum for reading was against the norm, Godina concluded differently. Contrary to

“the department head’s worst fears about parents’ disapproval of Chicano/a literature in the classroom, the parents instead became staunch supporters who felt comfortable coming to my classroom during open-house visits” (p. 546).

Godina (1996) further relates how his students became very excited about reading the literature (also see De Leon, 2002) and that genuine enthusiasm extended to members of their families. Soon he was receiving requests to send extra copies or photocopies of the books home so that family members could also read them. Ultimately, Godina witnessed a phenomenon at the local bookstore where he had originally purchased the texts. Following the unit in his classroom, he noticed the bookstore began to stock more multicultural authors and titles. The teacher, in this case Godina, had made an impact outside of his classroom and into the broader community by creating a demand for multicultural literature.

Unsupportive teachers may also respond negatively, as they did to Angela, the mother of the African-American middle schooler who spoke out against the choice of novel that portrays African-Americans as victimized. Angela spoke out because she felt there should be more positive examples of people of color in the literature chosen. However, the teachers responded abrasively to this suggestion in the context of a meeting with the curriculum committee that Angela called. Ketter and Lewis (2001) describe the incident as not “a very good meeting.” The teachers indicated that they were unaware of any racism at their school and went so far as to tell Angela it was her responsibility to educate her child on “those types of things.” The very first remark made at the meeting was made by a white teacher who said, “I’ve been teaching here for 25 years and I know there’s no prejudice at [name] Middle School” (the local politics of multicultural literature section, para. 5). In this case, the teaching staff at the school, because of their high level of cultural encapsulation, was unable to see how a critical look at multicultural literature would benefit their students in any way.

Even for the teacher who is supportive of and actively pursues implementing multicultural literature, there are difficulties to take into account. For instance the supportive teacher has the dilemma of dealing with the “unresolved contradictions of a society that is founded on the ideology of human equality and democracy, yet grounded in the conflicting perceptions of race,

class, and gender” (Spears-Bunton, 1998, p. 22). This in and of itself is a huge barrier to effectively teaching in a multicultural setting.

It is not just teachers and administrators who seem to oppose the implementation of a multicultural text in the classroom. Students can also be resistant to critically thinking about multicultural literature. In a study of four 9<sup>th</sup> grade students, Boyd (2002) observed that “as teachers incorporate more multicultural literature to augment the canon, students are often resistant to the literature. Students justify such claims by arguing that the difficulty of comprehending the cultural and linguistic practices exhibited in the story” (nic section, para 2). Boyd is specifically referring to a student who, although generally academically successful, fell short of the requirement for an assignment regarding a multicultural text because he claimed it did not interest him.

Finally, it is important to examine how the paucity of quality multicultural literature in the marketplace affects its use in the classroom. This is a widely addressed issue. Harris (1993) prefaces her book with a personal account of the difficulty she encountered as a child in finding any multicultural literature. Further, she acknowledged that her own book was several years in the making partially because she ran into difficulty in finding a publisher who would accept the that there was a market for it (p. xvi). Morales (2001) makes a connection between the lack of multicultural literature with institutions of inequity within our society. She states, “[a]lthough I had never experienced explicit racism, not reading an ounce of Chicano/a literature since my freshman year in college, was an implicit racism on the part of the. . . system” (sidebar). She sees the lack of multicultural literature as a symptom of the larger problem, i.e., institutionalized racism. Godina (1996) suggests that this dearth may be a result of “publishers who seek to attract more lucrative mainstream markets” (p. 544).

MacCann (1993) has found a way to turn this apparent lack of good, available multicultural literature into a boon, specifically as related to Native American literature. She suggests that in the face of the scarceness of multicultural literature, the negative stereotypes of people of color that are often depicted in mainstream literature can be used as “object lesson,” depending on the age and sophistication in critical thought of the students in the class (p. 140). If a teacher were to critically study a text that depicted the stereotypically dressed



Native American with the halting speech and the stony visage, that teacher could break down the stereotypes and encourage students to see through the barriers of an unjust literature.

### Conclusions

This paper has highlighted some of the important issues surrounding multicultural literature. It is important to keep in mind that this review is a broad overview of the wide debate surrounding the use of “opposition” and “alternate” literature in the classroom. The variations in what one person defines as multicultural literature as opposed to what another calls multicultural literature can be confounding. The way one teacher chooses to study multicultural literature can be very different from the way another chooses to use it in his or her classroom. There have been arguments strongly supporting the contributions approach and very strong arguments for using multicultural literature as a main component of a transformational approach with a goal of social action.

Using multicultural literature is dependent upon how one defines what constitutes that literature and what specific role it will play in the classroom. If one defines multicultural literature as any text that mentions a person of color, then one can claim to be utilizing multicultural literature in the curriculum by merely reading a transcript of Martin Luther King Jr.’s famous “I Have a Dream” speech on the anniversary of his birthday and leave it at that. However, how multicultural literature is defined in each classroom context is of critical importance because it is in that definition that the literature can be given power to transform the education of the students. The same speech could be read at the beginning of the school year and referred to several times in any study of revolution, social organization, or U.S. history. If the piece is defined as a central part of the curriculum, as in terms of Banks’s (2001) social action approach, it can take on a whole new meaning for the students (Beiger, 1995).

By guaranteeing that all texts are given appropriate and accurate background context, educators can ensure that the text is being addressed in the spirit in which it is written. One could argue by reading the words of Martin Luther King Jr.’s speech out of context that he was merely interested in creating a harmonic nation wherein white and black children played hand in hand. One could read his words and conclude that he was optimistic that this outcome

would be reached someday through the ever present gentle nudging of the oppressed to remind the dominant majority that “Hey, we’re still here. Don’t you think it’s time we all got along?” However, placed in the context of the Civil Rights Movement of the 1950s and 1960s, King’s speech becomes a defining moment in U.S. history that can be problematized to reflect the reality of racial violence, injustice, and blatant inequity that exists in U. S. society as a whole.

As has been explicated, a defining factor in whether or not an educator chooses to use multicultural literature in a critical way that encourages social action is dependent upon that individual teacher’s personal venture into exploring his or own position within society and his or her own ability to recognize social injustice (Ketter & Lewis, 2001; Macphee, 1997; Sleeter, 1996). The ability to say that one believes one thing, in the face of empirical evidence that proves the opposite is a definitively American trait. It is this trait that allows certain educators to present the story of Christopher Columbus in a very positive light. It allows them to continue to espouse that Columbus “discovered” America in 1492 despite the well-known fact that human beings have inhabited North America for at least 10,000 and probably more years. It is also this trait that allows educators to continue painting European explorers as heroes, despite the oppression, injustice and genocide that followed their wake in the Americas (Taxel, 1993).

It is a reality that the scarcity of quality multicultural literature can make this type of critical storytelling and analysis difficult (Godina, 1996; Morales, 2001). Educators who desire to encourage critical thought within their students on issues of social injustice and reconstruction through the study of multicultural literature may well run into obstacles of this sort. There also exists the actuality that teachers face opposition from resistant colleagues, administrators and students. Even teachers who feel personally that there are issues within U.S. society that should be addressed in terms of social inequity and injustice can have difficulty in reconciling within themselves the general belief that teachers are to be apolitical and it is not their place to bring politics into the classroom. Nevertheless, it is the teacher’s prerogative to acknowledge the politics in the classroom, which ultimately cannot be left outside the door. The literature reviewed in this paper suggests that it is neither realistic nor

beneficial to students to operate within a pedagogy that views students as apolitical and devoid of the ability to act.

Ultimately, it is the classroom teacher who decides what is presented to his or her class. The uses, misuse, or nonuse of multicultural literature in the classroom is directly dependent on how the teacher chooses to view his or her role. Should an educator conclude that it is within his or her realm of duty to provide all the students in that classroom with an educational experience that is reflective of the general population of the U.S., it is imperative that good, quality multicultural literature is used. There is no denying that quality multicultural literature does exist and that it can be a crucial tool in helping to create minds that are capable of critical and directed thought (Rasniski & Padak, 1990).

### **Recommendations for Practice**

Based upon the literature reviewed in this paper, it is recommended that teachers (1) use multicultural texts as a central piece of their curriculum, (2) make efforts to ensure that literature is authentic and portrays the culture it is associated with consistently and accurately, (3) engage in critical self-reflection and identity within themselves areas of prejudice, privilege, and power, and (4) encourage students through modeling to read multicultural texts with a critical eye and to employ action-oriented methods in examining literature.

Based on the work of Banks (2001) and Beiger (1995), it is suggested that rather than using an ethnic additive approach when studying multicultural literature, teachers instead incorporate multicultural literature from a transformation or social action perspective. By reading multicultural literature in the context of the history of inequity and injustice in the U.S., students have shown a capacity to critically analyze society and actually effect changes they see as positive (Ford et al., 2000; Macphee, 1997).

There are several schemes for determining how to evaluate multicultural literature in terms of acuity and authenticity. Norton (2001), Bishop (1997), and Cai and Bishop (1994) have all put forth criteria for assessing literature. There are several resources available in the form of annotated bibliographies and lists, some of which are listed in the Appendix.

The research also suggests that teachers who are self-reflective in their own personal examination of their positions of power and privilege in society are more likely to encourage

students to critically examine multicultural literature. Teachers who hold the position that the classroom should operate outside of politics and that they themselves are devoid of culture and apolitical are more likely to utilize multicultural literature at the ethnic additive level rather than a transformation or social action level (Ketter & Lewis, 2001; Wilkinson & Kido, 1997). Pinar (1993) has suggested that if “what we know about ourselves – our history, our culture, our national identity – is deformed by absences, denials, and incompleteness, then our identity – both as individuals and as Americans – is fragmented” (p. 61). This fragmentation could then be manifested in how teachers choose or do not choose to use and study multicultural texts.

Finally, the research literature reviewed suggests that teachers who themselves participate in literature discussion groups and circles that critically examine multicultural literature are more likely to encourage students to do likewise (Mathis, 2001). It is through witnessing their teachers reading these texts that students are given the impression they are valuable and in turn the stories they tell are valid and worth examination.

Ultimately, it becomes the responsibility of the educator to place multicultural literature in the center of the curriculum. Research indicates that it is through a genuine interest in many voices that students learn about themselves, their society, and the roles they can play as citizens in that society.

### **Appendix: Resources**

Day, F. A. (1999). *Multicultural voices in children's literature: A resource for teachers* (2<sup>nd</sup> ed.). Portsmouth, NH: Heinemann.

An overview of forty authors who have published children's literature. Includes biographical information as well as titles of books published. Includes, in the overview, a section on evaluating children's books for bias. Also has several very helpful appendices, including one which is a fairly comprehensive assessment for multicultural education programs.

Hansen-Krening, N., Aoki, E. M., & Mizokawa, D. T. (Eds.). (2002). *Kaleidoscope: A multicultural booklist for grades K-8* (4<sup>th</sup> ed.). Urbana, IL: NCTE.

A popular annotated bibliography published by the National Council of Teachers of English. It is organized by categories, such as social and environmental issues, the arts, etc. rather than by

ethnicity. Includes a list of suggested resources and a list of publishers and contact information on how to order books.

Lind, B. B. (1996) *Multicultural children's literature: An annotated bibliography, grades K-8*. Jefferson, NC: McFarland & Company. Breaks literature up based on ethnicity of the characters in the books, and also by grade level. Annotations are relatively brief. Includes a list of publishers of children's literature as well as contact information. Also includes a section on teacher's informational reading and research.

Marantz, S., & Marantz, K. (1994). *Multicultural picture books: Art for understanding others*. Worthington, OH: Linworth. Geared toward books for younger children, some of the books annotated can be used with older children as supplemental. Includes in the introduction a synopsis of the authors' motivation for writing the book which provides insight into the layout of the book.

Miller-Lachman, L. (1992). *Our family, our friends, our world: An annotated guide to significant multicultural books for children and teenagers*. New Providence, NJ: R.R. Bowker. Annotations are extensive. Although it is relatively old, published in 1992, includes a foreword by educator James Comer that is relevant to issues facing teachers using multicultural literature today. Organized by ethnicity.

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## **Culturally Responsive Strategies that Embrace Diversity and Improve Classroom Management**

*The recent increase in immigration to the U.S. has caused extensive changes within schools and created unique challenges for educators. This review suggests teachers can effectively meet the diversity of learning needs by embracing culturally responsive methods and multicultural curricula which center on valuing the assets each child brings to the classroom. The literature accentuates the need for K-12 educators to (a) enhance their cultural awareness of students and to critically reflect on their own cultural backgrounds, (b) provide equal learning opportunities for marginalized students and newly arriving immigrants, and (c) incorporate an anti-bias curriculum and democratic classroom management style that affirms the uniqueness of each student.*

United States census data from 1991 to 1998 show 7.6 million immigrants arrived in the U.S., with Asians and Latin American immigrants comprising three-fourths of this group. As this influx of immigrants continues to rise, census projections estimate that by the year 2050, non-Hispanic white Americans will make up only approximately 53% of the population (Banks, 2001). This change in demographics is most evident in our public schools where more than 150 languages are represented, and children of color currently make up 30% of the age 18 and under population (Arnow, 2001).

The increasing diversity within society has extensive implications for schools. In many of the larger U.S. cities, the dramatic increase of immigrants in schools has affected a change in their status from the minority population to the majority. This places emphasis on the need to include multicultural education within the parameters of our educational system. Multicultural education prepares children to live, learn, and work together to achieve goals in a culturally diverse world (Vavrus, 2002). Educators can contribute to the progress of multicultural education through programs that incorporate teacher self-assessments and peer coaching (Harlan, 2002). This includes procedures that will examine biases, and aid in directing efforts to establish environments that are receptive to diversity and optimistic to creating culturally responsive classrooms. Current teaching practices in schools tend to marginalize culturally diverse students, while only teaching to the mainstream students. The overall objectives for culturally responsive teaching is to maintain an egalitarian atmosphere for students, and respond appropriately to cultural issues that will generate or create new behaviors that will stimulate learning.

### **Literature Review**

Some Americans are concerned that the new immigrants entering the U.S. will not assimilate into the traditional, Western culture. Diversity is complex; it is not merely confined to one's outward appearance or the similarities of an individual or group in spite of perceived homogeneity. People often have the tendency to use descriptors to classify and generalize racial and ethnic identities of particular groups which lead to misconceptions, discriminatory practices and inequality, thus ignoring the uniqueness and values the person or group offers (Landau, 2004). Our society is only gradually transcending from the ideology of assimilation to a culturally pluralistic perspective, where all cultures are valued and can work together (Banks, 2001). The challenges that lie ahead for educators will involve issues on how to meet the academic needs of all children in a pluralistic society that values the roots of each child. Culturally responsive methods provide teachers with additional tools to meet the diverse learning needs while valuing the assets each child brings to the classroom. Teachers who embrace culturally responsive methods will play a crucial role in creating a more equitable school system for these students.

It is essential to recognize that a great number of school-aged immigrants entering our education system at various grade levels face many challenges. It is equally important that teachers develop the knowledge and skills necessary to accurately assess cultural differences and respond to them in a respectful and effective manner (Banks, 2001; Queen, Blackwilder, & Mallen, 1997; Rodriquez & Sjostrom, 1996; Vavrus, 2002; Weinstein, 2003).

Educators at all levels must provide a sense of value for each of their students. They can

achieve this by validating students, and treating them as respectful citizens (Landau, 2004). It is equally important that teachers are aware of the ways in which the dominant white culture permeates in all aspects of our society. This dominance is often associated with privileges that are provided to students identified as white or European descent (Ivey, D'Andrea, Ivey, & Simek-Morgan, 2002; Landau, 2004). Teachers may unconsciously make it a routine practice in white majority classrooms to provide less attention to the needs of students of color, which creates gaps in equitable learning opportunities. Culturally responsive teachers deliberately craft and implement learning situations that are beneficial to all students.

### **Immigrants and Other Marginalized Students**

Immigrant students may experience anxieties from being in a new environment, and their inability to communicate effectively in a new language may hinder their transition into the school and community (Curran, 2003). As a result they are likely to become withdrawn, or they may display signs of frustration and anger that can impede their integration with other students in the classroom, and adversely affect their learning opportunities. Understanding why students are invisible should motivate teachers to create ways to give students individual recognition and get them more involved in classroom activities (Landau, 2004). Culturally diverse students are likely to continue practicing their customs and traditions that are a part of their identity. Subsequently teacher instruction is most effective when monitoring the appropriateness of all students' behavior with respect to their cultural practices and by avoiding labeling or stereotyping students (Elias, Arnold, & Hussey, 2003; Ivey et al., 2002; Salend, 1999; Schniedewend & Davidson, 1998). Teachers can help marginalized students develop their own identities in a multicultural world using these situations to promote learning in future lessons.

Historically, many efforts to provide equal learning opportunities for both students of color and newly arriving immigrants are hindered by racism, sexism, and other discriminatory acts (Banks, 2001). Many U.S. citizens are more conscious of immigrants entering our country today than they were during the industrial period, primarily because of the overwhelming numbers coming from areas like Asia and the Middle East where the languages and cultures are very different from the Western world (Arnold, 2001). To add to the complexity of the U.S. immigrant

situation, there are those in the U.S. belonging to the dominant culture that have power and privilege who feel that by providing diverse students equal learning opportunities will ultimately lead to the loss of their power and privileges (Vavrus, 2002).

### **Culturally Responsive Teaching and Multicultural Education**

Culturally responsive teaching methods may be difficult to implement in political environments that do not favor multicultural education and where teachers do not fully understand student cultures. By understanding various cultures and being sensitive and respectful to cultures other than their own teachers can avoid conflicts in values and beliefs that exist between their students and the school. Many students are aware of their differences and some are more sensitive to their differences than others. When students experience situations where they are discriminated against because of their differences it will lead to ill feelings, negative attitudes towards school and teachers, and misbehaviors (Landau, 2004).

The primary limitations of this paper reflect the lack of data on both information on suburban schools and teacher education programs. Many sources focus on incidents in urban schools rather than suburban, creating a disproportionate view that only urban schools are violent and in need of culturally responsive methods. Also, few sources other than Vavrus (2002) and Harlan (2002), reference the need for teachers to take part in a curriculum where they can learn and discuss the personal attitudes, values, worldviews and behaviors that influence their own cultural development and biases.

There are many barriers that can prevent effective teaching. Without a self-reflective practice, teachers may miss opportunities to effectively teach all of their students. Educators are capable of developing negative views and prejudices about students from socioeconomic backgrounds different from their own. It is imperative that educators evaluate their assumptions, biases and stereotypes when teaching students from diverse economic class groups. In addition, effective teachers evaluate their actions as instructors to ensure they are not discriminating against students or allowing students to experience feelings of unequal treatment because of who they are, the entity they belong, or their ability or disability (Landau, 2004).

Every student has the right for an equal education. Teachers can ensure students have equal educational opportunities by carefully gauging the needs of each student, focusing on their strengths and employing management strategies that have democratic consequences. Landau (2004) explains democratic consequences involve measures that are constructive and teach responsibilities. They include students in the decision-making process and take different approaches to improve behavior. Democratic consequences foster a sense of self-consciousness in students that will encourage better decisions for future behaviors. At the foundation of building a democratic classroom, teachers need to be aware that student opportunities for equal education can be corrupted by personal biases that are relative to students differences in skill levels, religion, personal and physical characteristics, social class, and race.

Teachers should be confident in their abilities of incorporating a curriculum that considers the needs of all students and build lesson plans that relate to students' backgrounds (Villegas, 1992). Teachers often face the enormous challenge of addressing the unique cultures and learning needs of students while executing a standards based curriculum. Standardized test used to measure student's academics do not consider the specific learning needs of students and are more of a barrier than a measure of the potential learning achievement of diverse students (Landau, 2004). Teachers need to be fervently aware of cultural differences during assessments and evaluations of student performance, which includes recognizing language barriers.

Within the scope of multicultural education, teachers must satisfy the educational needs of students from diverse linguistic backgrounds. Many children of immigrants come to the U.S. speaking a language other than English. Perhaps the most important step teachers can take for English Language Learners (ELLs) in their classroom will be providing a safe, nurturing and affirming environment for students to learn (Elias et al., 1997). Significant gains are made when teachers recognize and accept the value of multicultural approaches that incorporate language acquisition. Scholars who support culturally responsive approaches have identified the necessary background knowledge teachers need to support ELLs including areas such as language development, second language acquisition, cultural diversity, and sociolinguistics (Curran, 2003).

Successful classroom management is tied to clear communication. Teachers' management and decision-making skills are more difficult when they cannot communicate in the first language of students who are new to U.S. classrooms (Curran, 2003). Teachers can support ELL students by learning more about their students and their families, and by making an effort to build on their cultural and linguistic backgrounds. A greater appreciation for diversity is achieved in teacher education once they acknowledge that cultural diversity is present throughout U.S. society and in every classroom. For educators to be effective in their approach to cultural awareness and responsiveness, it is imperative that they have a clear understanding of culturally responsive teaching methods (Rodriguez & Sjostrom, 1996).

Creating a democratic classroom environment is analogous to the democracy in society, including the rules that are established, the respect people have for each other, and the manner individuals conduct themselves and cooperate within the norms. It involves freedom, which offers students the opportunity to express themselves openly and honestly, to contemplate, and participate in the decision making process. Implementing a democratic structured classroom allows students to assume responsibility, to initiate actions appropriate for mature behavior, which promotes their mental growth, autonomy, and development (Landau, 2004). Teachers may not be able to meet all the needs of every student, but with the diligent application of sound democratic practices positive outcomes for many students are possible.

### **Societal and Familial Changes**

Teachers should be cognizant of the varying societal and familial changes that have occurred in the U.S. since the 1950s. One of the most significant changes is the dramatically widened gap in family income between the socioeconomic classes. Rising poverty rates negatively impact student learning, increase violence in schools and neighborhoods, and alter the patterns of activities among members of the family (Queen et al., 1997). Transformations within the family structure have also contributed to increased challenges for educators. In families of previous generations, parents often depended on employers and the church as sources of authority. Evolving societal ideals, demands and conditions, however, have moved parental dependence away from these sources. The value and respect that parents once had toward

authority that produced conformity to rules and obedience have quickly diminished over recent generations (Queen et al., 1997). The members composing the family differ widely across social and ethnic groups (Ivey et al., 2002). Single-mother households, extended and/or blended families, and gay and lesbian parents are increasingly visible in the U.S. with gender role definitions changing and patriarchal authority being challenged.

Children are the most affected by the changes in family structure. Many of today's problems that were once an integral part of an adult's life have now become the responsibilities of children (DiGiulio, 2000). Students who are required to assume adult tasks may enter schools with issues that are far more important than education. For instance, they may have the responsibility of supervising the care of a sibling, preparing meals and putting their own selves to bed while the parent(s) are still at work. As a result of these extra tasks students may feel overwhelmed and fatigue and exhibit behaviors that are not suitable in the classrooms (DiGiulio, 2000). Teachers are charged with the task of providing these students with a quality education, while managing a variety of behaviors and student motivational challenges. Teachers utilizing cultural responsive methods will be better prepared to help students from various structured families address these issues by first understanding the stresses these students are experiencing.

With the changing sociocultural demographics, properly managing a multitude of student behaviors, attitudes, beliefs, and values is of primary concern for teachers. They must be adequately prepared to address and adapt to changing values and unfamiliar issues of minority students that may interfere with existing classroom management practices.

### **Culturally Responsive Classroom Management**

Culturally responsive educators recognize that classroom management is more than the enforcement of disciplinary measures to control behavioral problems, but it also defines the leadership style that teachers will assume in the classroom (DiGiulio, 2000). Effective leadership stipulates that teachers will assume responsibility for their students' learning. The teacher ensures that classroom activities create learning opportunities and full participation for all students. Creating a positive classroom environment that provides the best possible situation for learning is essential to the process

of classroom management (Landau, 2004). Diminishing hostile situations that may adversely affect the classroom environment are also important. Preventive measures to minimize unwanted behaviors should be immediately implemented to resolve any conflict that may arise between the teacher and students or conflicts that pit students against each other (DiGiulio, 2000). Teachers may diffuse power struggles by creating a classroom environment that is positive, respectful, and values the needs and interest of students (Landau, 2004). Once teachers learn to work together with students and not against them even some of the most confrontational students will become cooperative and manageable.

Studies on corrective measures taken against students of color have drawn the concerns of administrators and parents (Bullara, 1993). Marginalized students receive a disproportionate amount of disciplinary treatment from school administrators. Students of color receive two to five times more disciplinary treatment compared to white students. Teachers who react to punishing students of color are those who have failed to understand cultures different from their own. These educators have also failed to foster a classroom climate that would result in more widespread and positive outcomes for students of diverse groups and backgrounds. These factors also include unclear, poorly specified expectations, and the lack of consistency in disciplining when expectations are not filled (Bullara, 1993). One-on-one problem solving can prove to be an effective way to resolving inappropriate student behavior by allowing direct communication between student and teacher. It affords the teacher and student time to share opposing perspectives, to listen carefully to each other and to clarify misunderstanding of rules. It provides the student with alternate choices that are more positive responses than the decision the student made that resulted in the misbehavior (Landau, 2004).

Students can benefit from all learning opportunities. Landau (2004) explains that teachable moments occur when teachers take advantage of opportunities to reshape behavior, reteach, and improve social behaviors of students. Teachable moments allow students to critically reflect on decisions they have made and contemplate resolutions to promptly fix the problem. In order for teachable moments to be most effective and beneficial for students' teachers must ensure their response to the situation is constructive and does not serve to



make matters worse by making the student feel inadequate or negative about the behavior.

Developmental classroom management strategies that promote positive responses between teachers and marginalized students will help define underlying factors that are unique in certain cultures and often misunderstood as non-conforming behaviors. For example, Asians “have been taught to create emotional harmony and avoid conflict in accord with their cultural norms” (Ivey et al., 2002, p. 195). Teachers who do not understand this cultural norm may interpret these students as unmotivated or having a lack of drive. The lack of careful considerations for cultural differences may result in the misinterpretation of the behavior. Consider the call response, a communication style that is commonly used by African American students. Black students talk loudly simultaneously as the teacher is speaking while responding to the teachers’ comments. The students reacting this way are demonstrating concerns about the comments made by the teacher or are acknowledgment of agreement. Teachers who are culturally aware can respond to this behavior constructively and avoid what may be interpreted as disrespect between the student and teacher (Brown, 2003).

In order for teachers to gain a better cultural awareness of their students, they must first critically reflect on their own cultural backgrounds. As cultural beings, educators from the dominant culture “need to articulate and examine the values implicit in the Western, White, middle-class” atmosphere of the schools they teach in and see that the “emphasis on individual achievement, independence and efficiency” may not be the values their students need in the classroom (Weinstein, 2003, p. 271). Teaching programs must allow teachers to “confront and change their own biases” and counter “misinformation and...educational methods that may coincide with racism” (Vavrus, 2002 p. 85). Cultural responsive management requires the knowledge and awareness of ways schools may perpetuate discrimination, and how race, social class, gender, and language background are linked to power (Weinstein, 2003).

Regardless of the culture represented, students will often demonstrate certain behaviors in class that may warrant the teachers’ immediate attention and actions. Therefore well-trained culturally responsive teachers will consider the cultural backgrounds of students prior to implementing a solution (Weinstein, 2003). Fair

treatment for students is accomplished when teachers who clearly understand that infractions are effectively managed once individual needs are considered and addressed. The application of the same treatment for all students does not consider individual circumstances, which may have influenced the infraction or misbehavior. Once teachers understand the differences in each situation and address the individual needs it will allow them to make appropriate decisions that can result in fair treatment for the student (Landau, 2004).

Teachers must stay proactive both by developing ways to communicate respect for diversity, and by demonstrating actions that reaffirm a connection with students. Rules that teachers create prior to the beginning of the school year will help set the stage for positive interactions between cultures once classes begin. Rules established to promote a safe and efficient classroom for learning must be without personal biases and inequity, common to all students, and a safe environment for students to engage learning (Landau, 2004). Teachers who involve their students in creating rules that are safe and promote equality to all increase the likelihood of cooperation and adherence to those rules, thus providing the students time to focus more time on academics rather than being distracted by unwanted class behaviors.

To promote effective classroom management procedures it is imperative that teachers distinguish between negative and positive rules that specify a desired behavior. Teachers can foster a positive classroom environment where students are most compliant to rules by understanding the manner in which basic terms such as I, you, and we, define how language and power interrelates i.e., I – is associated with the behaviorist practice that reflects teacher desires; You – is associated with permissive practice that reflects delegation of power to students; and We – is associated with democratic practice that reflects mutual respect and trust between the teacher and students, and power is equally shared with students (Landau, 2004). Additional guidelines for rules include, a negative rule that demands compliance of a student not to talk without raising his hand can be stated in a more constructive manner by asking the student to raise his hand and wait to be acknowledge prior to asking or partaking in class discussions. Bullara (1993) explains that any rule that requires strict compliance of students is negative. For example, telling a student not to be late for class. In contrast to the negative intonations this

rule will serve, it is suggested that teachers instruct students to be in their seats when the tardy bell rings, and to begin instruction immediately following the bell. In situations where a negative rule instructs students not to forget their work, introducing a positive example that will inform students to bring books, paper and pencil to class daily will be more constructive.

Organizing classroom meetings are conducive to nurturing appropriate behaviors and fostering a positive classroom environment. To ensure the success of meetings teachers can do the following: teachers can call a meeting or allow students to call a meeting; ensure that times, places and the manner of the meeting is appropriate and that all students have some control and power in the meetings; arrange seats so that students and teacher can communicate directly with each other and the power base on seating is equal; ensure before the meeting that names are not used to prevent a breakdown in communication; monitor the meetings to ensure concerns common to the classroom are addressed and not individual personal issues that are consuming time; and encourage full participation in meetings. Teachers may need to facilitate by asking questions in order to influence or stimulate student involvement and interactions. Students should be encouraged to make a journal – recording what is discussed to ensure clarity, track progression, and avoid repetition of past issues (Landau, 2004).

### **School Climate and Culture**

The climate and culture of schools vary from one institution to the next, which requires teachers to discover and employ appropriate culturally responsive strategies depending on the environment and student population. Establishing and maintaining reasonable learning expectations and conditions in urban schools are often challenging propositions for teachers. Several reasons exist in the challenge of managing urban classrooms. During the past quarter century, a large number of immigrants from Middle Eastern, Hispanic and Asian countries have settled in U.S. urban areas (Brown, 2003).

A significant number of these immigrants are of school age, which has inundated urban schools to the brink of overcrowding. These conditions have placed additional demands on teachers to educate new linguistic and cultural populations. Studies suggest that classroom management will be a greater challenge for

teachers in schools that reside in high-poverty neighborhoods because the schools themselves are under greater pressure to maintain a safe, orderly, academic environment within under-funded educational systems (Metz, 1987). Inner city public schools continue to struggle with filling job vacancies with certified, high quality educators. Some factors that contribute to this teacher shortage in inner city schools are their enormous sizes and chronic under funding (Tyack, 1994), and the fact that students in these schools often live in densely populated and poverty-stricken neighborhoods that result in high degrees of territorial behavior (Howey, 1999).

Educators must have a solid understanding on the cultures and conditions of urban schools and look past surface appearances. Researchers, remarking on the state of urban schools, noted that the appearance of these schools are often dreary and are likened to the uncongenial surroundings of a destroyed city (Mendler & Curwin, 1983). Once teachers get past the obvious environment problems, inner city schools can offer a rich, rewarding experience for educators and students alike. The disparities between urban and suburban schools show the importance of knowing the culture of the community (Brown, 2003). Urban schools are often hampered by violence, and deal with disciplinary problems that are more intensely magnified than the problems in suburban schools (Mendler & Curwin, 1983). Although exceptions like the violent incident at the suburban, Columbine, have occurred in the previous decade, overall, problematic and aggressive behaviors are subject to occur more frequently in urban schools largely due to factors related to poverty and neglect (Arnow, 2001).

Cultural differences between urban and suburban schools are quite noteworthy. Many educators, who take teaching positions in urban schools, are likely to be unfamiliar with the culture of their urban students. They will be detached from their students, and it will require a great effort on their part to connect with the students and build a trusting relationship with them (Brown, 2002; Landau, 2004). Even inner-city schools with a high percentage of teachers of color often suffer from cultural clashes, (Mendler & Curwin, 1983). Another factor that has a huge impact on learning is the overcrowded and physically older school buildings that often attract undesirables who are no longer in school but go on campus to cause trouble.

DiGiulio (2002) suggest a three-dimensional discipline approach to managing classrooms of inner city schools. This approach contains classroom management principles that are consistent with ideals of a culturally responsive approach. The Physical Dimension involves setting up a safe and productive learning environment; the Instructional Dimension centers on teaching so students stay focused and learn; and the Managerial Dimension involves managing a smooth-running classroom. This multidimensional approach is designed for special problems; it utilizes methods that are specifically for special needs students in mainstreamed classes, and it involves methods to deal with inner city schools and efforts to minimize drug and alcohol use in school.

Among the most challenging barriers that have created grave concerns for teachers in urban schools is the ideology on educational deficit thinking that marginalizes culturally diverse students. In short:

The deficit paradigm explains lack of school success as being due to problems in students, their families, their culture, or their communities. Underachievement is viewed as stemming from deficiencies in the students, so policies and practices to help students succeed attempt to correct their deficiencies. (Weiner, 2003, p. 306)

Looking at students from a deficit perspective often makes teachers set lower expectations for them. If any gains are to be made to overcome such barriers, greater effort on the part of teachers to see students bringing values instead of deficits must be emphasized. It is important for teachers to work positively with students and build relationships (Brown, 2003). Research suggests the need for development of a trusting relationship with students, and consistency in reinforcing social norms in the classroom that are seldom used in schools (Weiner, 2003). If teachers want to implement a Democratic learning approach it is imperative that they develop and maintain trust in their students and have faith in their personal responsibility to accomplish student directed tasks, which is essential to the democratic classroom principles (Landau, 2004). Social norms should be obstinately expressed and integrated with the student's success because it factors into their developmental process.

Teachers can successfully gain their students' trust and cooperation in urban classrooms by

“establishing an environment where teachers address students' cultural and ethnic needs, as well as their social, emotional, and cognitive needs” (Brown, 2003, p. 277). Effective urban teachers develop classroom management systems that encourage cooperation, address the needs of diverse students and lead to genuine student learning (Brown, 2003). Many parents regardless of their income, race or where they live have genuine concerns and hopes for the education of their children. Teachers should not be judgmental or draw conclusions on students learning potential or academic success based on their environment, income or race. Teachers and parents through understanding and communication can support the learning process. Teachers must take the initiative to communicate with parents and involve them in the child's education (Landau, 2004).

Researchers conducted interviews with thirteen urban teachers that revealed several management strategies that reflected cultural responsive teaching methods (Brown, 2003). Three primary themes that emerged from these interviews were (1) caring for students, (2) being assertive and acting with authority, and (3) communicating effectively with students. Caring for students can never be taken for granted. Here teachers get to know students better and on a personal level, being cognizant about their needs, displaying sincere and genuine care, ensuring their safety, and making students feel comfortable in class. Being assertive and acting with authority requires a strong personality on the part of the teacher. The assertive behaviors of teachers are critical in establishing the authority they need to maintain a structured atmosphere. Communicating effectively with students require the awareness of specific verbal and nonverbal communication styles that affect student's ability and motivation to engage in learning and being aware that the differences in communication styles can affect the quality of relationships between teachers and students of color (Brown, 2003).

A great number of students come from various backgrounds with both positive and negative social behaviors already intact, and they continually reshape their existing behaviors as they develop. Culturally responsive teachers who build on their leadership abilities can be more effective in motivating students to behave in socially competent ways. A full appreciation of why students display positive classroom behaviors requires an understanding of their personal goals, and knowing to what degree

these goals are valued by teachers and peers (Wentzel, 2003). A caring classroom environment is a place where students can feel a sense of belonging and are motivated to engage in appropriate behavior.

Students that develop friendships improve their social behaviors and interactions. Furthermore, teachers must be aware of the barriers that can prevent friendships from developing among peers in school. They can assist students with developing social relationships by incorporating a multicultural and anti-bias curriculum that affirms the uniqueness of students, while teaching them that all students have many important traits in common (Salend, 1999). Researchers have offered educators several activities and materials for teaching students about individual differences related to disability, culture, gender, and socioeconomic status (Salend, 1999; Schniedewend & Davidson, 1998). They stressed the importance of getting children involved in events where they can share their experiences and feel comfortable working collaboratively.

### **Conclusions and Recommendations for Practice**

As students from multicultural backgrounds become more prevalent in our schools, arguments over the need for multicultural education have intensified. This controversial subject stems from the dominant culture that has traditionally wielded power over minorities in our society. Power permeates the educational system where the dominant culture, race, religion, gender orientation and social classes have consciously and unconsciously provided privileges and opportunities that normally escape marginalized students (Landau, 2004). Landau (2004) states “being a member of the majority race” provides privileges, opportunities and institutional access that has been a long-standing and accepted part of the status quo thus marginalizing minorities (p. 81). Teachers must recognize that students will perceive them as belonging to the dominant culture or race-possessors of power-thus creating a dichotomy between the teacher and the stigmatized group, exacerbating a resistance to learning, the drop out rate, low expectations and the degree and frequency of harsh disciplinary treatment (Landau, 2004). It is important to emphasize again that multiculturalism promotes equal educational opportunities that can lead to privileges and power for minorities, which

threatens the existing status quo and Western ideals held by the dominant culture.

The increasing diversity within our society has made extensive implications that have been both beneficial and created challenges for our government and educational system. Historically, efforts to provide equal learning opportunities for students of color and newly arriving immigrants are often hindered by racism and other discriminatory acts. The dominance of white culture is evident in all aspects of our society, and certain privileges are provided to students identified as white or European descent (Ivey et al., 2002; Landau, 2004). Those belonging to the dominate culture that have power and privileges often feel that by providing diverse students equal learning opportunities will ultimately diminish their power and privileges (Vavrus, 2002). While current teaching practices in schools tend to marginalize culturally diverse students, teachers in white majority classrooms unconsciously make it a routine practice to ignore marginalized students thus extending gaps for equitable learning opportunities.

Further studies have also revealed a growing number of students in U.S. classrooms with diverse linguistic backgrounds. Students that speak languages other than English have increased the tasks for Administrators to recruit bilingual teachers in order to effectively communicate and address the educational needs of ELLs. Drastic changes in the family structure, to include the varying socioeconomic status among students, and rising poverty has presented additional challenges for educators as they attempt to overcome the seemingly insurmountable task of providing students a quality education and manage the behaviors and distracters that accompany students whose primary focus may be on issues of survival rather than education. Data collected on classroom management practices by educators who do not include culturally responsive management strategies indicate that marginalized students receive two to five times more disciplining treatment than white students (Bullara, 1993). Teachers, who fail to understand cultures other than their own, often make the mistake of misinterpreting behaviors as non-conforming and thus foster classroom climates that are not positive for diverse groups and backgrounds (Bullara, 1993; Ivey et al., 2002).

Research on culturally responsive strategies provides limited data on existing teacher education programs or schools that implement these practices for diverse and marginalized

students. Culturally responsive pedagogy acknowledges and responds to cultures and seeks to ensure equitable access to education for children from all cultures. However, this is controversial with some members of the dominant culture who wish to continue their hold on power over minorities in our society. McEwan Landau (2004), states “being a member of the majority race provides privileges that have been an accepted part of the status quo” (p. 81). Culturally responsive teaching practices challenge the status quo by fostering the development of all children, including our future leaders.

It remains unclear as to whether or not educators are willing to take on the responsibilities and challenges of a culturally responsive practice. This work requires courage and confidence to demonstrate resistance to current mainstream policies and perspectives. To accomplish this, educators must implement

strategies (see Table 1) that embrace diversity, and be mindful that their involvement in multicultural education prepares children to live, learn, and work together to achieve goals in a culturally diverse world (Vavrus, 2002).

Recognizing the value of diversity, significant gains can be made for our society when teachers embrace their power as agents of social change and implement teaching methods that meet the needs of each learner. Culturally responsive classroom strategies can improve behaviors, facilitate student learning, and help build positive relationships. Teachers who can look beyond the differences and consider the uniqueness of their students will foster each child’s sense of belonging and achievement. A culturally responsive practice will help teachers manage the increasing challenges in our multicultural society while providing equitable learning opportunities that will lead to a brighter future for all students.

Table 1: Summary of Culturally Responsive Strategies for the Classroom

Culturally Responsive Strategy	Response / Effect
Incorporate teacher self-assessment and peer coaching.	Teachers confront their own behaviors (Harlan, 2002; Vavrus, 2002).
Implement an egalitarian atmosphere.	Feeling of self worth for students (McEwan Landau, 2004).
Respond appropriately to cultural issues, avoid labeling, and stereotyping.	Demonstrates respect and expected behavior for students (Elias et al., 2003; Ivey et al., 2002; Salend, 1999; Schniedewend & Davidson, 1998).
Exhibit a positive attitude that expresses respect for cultural differences.	Students develop a sense of belonging in the classroom
Be aware of cultural resources and ask students for information about community resources.	Models lifelong learning and genuine interest in different cultures
Create a positive classroom environment.	Students feel safe and promotes learning
Recognize the value of multicultural approaches that incorporate language acquisition.	Creates a variety of ways to support the learning of ELLs (Curran, 2003).
Transition from traditional views to a multicultural perspective.	Diminishes existing barriers to learning opportunities and narrows achievement gaps
Design activities to be cognitively demanding, yet with support for every student to be successful.	Invites student participation and interest while decreasing anxiety about learning tasks
Advocate for reforms in current education policies that negatively effect students.	Demonstrates concern for the educational welfare of immigrant and other marginalized students
Commitment to the awareness of diversity, respect, and tolerance.	Enhances equal education opportunities and inclusion for all students

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### **Charter Schools: Innovative Reform or Market Folly?**

*This paper is a review of a selection of materials that contain studies, historical research, philosophical debate, and opinions regarding the efficacy of charter schools. This discussion not only touches on the features and results of charter schools in particular, but also examines the argument that seeks to redefine public education as a private, rather than a common good. Within that framework four central questions are analyzed: Are charter schools equitable? Are charter schools academically effective? Are the introduction of market forces and privatization features desirable for public education? Is the expense of public money justified? The answer to these questions is no. Charter schools are an inequitable, ineffective, expensive, and unfortunate diversion from the real challenges facing public education.*

Among the many debates about educational reform, the issues surrounding school choice, particularly charter schools, are some of the most contentious. Supporters of charter schools insist they provide opportunities for a bottom-up approach to schooling that allow for innovation, high standards of academic achievement, increased freedom from regulatory and administrative constraints, a financial streamlining, and greater parental involvement in educational decisions. It has long been argued that those qualities are in decline, or have never existed, within the public school systems. The more centrist view sees public schools as stagnant and in need of healthy competition. More strident opinions portray the public system as a bureaucratic leviathan of mediocrity; anathema to a capitalist society. Those opposing charter schools argue that far from being a bottom-up approach to providing meaningful reform where it is most needed—increased funding, equitable resource allocation, pedagogical and curricular changes—charter schools are the culmination of a top-down ideological agenda that would have no problem with the complete privatization of public schools. It is feared that the common school, what Horace Mann called “the greatest discovery made by man” (Perkinson, 1987, p. 59), will be eviscerated. This institution of opportunity, conceived ideally as a means whereby *all* could gain the knowledge and skills necessary for active participation in a democratic society, would shift its emphasis from a collective good to a “private and personal good...distributed through the market” (Covaleskie, 1994, para. 1).

Public schools have come under criticism for years; some of it well-deserved. Lack of achievement, innovation, efficiency, freedom,

and even equity; these are the criticisms leveled by charter school proponents, and it would be a mistake not to acknowledge the validity of these concerns. However, what charter proponents usually do not acknowledge is that the academic challenges and very real problems that exist in certain schools, as well as districts, and states, is not a fundamental flaw in the ideal of the common school per se, but rather the result of historic social and political forces that have perpetuated resource inequities, and the marginalization of numerous cultures. To assume that the influence of deregulated market forces applied to charter schools will assure equity and superiority in education is to assume a nobility of purpose that does not exist. Covaleskie (1994) writes: “The nature of capitalist markets is that there will be losers as well as winners” (The Gentle Face of Capitalism section, para. 2), and losers do not benefit. Accepting the *laissez-faire* inevitability of losers in an educational “market” goes against the essence of education as an essential component of a democratic society. Education is not a consumer good.

There is also very real concern that charter schools will further the trend of school resegregation, which years of civil rights legislation had sought to ameliorate (Hill & Guin, 2003). Studies indicate that this is happening with charters, either by default (Frankenberg & Lee, 2003), design (Buchanan & Fox, 2003), or indifference (Merelman, 2002). Frankenberg and Lee argue that charters have the potential “to transcend high residential segregation created by neighborhood assignment and school district boundary lines” (2003, Conclusion section, para. 2). Unfortunately, the reverse is often the case, with many charters showing more segregation than the regular



public schools. Cobb and Glass (1999) see Arizona's charters as particularly vivid examples of *de facto* segregation. Resegregation has huge implications, not only in respect to the achievement gap that exists between Whites and People of Color, but in the commitment of the society as a whole to eliminating one of the most odious and pervasive characteristics of American society. Separate but equal *outside* the classroom has never worked, and as part of any education model—intentional or not—the potential for further marginalizing the less privileged is inevitable.

Many aspects of charter schools are troubling, yet their popularity grows. The notions of having a selection among schools, as well as a greater say in those schools, are not to be dismissed lightly. People's *perception* of the public school system, as well as their sense of empowerment within that system will ultimately have a huge influence on the direction of education.

## Literature Review

### Difficulties in Research

The discussions about charter schools are many, and the written material is vast. Yet many studies offer caveats when it comes to presenting definitive conclusions about charter schools. The problems for researchers in trying to arrive at definitive answers are several: charters have existed only since the early 1990s, making longitudinal studies difficult; regulations vary greatly from state to state, making comparisons difficult; what information is provided is often up to the various chartering agencies and observations do not always match up with claims; an array of chartering agencies, each with different missions, make applying a uniform criteria problematic; and comparisons between charter schools and surrounding public school districts have a number of variables that need to be factored in (Bohte, 2004; Hill & Guin, 2003). As well, large studies conducted nationally or within states usually do not differentiate between the types of charter(s) studied. That is to say, while some studies are specific to large, for-profit charter organizations, and others take a look at how a small collection of community-specific, non-profit charters fare at achieving their goals, other studies—specifically sweeping quantitative analyses—typically do not differentiate between charter school type. Of course, inferring the *quality* of any type of school based solely on

standardized test scores is itself problematic; raw numbers cannot begin to tell the whole story. But when they are combined with other quantitative and qualitative information a picture begins to emerge, or rather, something of a mosaic.

### Charter Schools

It is imperative to have a working definition of charter schools and their obligations. Good and Braden (2000) define charter schools as “public schools that operate based on a contract or charter with a state-approved charter granting agency” (p. 119). This definition seems straightforward enough, but charters vary in a number of ways. The chartering agency itself can be statewide or within districts, with the authority of these agencies spelled-out according to legislation passed in the states that allow charters. A variety of individuals, including “educators, parents, community members, for-profit and non-profit organizations, and institutes of higher education” (Miron & Nelson, 2000, para. 2) can form a charter and seek authorization. The charter spells out conditions under which a particular school (or schools) can operate, and these “may be newly created schools, transformed public schools, transformed private schools (secular or nonsecular), or home schools” (Good & Braden, p. 120). Charter schools are also eligible to apply for start-up and operating funds from the federal government. These funds are disbursed by State Education Agencies (U.S. Department of Education, 2004, Public Charter Schools Program). Preference is given to states with multiple chartering agencies. Within states, those seeking access to these funds must first apply for, and be granted a charter by the appropriate state chartering agency.

Described as “hybrid public schools because they seem to combine the open enrollment of public schools with the educational programming more common to private schools” (Good & Braden, 2000, p. 190), charters ostensibly earn their right to exist by demonstrating accountability on several fronts. Depending on state regulations and the charter agreement, these accountability measures vary greatly in type as well as in oversight. What is measured and how it is measured depends on location, the governing body, and what is deemed important. Typically, the characteristics looked for in charters include: responsible management and leadership that is effective at overcoming startup problems; ability to achieve a financially viable, thriving school with high levels of student and parent satisfaction; and

substantial improvement in academic achievement (U.S. Dept of Education, 2004, Public Charter Schools Program). Failure to meet specified goals can result in revocation of the charter by the chartering agency as well as school closure.

Operating under the promise of greater flexibility, charter schools are freed “from most of the rules and regulations that apply to traditional public school systems” (Miron & Nelson, para. 2), but charters are required to remain secular and obey federal civil rights and disability laws. Like public schools, all are welcome to attend, with seat availability *technically* the only limiting factor. Yet there are charters that by contract and design are set up for specific communities. For example, Texas allows charter arrangements specifically for at-risk youth (Estes, 2004). There are also charters designed to serve historically marginalized ethnic groups such as Native Americans and indigenous Hawai’ians (Buchanan & Fox, 2003). *De facto* limitations on attendance also occur when such things as transportation problems, location, environment, and resource equity are considered.

Like public schools, no tuition is charged to the student, but rather funding is provided by the government in the form of tax dollars; dollars that would have otherwise gone to public schools. Unlike school vouchers, where a specific amount of public money is allocated to a given student and redeemable at *any* available educational facility, public or private, religious or secular, charter school appropriations are typically an average of the surrounding school districts’ per student cost. To illustrate: If a district receives \$ 5,000 per year in tax money to educate a student and that student enrolls in charter school X, charter school X receives \$5,000 more and the local school district receives \$5,000 less (Weil, 2000).

Charters often get a fair amount of money contributed by private sources such as parents or local businesses. This can be a considerable amount in wealthier areas or with the right benefactor. For example, the Bishop estate in Hawai’i provides millions of dollars to support charter schools designed *specifically* for indigenous people (Buchanan & Fox, 2003). Charters in poor districts may or may not have access to this type of local philanthropic help, but there are resources available from the federal government that aid with start-up and initial operating costs.

Almost always, individual charters enroll fewer students than individual public schools. Charters are at a disadvantage from a cost per pupil standpoint; the economy of scale that larger public schools can offer is not usually attainable. But this is deceiving. Charters do not usually provide transportation services, often do not provide food service, have fewer resources for students with disabilities, and spend less on scholastic resources. They also often require a certain amount of unpaid volunteer work from parents (which promotes parental inclusion in the process, but is also a limiting factor for many parents). Yet charters manage to spend more of the public’s money, per student, on administrative costs than do traditional public schools (American Federation of Teachers, 2002; National Association of State Boards of Education, 2003).

### **Education as a Public or Private Good**

Over the years the “political and societal validation of education as a public good” (Halchin, 2001, p. 20) became society’s consensus. Yet there have always been those that have questioned the assumption that education *ought* to be regarded as a public good at all. Public school systems are viewed as antithetical to the principle of freedom of choice. Coulson (1994) concludes “that human activity is most harmoniously orchestrated by free association in a competitive market, and is least well served by coercive and monopolistic organizations such as our government-run school system” (Conclusion, para. 2). Individual choice and self-determination are seen as *the* important factors. In essence, the question is reframed from a public one, (“What is a good system of public education for *our* children?”) into something much different, (“What kind of school do I want for *my* children?”) (Halchin, 2001, p. 31).

Halchin (2001) further argues that transforming education into a private good could have the effect of dismantling government efforts to insure educational equity, since “a system that treats education as a private good emphasizes market values, such as efficiency, competition, and choice. In the absence of government intervention, equitable treatment is neither a priority nor a concern of the marketplace” (p. 33). In response, Coulson (1994) believes that the marketplace is exactly where education should reside and “that those values which are necessary for the peaceful and productive coexistence of the people are obstructed by the state provision of schooling”

(Preparation for Citizenship section, para. 1). Therein lies the ideological division at its most extreme: education is seen as either a common good or a private commodity. Either peoples' interests (in this case, students) are most equitably served by a shared, democratic educational system, or by the "invisible hand" of the decentralized marketplace.

Depending on one's viewpoint, charters are either another indication of market economics working its competitive magic on education's \$500 billion market and/or it is a ruse aimed at undermining an extensive and largely effective public good. Either way, turning education over to the greed and caprice of profiteers, or allowing it to be dismantled to satisfy narrow self-interests is a frightening thought to those who view education as an essential part of the common good, a critical component of an equitable democracy. There is nothing inherently noble, equitable, or moral in free-market pursuit of profit, and there is nothing intrinsic in *laissez-faire* competition which insures that *either* the private or the public good is served (Covalesskie, 1994). Yet public education, at least in theory, aspires to advance the common good. It is certainly not a vehicle with which to allow the private sector to give "birth to a new industry that seeks to turn the publicly funded task of educating the nation's children into a source of private wealth" (Molnar, 2001, p. 2).

### **The Race to Reform**

Much has been written in the past 30-40 years about a dysfunctional educational system in need of repair. Berliner and Biddle (1995) debunk the myths that depict American public schools as incompetent, providing inadequate education that threatens the country's economic might and social fabric. There is always room for improvement, the authors acknowledge, but one needs to be aware of erroneous conclusions that pay little attention to the facts.

Berliner and Biddle (1995) do not suggest that education in the U.S. is flawless, yet many of the challenges students face in public (or private) education result from an array of external societal failures in general. Drugs, violence, poverty, and racism are part of the reality outside of the classroom, yet these challenges are also expressed within the walls of schools, where the need to address them often conflicts or overwhelms educational goals. Despite these challenges and many more, dismantling the comprehensive system of public education offered in the U.S. is not something

the authors advocate. Public benefits would be highly unlikely "if a market model were forced on education...and one wonders how long America could survive as a society if its schools became even *less* equal than they are today in their funding, staffing, and offerings" (p. 175). Rather, genuine reform begins with a *true* understanding of the nature of the problems, not exaggerated or even fictitious claims seeking to redirect attention away from the real issues.

The dissemination of misleading and often blatantly false information created the specter of an educational crisis (Berliner & Biddle, 1995). In response, charter schools have been viewed by many as a reasoned response to this 'crisis.' Watkins (cited in Weil, 2000) outlines, in rather broad strokes, the categories into which charter advocates fall:

1. Zealots, who believe that private is always better than public, market systems are always superior to public systems, unions always cause problems, and students at private and religious schools outperform their public counterparts
  2. Entrepreneurs, who hope to make money running schools or school programs
  3. Reformers—students, parents, teachers—who want to expand public school options and improve systems of education.
- (p. 14)

These examples represent a broad spectrum of charter advocates. The first example typifies the far-right ideology, with its insistence on a sweeping application of unfettered individualism. As a means of solving societal, let alone educational, challenges, this ideology is counterproductive to a truly democratic society. The second example depicts those whose motives, if not outright unethical, lack any sort of altruistic purpose. Pursuit of profit cannot be bothered with purity of purpose. The third example, however, warrants close consideration, for these are the people who have the most immediate knowledge of their schools, and who have a very tangible stake in any sort of effort at school reform. Whatever political or philosophical considerations they have brought into the debate, they have decided that, at the least, an alternative to the status quo is needed.

### **Charters as a Distinct Model**

The advent of charter schools as a distinct model began in Minnesota in 1991, with a small experimental program. Funding from the federal

government began in 1994, which was included in a little-noticed provision as part of the \$12.7 billion “reauthorization of the 1965 Elementary and Secondary Education Act (ESEA). A relatively meager \$15 million was allocated under Title X, Part C—“Programs of National Significance” (Leal, 2001, p. 58). This was a modest beginning, but from these humble beginnings charter schools have blossomed into a huge business, and a rather untidy philosophical debate has been waged by proponents and those in opposition from both sides of the political aisle.

Sarason (1998) is direct, and writes: “The charter school movement is the most radical challenge ever to the existing system” (p. 52). This bold challenge, long in its conception, is based on the premise that the present system is at a dead-end, “incapable of reforming itself, of innovating in ways that support or do not defeat the spirit of an innovation” (p. 53). Arguing that the charter school concept did not just spring out of thin air, Sarason sees a historical link between charters and “Nixon’s Experimental Schools Program (ESP) [which] encouraged, selected, and supported schools to refashion themselves and...create a new setting with relative freedom from past constraints” (p. 14). Not unlike the charter schools to come, these experimental schools were hailed as the wave of the future. But Sarason (1998) argues that the ESP was a failure (p. 15). This was due to poor conception and a general lack of articulation on just *what* was to be reformed, how this reform was to occur, and why. Drawing further comparisons with Nixon’s Experimental Schools program and the charter school movement to come, Sarason states:

Charter schools rest on a devastating critique of the present system because it implies that for a school meaningfully to innovate to achieve more desirable outcomes; it must be free of the usual rules, regulations, and traditions of a school system. That conclusion is an *implicit* one; it has never been made explicit by proponents of charter schools who usually assert that these schools will contribute to the improvement of schools generally. What those contributions may be, and why and how they will exert an influence has never been made clear. (p. 18)

The implicit argument for *how* reform was to occur became more explicit as charter advocates championed the benefits of market competition

and deregulation as a means to improve standards and force accountability.

Sarason (1998) sees the ESP, in part, as a response to civil rights legislation that had added new levels of uniformity and regulation seeking to “bring about an integrated and uniform school system” (p. 13). ESPs, an expensive and ineffective model that did nothing substantive to address schools’ desegregation struggles, were perceived by many as yet more evidence of an educational system attempting reform with “a classroom here, a classroom there” (p. 17).

### **Privatization, Competition, and Money**

Originally thought of as something of a grassroots movement by those seeking educational reform, charters, to be allowed at all in states, could not just set up as they pleased. To reiterate, as a general rule “charter schools are held accountable for student outcomes and in return are virtually freed from state laws governing schooling (with the exception of federal special education laws and health and safety standards)” (Good & Braden, 2000, p. 119). Chartering licenses are granted by a state-approved agency to any number of entities deemed to have met certain criteria. These can be a group of educators or parents seeking to set-up a single school in a given neighborhood, typically operating as a non-profit; or perhaps as a collective, and in which all are partners. Whatever the arrangement, some form of accountability, at least in theory, is supposed to be evident, but this too varies greatly from state to state.

Increasingly, though, charters are run by publicly traded, for-profit educational management organizations (EMOs). These businesses are contracted to facilitate the operations of existing schools or are granted a charter to set up and run new schools using their own proprietary curricular model. For-profits have been the target of much of the wrath from those opposed to charter schools. It is here that charter schools as a means of privatization is best (or most egregiously) exemplified. According to some (Bulkely, 2001; Lin, 2001; Molnar, 2001; Zollers & Ramanathan, 1998) the performance and the rhetoric of these EMOs often do not match. Specifically addressing for-profit EMOs, Molnar (2001) writes:

The weight of evidence to date strongly suggests that for-profit companies cannot fulfill the important task of educating children to serve as free and responsible

citizens in a democratic society and as participants in a complex and changing economy, certainly not for less than we are already spending. (Introduction section, para. 6)

Accounting for roughly twenty percent of charters nationwide, and originally set up “with school districts to manage existing public schools” (American Federation of Teachers, 2002, p. 42), these companies were revived to try their collective hand with the burgeoning charter business. Despite the failure of some of the bigger players, most notably Edison Schools, there is no shortage of private management companies. Innovation, efficiency, and results have been the promise of these companies, yet the outcomes often tell a different story.

Non-profits and for-profits alike promise improvements in curriculum and freedom in teaching methods. Yet many of these methods are already available and used by public schools “without the benefit of a contracted third party” (Molnar, 2001, p. 5). Often, the “innovations” offered by EMOs are standardized corporate designs leaving little room for adjusting lesson plans, and/or the models are proprietary information that is unavailable, eliminating “any possibility that ...charter schools would share innovative practices and curricula with other schools” (Molnar, 2001, p. 6). In the case of EMOs, particularly the larger ones, the notion of “creating a chain of charter schools runs contrary to the concept of charter schools as laboratories of innovation run by visionary teachers and parents” (American Federation of Teachers, 2002, p. 74).

Much of charter advocates’ argument centers on freedom and innovation in the classroom, and one would suppose teacher satisfaction would be enhanced in such a learning environment. However, a study by Short and Rinehart (cited in Lin, 2001) concluded that teachers in *non-charter* schools believe that they have a) more decision-making opportunities, b) more opportunities for growth, c) enjoy a higher level of status, d) have a higher level of self-efficacy, and e) make more of an impact than their charter school colleagues. Many charter school teachers describe themselves as alienated, and complained they could not respond to student needs (Lin, 2001, Teacher Efficacy and Empowerment section, para. 1).

Finally, Molnar (2001) takes exception to the notion of for-profits being able to “operate a public school and do so more efficiently than a

not-for-profit entity: simply put, the corporation must be able to extract enough money from the system to provide shareholders a return on their investment” (p. 13). While making a profit on the academic success or failure of K-12 students may not seem problematic to some, this is ultimately an untenable position. A successful EMO that was in business long enough would have its operation scrutinized by public schools, who would be expected to duplicate successful measures without paying shareholders, thus saving money and offering equally enriching curriculum. The success of for-profits could ultimately depend on putting traditional public schools out of business or leave them with only the most difficult, costly students.

Another component of the competition argument is the notion that competition itself will spur a rise in achievement in public schools. Apart from the fact that this initially was never central to charter school arguments, one study (Bohte, 2004) asserts that this phenomenon may be happening. In a detailed quantitative analysis of Texas school districts, the study concludes that there are modest gains in public school achievement measures. Less clear, however, is why this is the case. Bohte is not able to explain whether the threat of lost revenue, adopting innovative ideas, an exodus of at-risk students, or the adherence to generally tougher standards has caused an increase in achievement levels. What is clearer, though, is that charters have not kept pace with public schools in terms of achievement. The American Federation of Teachers (2002) concludes charter schools have been more adept at innovating “at the organizational level than they have been at encouraging changes in the classroom” (p. 75). The necessity of staying afloat financially and/or showing a profit (in the case of for-profit companies) has often taken a disproportionate amount of the energy and resources that would otherwise go toward teachers, students, and curriculum.

### **Inclusiveness**

Are charters equal opportunity providers of education? According to a study on for-profit charters and students with disabilities, Zollers and Ramanathan (1998), in a paper outlining the experiences of those students, argue that the record, at least in Massachusetts, is not so good. While acknowledging that *non-profit* charter schools in the state did a “decent job of including students with mild disabilities, *for-profit* charter schools in Massachusetts have engaged in a

pattern of disregard and often blatant hostility toward students with more complicated behavioral and cognitive disabilities” (Headnote section, para. 7). Charter schools are exempt from many state regulations, but are not exempt from federal law. In the case of students with disabilities, “charter schools are subject to all mandates of the Individuals with Disabilities Education Act (IDEA, Section 504 of the Rehabilitation Act of 1973 as amended, and the Americans with Disabilities Act (ADA)” (Estes, 2004, p. 257). But as for-profits seek a return on their investment, the cost of educating students with disabilities is seen as an unacceptable liability.

Zollers and Ramanathan (1998) examine several for-profits with similar curricular models that profess to use an inclusive model, meaning that the disabled learn alongside their able-bodied peers. All the companies examined seem to follow a similar pattern:

The for-profit charter school refuses to provide required services to a child with a behavioral disability, uses inappropriate disciplinary procedures, segregates the child in a separate “classroom,” and eventually attempts to counsel him or her out of the school. (Unwelcome Customers section, para. 13).

The authors assert that cost is the consideration here. In Massachusetts it costs twice the money to educate special-needs students as it does mainstream students. As students enter charter schools the money for that student—an average of that district’s cost-per-pupil—is sent to the charter. If that district has a higher percentage of special needs students, then a higher average goes to the for-profits, with the assumption that it will be reflected in the type and quality of facilities and resources provided for the disabled. This is rarely the case. In short, the companies make money off the taxpayer by accepting special-needs students; provide inadequate or non-existent resources, then counsel-out students and their parents, who are forced to return to the public schools. Another consideration is that, as competitors vying in an education marketplace, charters’ existence is often contingent upon academic performance as indicated by standardized test scores. Special needs students who can’t or won’t perform well on tests are considered ill-suited to helping raise those scores (Zollers & Ramanathan, 1998).

### Furthering Student Stratification

No discussion of charter schools would be complete without some talk on matters of racial equity. In fact, many who express concern or outright opposition to charter schools argue that issues of racial and ethnic stratification should be central to any discussion as to how and whether a charter school policy is formulated. Concerns about where charters are located, equal access to schools, and inclusiveness for all students, explicit or implicit, is critical to what role charters have played and will play in striving to eliminate inequity in education.

In one study, Frankenberg and Lee (2003) look into segregation and their data deal with racial distribution across schools, public and charter, and the increasing trend of racial polarization. Taking to task a key piece of charter school advocates’ ideology—markets as the most effective means of insuring quality—and comparing education with other markets (housing, employment, and health care), Harvard University professor, Gary Orfield writes: “One could accurately say that the normal outcome of markets when applied to a racially stratified society is a perpetuation of racial stratification” (cited in Frankenberg & Lee, 2003, Foreword section, para. 10). Charters become a choice option with the very real potential of contributing to the dismantling of any progress in education equity.

However, Cobb and Glass (1999) see the potential for charters to serve two contradictory purposes. The authors write that “choice can correct for severe levels of segregation and ensure the stable integration of schools....Conversely unregulated choice can intensify ethnic stratification by allowing parents to remove their children from integrated schools” (Exclusionary Influences section, para. 4). For Blacks, who have seen decades of effort at desegregation and public school equity reversed, abandoned, or opposed at every turn, any alternative is seen as a viable option. As Weil (2000) writes:

African American parents and students support the charter school concept precisely because, as many of them claim, traditional public schools have failed them...These people argue that allowing them to choose...will ensure that their children will be given an equal opportunity to learn. (p. 2)

To many parents, it is academic whether the debate is framed as a failure of public schools to

effectively serve certain communities, or as leadership failing to adequately fund the public school system; it is deemed as pointless to argue abstracts when one's own children suffer the consequences.

Nationally, charters have set up disproportionately in minority neighborhoods precisely to serve under funded, failing public schools (Frankenberg & Lee, 2003). This has become all the more true as NCLBs' mandate for alternatives to failing schools gives rise to additional charters (U.S. Dept. of Education, 2004, NCLB ). Undoubtedly, there are more ill-served students and parents in poor areas than in the suburbs. Yet, while many Blacks and Whites may view integrated settings as a valuable tool for improved education and resource equity, the settings of these schools are in areas not likely to draw middle class Whites. Put another way, charters in predominantly Black neighborhoods draw *more* Black students and charter schools in predominantly White neighborhoods draw *more* Whites (Frankenberg & Lee, 2003).

Hill and Guin (2003) argue that the choice charters offer does not necessarily imply a more inequitable arrangement than the traditional public system. While understanding that "the most knowledgeable are first to identify the best opportunities, and the most aggressive are the ones most likely to sign up early... (Introduction, para. 5)," aggressive self-seeking is as much a part of the public school system as it is with privatized models, just more covert. They acknowledge that the more "connected" parents, the ones that wield greater influence, bring more resources to their kids' particular public schools. To be sure, these make for inequitable arrangements. One could certainly argue that those connected parents are typically White and middle-class, with the time, resources, and social capital to make those connections work for them. Hill and Guin don't argue that the same resources, social capital, and time exist within poor neighborhoods. They also don't acknowledge the systemic causation of these resource disparities. What they do assert is that "choice programs must not be ruled out because they can lead to some inequities" (Conclusion section, para. 5), and in any event, the existing public system also has inequities that might not be found in charters.

That there are inequities is not in dispute. What is disputed is whether charters are a better model for ameliorating these inequities and whether it is worth the enormous cost to public education to find out. Trading one school model

for another seems pointless if the furtherance or exacerbation of existing inequities is the result. Frankenberg and Lee (2003) argue that that is precisely the outcome that charters must be measured by. To assume that "organizations that manage schools of choice" (Hill & Guin, 2003, What is Known About Choice Programs section, para. 9), those EMOs who increasingly set up shop in poor and minority areas, favor equity over profits is to deny the reality of market competition.

### **Charters and Academic Achievement**

For decades, many arguments have been put forward for the necessity of school reform. Despite many differences about the characteristics of reform, at the heart of almost every argument is the belief that students are not achieving academically as well they should or could. Yet, in a 2004 pilot study conducted by the National Center for Education Statistics (NCES), a quantitative analysis clearly shows that in the past decade *public* schools perform as *well or better* than charter schools in almost every statistical category (U.S. Dept. of Education, 2004, NCES). The NCES statistics are disaggregated, although rather broadly. The numbers are broken down by gender, race/ethnicity, socio-economic status, English proficiency, school location, and teacher experience. What is not disaggregated is the previous achievement levels of students enrolled in charters or the types (i.e. for-profit or non-profit) of charter schools. Texas, California, and Michigan are over-represented in the study, as they account for half of charter school students nationwide. This study is also limited to 4<sup>th</sup>-grade. But given the broad array of charters in all types of economic, racial and ethnic settings, one might still expect to find at least *some* trend toward improvement in achievement *somewhere*.

The NCES study indicates that this is not the case. Black and Latino students in *public schools* perform better, on average, than their peers in charter schools. Whites perform almost exactly the same, and the achievement disparity between Whites and People of Color actually increases in the case of charter schools. While the data are certainly not the last word on charters' ability to improve achievement, it has caused quite a stir among educators, and it will be interesting to see how the numbers are debated.

### **Conclusions**

The debate over charter schools is a messy one. Attempting to paint a clear and comprehensive

picture of such an expansive topic is problematic. To focus in on one particular facet of the debate, or one particular state, school district, or school would allow for a *tidier* argument, but it might also bypass any discussion of the complexities of charter agreements or the varieties of charter types. Also, without some knowledge of the overarching philosophy that supports school choice and privatization, there is the risk of misunderstanding much of the motivation behind this reform movement.

However, as much as perceptions about public school efficacy may be rooted in philosophical, religious, racial, cultural, and governmental considerations, the decisive factor may ultimately be kids' day-to-day classroom experience. Put another way, if parents' perceptions are that their child's individual interest is not being served, those parents that are able will look for an alternative. That there are problems in public schools, with both bad and good schools, is not in dispute. The argument that public schools are in a hopeless state of academic and moral malaise is hyperbole (Berliner & Biddle, 1995). Many schools work quite well. The notion of school choice, though, is an empowering idea for those who are adamant in their belief that public education has not, *and will not or can not* provide their children a suitable education. The rhetoric that charter school advocates offer is at best little more than a palliative; at worst it is public policy that ignores pressing issues of effective, equitable education while seeking to eviscerate the modern-day common school.

There is a "wait and see" attitude among some researchers, who argue that all the data is not in. (Bohte, 2004; Hill & Guin, 2003). True, but much of the *reliable* data does not currently support any general upbeat assessment. In fact, as a means of making gains in academic achievement, charter schools perform no better, and often not as well as traditional public schools. The National Center for Education Statistics' (NCES) 2004 report, outlined in this paper, contains a statistical wake-up call for those who believe that charters are the answer that will best serve students, parents, and educators. Numerous studies have been conducted and numerous papers have been written before the NCES findings, and most pointed to a similar conclusion; charter schools have generally not lived up to expectations. In a previous study, findings by the American Federation of Teachers outline a more generous

assessment of charters' academic outcomes. But other conclusions of that study mirror some of those addressed in this paper. The conclusions the AFT reached are:

- Student achievement in charter schools remains comparable to that in regular public schools.
- Charter school teachers feel less empowered to make changes in their workplaces than do their peers in traditional buildings and hold mixed feelings about administrators and governance structures.
- Such innovations encourage innovation at the organizational level, but are less successful at changing instruction.
- Charter schools contribute to the isolation of students by race and class.
- Charter schools fail to be more accountable than regular public schools.
- Such buildings generally receive as much money from public and private sources as what regular public schools receive from government coffers, but they educate fewer needy children who tend to cost more to educate. (Blair, July 17, 2002, p. 2)

This grand experiment in school reform comes at the expense of the public school systems most in need of more, not less, resources. An array of state laws and charter agreements have often resulted in charter schools with less oversight, less regulation, less teacher empowerment, more racial, ethnic, and linguistic segregation, and little credible assurance of any sort of equitable resource distribution.

Accountability for charter schools means many things to many people (Frankenberg & Lee, 2003; Hill & Guin, 2003), yet the underlying argument is that these schools, less fettered by regulations and bureaucracy, and free to compete in a market, will thrive. Some charters are successful and their students do thrive. But many other charters don't succeed and students find themselves in an undesirable situation or worse still, without a school. Quite often success is measured solely by the school's organizational ability, the ability *not* to lose money, or simply the ability to stay open. For-profit EMOs, who are responsible to shareholders, often betray the best interests of students (Zollers & Ramanathan, 1998). In addition, charters targeting poor communities have the potential to further segregate students



and offer a watered-down curriculum (Frankenberg & Lee, 2003). With limited oversight and regulation, little stands in the way of charters' tendency to perpetuate segregation and ability tracking, this time under the banner of choice. These examples point to specific recent, and potential, outcomes with the charter school model.

It is increasingly the consensus that society wants to *improve* schools so *all* students can strive for academic excellence. The introduction of any model that drains public resources from public schools to provide for a marketplace model which assures winners and losers is anathema to the equitable, democratic institution envisioned by people such as Jefferson, Mann, and Dewey. Covalleskie (1994) denies the validity of the argument which holds education to be a personal and private good, best distributed through the market. This, Covalleskie argues, is a serious misunderstanding of the meaning of education.

Education, because of its role in social membership and in social adaptation, is not a commodity for the market. Social formation, partly and properly carried out in the schools, is not purely a matter of individual choice; it is also a communal enterprise. It is certainly not a mere commodity. (para. 6)

Charter schools, although not the most egregious example of the move toward privatization, are the most prevalent model of school that seeks to usurp or displace this "communal enterprise." Public education is a shared societal endeavor with the goal of providing an inclusive, equitable, and quality education. Public education ought not to be a furtherance of the division between the "haves" and the "have-nots." Unfortunately, charter schools, aimed at correcting perceived failures in education, take the public's eye off the real problems in education. Such features as inadequate and inequitable resources and the continued marginalization of specific communities are the real problems. Rather than being a solution, charters are simply ill-conceived "bandages" which hide wounds rather than heal them.

### **Recommendations for Practice**

To suggest, though, that all who opt for a charter alternative do so because they are adamantly opposed to public schools, is to miss the mark. Many people have sound ideas about what public schools ought to be. Yet their

experiences have often left them little choice but to choose a more immediate, pragmatic path rather than wait on a broken promise. Danny Cortes, chief administrative officer of 320-student Nueva Esperanza Academy Charter School, summed it up well: "The reason we're in this business is not because we're Latinos, but because someone is failing our students. If the public schools were working, we wouldn't need these schools" (cited in Zehr, November 21, 2001, p. 1). Michael Pons, policy analyst for the National Education Association, addresses this statement by replying that "if Hispanics are interested in smaller schools, smaller class size, and teacher quality, let's replicate those things in existing public schools" (cited in Zehr, November 21, 2001, p. 1). While Pons' answer merely touches the surface of what needs to be done, and is specific to one large, generalized group, it is instructive: public schools can and should be engaged in those practices that are most effective for particular communities.

There is little evidence to suggest that those effective classroom practices, to the extent that they exist in charter schools, cannot be replicated within existing public schools. In fact, it is quite often the case that effective and innovative teaching strategies are more evident and more easily implemented within existing public schools. Where these best practices are not being observed, public education proponents and practitioners need to be flexible and open enough to realize and adopt methods from charter schools that are beneficial.

States and school districts need to be equitable in their resource allocation. Sufficient funding is critical to school viability, and allowing some districts to be under funded while others thrive is unacceptable. As well, resource distribution *within* districts needs to be fair. Public schools must be flexible and innovative, responding to the local and regional needs and challenges of various racial, cultural, and linguistic communities. One of the strongest arguments charter advocates make is that traditional public schools, and the boards of education that run them, are too rigid and unresponsive to the concerns of parents and the community.

Buchanan and Fox (2003) see community-specific or ethnocentric charters as a solution to various communities' needs. This is a nod to the reality of America, what Ravitch describes as "an increasingly diverse salad bowl where each group remains distinct and yet contributes to a pluralistic American culture" (cited in Buchanan

& Fox, 2003, ethnocentric section, para. 1). This observation rings true, and as an argument for an educational approach that will best serve historically oppressed peoples it also has merit. Acknowledging diversity and insisting on community-sensitive education is laudable and long overdue. But as an argument for deregulated models of privatization, this argument loses credibility. Similar to the imposed "separate but equal" public policy from decades past, those who argue for privatization offer assurances of a resource equity that does not exist. That public education will realize equal opportunity and equitable financing in a competitive, unregulated marketplace is fantasy (Covaleskie, 1994).

Undoubtedly, we will find success stories in culturally, racially, or linguistically specific schools. For example, Buchanan and Fox's (2003) depiction of charters set up for Native Hawaiians may serve as a case-in-point. These schools have received enthusiastic response from all concerned, and it is difficult to argue against a model that proves successful for a historically oppressed people and their culture. Other marginalized peoples have found, and will find, isolated successes outside a mainstream that has historically spurned them, especially if sufficient funding is available.

Some of these examples are The Blackwater Charter School on the Gila River Indian Reservation in Arizona, where the tribal elders are allowed "to emphasize the tribe's history, language, and customs [and] the Gila educational system is based on tribal heritage and reflects tribal concerns" (Weil, 2000, p. 39). The Oakland Charter Academy is a school dedicated to bilingual and multicultural education. It was started by the principal, parents, and community members in 1993 despite "open hostility from the district school board and the teachers' union" (p. 40). Yet another example is Friere Charter School in Philadelphia, which is eighty-five per cent black, with the remainder split between Latinos and Whites. This school offers a "blend of academic and experiential learning" (p. 45). With a teacher-student ratio of 18 to 1, a mentor for every student, and individual learning plans for all students, the Friere School is a progressive, democratic model of success in an impoverished area of a large city (Weil, 2000).

These examples point to communities who refuse to wait any longer for what the public school systems should and could offer. That these schools are charter schools does not point to charters being deemed a better model by these

communities. Rather, charters were seen as an opportunity to efficiently and effectively address the specific needs of their respective communities. Start-up funds available through No Child Left Behind (U.S. Dept. of Education, 2004, NCLB), and private donations (Buchanan & Fox, 2003) make the decision to choose a charter alternative that much more attractive to communities ill-served in resource distribution.

In response, public schools need to be proactive. There is no pedagogical reason why, in the true spirit of the common school, culturally sensitive, effective, and innovative public school systems cannot embrace the needs of all the communities served. If that involves employing comprehensive bilingual education for English-language learners, then that is where the resources need to go. If it means content and methodology that is sensitive to Native American or Native Hawai'ian learning styles and desires, then resistance to culturally inclusive pedagogy is counterproductive to *all* valid educational goals. If it is inner-city districts serving a decidedly poor, disadvantaged community and the needs of the students are more resource-intensive than in wealthier districts, then those needs must be met. From the charter school experiment, educators, as well as the general public, can find and embrace those ideas worth keeping.

Of course, money is always *the issue*. Political will has to be mustered which demands that all levels of government prioritize adequate, equitable funding of public schools. Resource allocation between and within districts must address the most pressing needs. Strict enforcement of all applicable civil rights and health and safety regulations is a must. These are our children and a fair, safe environment is mandatory. Creative professional school personnel, committed to excellence and innovation, should be the norm, not the exception. Classroom instruction must embrace and incorporate the diverse cultures of our society. Learning communities need to extend beyond the classroom to include the community-at-large where everyone has a stake in children's successful education.

Fundamentally, American society needs to recognize the essentialness of equitable education for *all* of its children. Fair access to public education is the means with which children are provided the skills and knowledge to become active participants in a democratic society. Quality education is not a privilege

reserved for the lucky few while the rest suffer. Covaleskie (1994) writes:

The issue here is whether education, a requirement for democratic citizenship, ought to be distributed as a commodity, or whether education is in some fundamental way different from microwave ovens. To ask this question is to answer it: democracy is in no way threatened if some citizens have inferior microwave ovens, or none at all. That is not so if the market leaves some children with inferior education. (Education and the Polity section, para. 4)

While the analogy between education and microwaves is humorous, the inference is not. Charter schools move society away from recognizing education as a common good, with shared responsibilities in the challenges and shared rewards in the outcomes. As a democratic nation, we should deny those arguments which would offer the common good to the highest bidder.

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### **Painting and Piaget: Art and Cognition**

*Funding and program cuts threaten the existence of K-12 visual arts education as a result of the No Child Left Behind Act of 2001 and high stakes standardized testing where federal school funds are linked to student achievement. Thus only those classes directly contributing to performance on these tests are valued and supported. An extensive and diverse body of research which views art cognitively proves these trends myopic. Theories on multiple intelligence, creativity models, and various art curriculum foci are examined in describing the various cognitive, developmental, and social-societal benefits art creation offers to students. This research, which clearly corroborates art as cognitive and developmental, empowers educators to argue and advocate for arts education based on its documented outcomes.*

Arts inclusion in the curriculum of K-12 schools has a long and turbulent history. Throughout this history there have been those who advocate the benefits of art for students and its importance in schools as well as those who believe that it is of secondary benefit to students. These critics believe that schools are better off focusing on the basic coursework of the three R's, reading, writing, and arithmetic. Those who place the importance of art as secondary to other academic coursework have, in recent years, been aided by such legislation as the No Child Left Behind Act of 2001 (NCLB) that places improvement in reading, writing, and math as a condition of continued federal funding for schools. This in turn places a premium on the subjects within a school that are attached to standardized testing to determine improvement in accordance with NCLB. Without minimizing the importance of standards in academic fields for students, those who place the importance of art in and to the lives of students as basic to their development rather than secondary or tertiary are left with the task of proving why it is important and needs to be a part of school curricula. Thus, it is the thesis of this work that arts cognitive and developmental qualities and benefits necessitate its inclusion within K-12 schools. Further, to fail to do so is to deprive students of a subject of study that is basic to growth, learning, expression, and the human experience.

In order to promote basic funding for art in schools, an examination of student learning and development is essential. Several key issues come to light out of such an examination, including; (a) the nature of art, (b) whether art is enrichment or developmental (Gardner 1982, 1983, 1991, 1993, 1997; Inhelder, 1964, 1969; Schmeck, 1988; Sternberg, 1985, 1996), (c) art

as an aspect of intelligence (Gardner, 1982, 1983, 1991, 1993, 1997; Sternberg, 1985, 1996), (d) the relevance of art to our students lives , and (e) effective art instruction to best deliver its benefits to students (Brown & Korzenik, 1993; Eisner, 1999, 2002). Within this paper these subjects will be addressed, as will the nature of intelligence, its definitions and their importance to teaching (Gardner, 1982, 1983, 1991, 1993, 1997; Martinez, 2000), creativity and its effect on student thinking (Amabile, 1996; Feldman, Csikszentmihalyi, & Gardner, 1994; Morgan, 1997; Schmeck, 1988); and what cognitive effects does the teaching of art impart to students (Brown & Korzenik, 1993; Cohen & Gainer, 1984; Gardner, 1982, 1983, 1991, 1993, 1997; Inhelder, 1964, 1969). These foci fall under art and cognition, what art teaches, how best to teach art, and art curriculum outcomes when incorporated in school curricula.

Considering the importance of art to students and thus its positive effects when incorporated in K-12 of school curricula, this paper focuses on the cognitive and developmental elements of the visual arts. Visual literacy, a developing field in its own right, was left out of this examination, as were other subjects within the arts such as music, theatre, writing, and dance. Though under the same pressures as the visual arts, inclusion of these elements was beyond the scope of this paper. However, similar research on the arts not included in this paper is needed for analogous reasons to those that prompted the composition of this work.

This is an essential topic because if art is developmental in nature or an inherent intelligence basic all learners, then its exclusion due to any reason from funding to school subject hierarchy would have a detrimental effect on the

educational experience of students. If student education and thus development and intellect are the fundamental qualities of a school's mission and reasons for existence, then these qualities in art must be examined and used in the formation of our school's to best serve students. To leave the contributions of arts education unexamined is to deny students informed decisions by policy makers in the formation of school curricula. Further, if proven important to development or intelligence, it is to deny students access to elements fundamental to their growth as humans.

Visual art's place in the classroom has a long history of debate. It has been part of the larger deliberation on what education's role in our society should be, what should be taught, and for what purpose. Schools have for the most part always focused on educating students for a productive role in our society, e.g., training for work. Consequently the connection of art with other educational benefits outside of art for its own sake has its own history. Brown and Korzenik (1993) describe early examples of this defense of art in education. In 1847, John Gadsby Chapman connected writing and drawing, claiming the "quick eyes and controlled hand" (p. 121) involved in drawing would help penmanship. In addition, geography would be aided through art in education, through the remembering of spatial relationships that comes from drawing. In 1876, America had a centennial exposition in Philadelphia which exposed many Americans to art from around the world and created a surge of public desire for art information. In 1877, following the exposition's close, in an atmosphere of support for the arts and art education, Langdon S. Thompson, Superintendent of the Public Schools of Sandusky, Ohio, published a pamphlet titled *Some Reasons Why Drawing Should be Taught in Our Common Schools*. This call for art teachers and art in education spread throughout the U. S.

Within art education there were three arguments on what its instruction accomplished and why it should be taught including disciplinarian, utilitarian, and aesthetic. The disciplinarian argument connected art to intelligence, perception, judgment and imagination. The utilitarian argument connected art with everyday utility and with creating students who could use art in their adult professions. Finally, the aesthetic argument connected art education with the instilling of beauty and taste in assisting the formation of a culture of a high degree. Thompson and other

proponents further went on to argue that drawing was helpful in reading because it promoted recognition of forms. Spelling and geography would also benefit from the remembering of forms taught to students through drawing. Arithmetic was another academic study that would benefit from drawing. This was to occur through the practice of conceptualizing and symbolizing in drawing which would lead a student's thoughts from concrete to abstract, a major component of mathematics. They linked drawing to the school's mission of job preparation, claiming it would make students more employable.

Though by no means an exhaustive history of art in education, the previous examples provide a concrete case in point for the need to show the relevance of art in education. More specifically, they demonstrate why art should be taught in schools, its relevance to our children, and what it will do for them if it is included.

Concerns of this nature were not limited to educators however; many professions have debated these matters, among them psychologists and philosophers. Some of the issues connected to art's place in education are; (a) explaining the role of art in children's cognitive development, (b) examining creativity and imagination's importance to cognitive development, (c) defining intelligence and analyzing the role art in its formation, and (d) teaching art education in order to best serve children's cognitive development. Disparate elements both historical and contemporary have had an influence on these matters. It is through their exploration that one acquires a holistic view of the complexity of beliefs related to this subject.

The field of human development is one which has claimed the task of determining what students are capable of achieving at various stages or ages with appropriate learning environments. This field has profoundly bolstered art education by establishing a long history of research connecting art with holistic cognitive development. Kieran Egan (1999) places Plato (427-347 BC) at the beginning of the historical arguments over cognitive development. "To Plato (trans. 1941) the mind is, in significant degree, an epistemological organ. Its development is measured, in significant degree, in terms of the knowledge it learns" (p. 58). Plato's views on development are that "the mind is what it learns" (p. 59). This supports the notion that education is vital in the formation of educated people or, learning as development. Rousseau (1712-1778) claimed

that development of the mind and body was a natural process. Education's purpose was to discover "the nature of students' development, learning, motivation and so on," (p. 59), with the belief that this knowledge would facilitate an "efficient and humane" (p. 59), education of students. This belief supports the theory that what the student learns does not affect their development significantly, or in a sense learning is subordinate to development. These opposite beliefs would be echoed and added to by different psychologists and movements within the field of cognitive development throughout history.

Piaget agreed with and expanded upon Rousseau's tenant that learning is subordinate to development. In his explanation of this tenant he developed four stages all children go through in development; a sensory-motor stage, a pre-operational stage, a concrete operations stage, and a formal stage. Piaget (1964/1972/2005) explains, in the first stage, ages birth to two years-old, children know the world only through what they perceive and can act upon. In the second stage, the preschool years (ages 3-5), children are able to use language, mental images, and symbols in reference to the world though this use is limited to formation not manipulation. In the third stage, (ages 5-13) children become able to manipulate the imagery and symbolic thought as well as being able to view concepts from more than one point of view, known as reversibility. In the fourth stage, (age 13+) children can create and solve logical problems.

At the same time as Piaget, Lev Vygotsky, a Russian psychologist, formed a sociocognitive development theory that though concurrent with Piaget, had significant differences. His view of development argued that children make sense of the world through the cognitive tools they acquire as they grow up in a specific culture (Vygotsky, 1978/2005). In this sense, he believed that development was subordinate to learning. Further differences included Vygotsky's belief that intellectual development could not be viewed in terms of stages. Instead, he argued that to understand cognitive development one had to understand the mental tools and processes one learned in the culture in which one was born (Egan, 1999).

These theories on development are significant in that they have framed the arguments over the role of art in education through the process of how children develop. This becomes apparent in reviewing creativity, as a commonly held component and result of art,

in development. Here too, the field of cognitive development is full of concurrent research indicating the importance of creativity to cognitive development yet is rife with dissent both in terms of definition and assessment (Amabile, 1996). Some notable academics claim (Chomsky, 1968, 1980; Fodor, 1983) creativity should not be a separately studied cognitive ability because, "they see virtually all important contributions to knowledge as arising from preexisting physical structures present in the growing individual" (Feldman et al., 1994, p. 3). Where as other equally notable academics sometimes labeled "radical nativists" (Campbell & Bickhard, 1986; Feldman, 1994) claim that creativity should be studied separately because what comes out of creativity comes from outside the individual, and thus more than just the original biological capacities of the individual needs to be considered (Feldman et al., 1994).

Among those scholars who deem creativity a researchable cognitive development component, several models of creativity have been established. Feldman (1994) proposes a interrelated three part model of systems describing creativity. It is composed of cultural expression (natural vs. crafted world), reorganization (reflectiveness), and transformation (transformative imperative). Within this model reflectiveness is the ability to know ourselves and the world, and is the first stage of creativity. Transformational processes, the second stage of this model, is the ability to imagine changes to the world that can be made tangible. Finally, transformation is the awareness that the world can be changed. Further Feldman, Csikszentimihalyi, and Gardner (1994) state in this model of creativity:

It is in the interplay between desire for preserving important features and qualities of experience and desire to transform experience that creativity takes place. Creativity requires the ability to comprehend that the internal and external environments can be intentionally transformed, within limits that have been evolved from the processes of representation, and with unconscious and conscious perceptions of change informing and shaping each other. Representation, organization of experience, skills, and analytic capabilities, including a sense of self, lie in between the two (internal and external) kinds of change. Representation and reflectiveness have as their fundamental purposes to organize and categorize and

make useful the information that finds its way there. (p. 37)

This is an important component in viewing art as involving cognitive growth. The assertion that creativity involves skills and operations which make it a cognitive activity can be transferred to the creation of art which uses creativity as a component of its process.

Amabile (1996) also proposes a three part model in describing creativity. This model consists of domain-relevant skills, creativity-relevant skills, and task motivation. Within these stages, domain-relevant skills consist of the complete set of response possibilities available to create a new synthesis. It is also the knowledge of how and in regard to what the new response will be judged. Finally, it is having a knowledge and understanding of the domain one is working in and the technical skills one must have to enact change in that field. She further argues that the skills in this stage require “innate cognitive, perceptual, and motor abilities as well as formal and informal education in the domain of endeavor” (p. 86), and links creativity to proficiency in the routine acts within the field one is acting in. The second stage of this model, creativity-related skills, refers to understanding the complexities within a domain and being able to break away from the norm of that field in problem solving. This includes the following set of cognitive features; breaking the perceptual set by releasing perceptual paradigms, breaking the cognitive set by thinking in new ways, understanding complexities, keeping response options open as long as possible, suspending judgment, using wide categories, remembering accurately, breaking out of performance scripts by changing one’s sequence approach, and perceiving differently. The final stage in this model is that of task motivation. This includes one’s motivations for engaging in a creative task and one’s attitude about the task at hand. This model of creativity is also important to viewing art as a cognitive process through its assignation of that quality to creativity. This can be seen in the implications she ascribes to her model of creativity, in which she answers the question, of whether creativity and intelligence are the same thing, stating that because “the componential conceptualization suggests, simply that intelligence (as typically conceived) is a component of creative ability. It is a necessary, but not sufficient, contributing factor” (p. 100). Further, there are qualities needed for creativity, such as motivation toward the task and

intellectual risk taking that intelligence tests cannot measure.

One of the main aspects of cognitive development both in general and in art education is that of intelligence. What is intelligence, and how is it promoted, are questions that have a long thorny history of dissent among those within its scholastic domain. These questions have been central to those who theorize about cognitive development. From Plato to Piaget, questions of this nature have driven educators and psychologists to study development and education in the search for answers. In contemporary history the search for intelligence has taken many forms and served various purposes. Martinez (2000) reveals this by showing how intelligence quotient (IQ) tests first developed by Alfred Binet around the turn of the century exhibit the dangers of misused explorations in this field. Binet was commissioned by the Paris public school system to develop a method for identifying failing students from those who had the ability to succeed academically. The intent was to provide special attention to lower functioning students in order to promote their success. However, those with a political agenda including, Herrnstein and Murray (1994), misused Binet’s IQ tests to promulgate biased theories that intelligence was set and biologically determined. The intelligence theories that claim biological determination, ignore the powerful influence of education on cognitive development, ironically Binet was keenly aware of this deep connection.

Improving intelligence is one of the foci that educators have in mind when including or devising curricula within schools. Within the current study of this field, Howard Gardner is a prominent figure who has changed the way intelligence is viewed with his theory of multiple intelligences (1982, 1983, 1991, 1993, 1997). In this approach to the definition of intelligence Gardner looked at the mental functions of various groups. In his studies, he used disparate groups which included; brain damaged patients, people with autism, prodigies and gifted people, and a range of normal children and adults. In addition, he included experts from different fields of work and people of various cultures. In a comparison of these groups of people he was able to discern eight different intelligences partly because one or more were absent in brain damaged individuals and in part through the study of those with special ability who exhibited extra strengths in one or more of the intelligences (1982, 1983, 1991, 1993, 1997). He



states that in most normal people these intelligences work together and are thus hard to differentiate. He ascribes these different intelligences to different areas of the brain, which is evident in the case of brain damaged people who retain certain abilities while they experience the loss of others. In defining these intelligences he looked at and used for his criteria; the potential for isolation by brain damage, the existence of savants, prodigies, and exceptional individuals, the identification of a core operation or set of operations, a distinctive developmental history and definable set of expert performances, an evolutionary history and plausibility, support from psychological tasks, support from psychometric findings, and susceptibility to encoding in a symbol system. Intelligences included under these criteria are linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalistic (1982, 1983, 1991, 1993, 1997). While all intelligences deserve the study of those interested in the field of cognition, spatial intelligence will be the focus within this research.

Spatial intelligence's as defined by Gardner (1983, 1993) "are the capacities to perceive the visual world accurately, to perform transformations and modifications upon one's initial perceptions, and to be able to re-create aspects of one's visual experience, even in the absence of relevant physical stimuli" (p. 173). This is not limited to those with sight as evidenced by blind people who can envision the layout of a room. Spatial intelligences include many different abilities, some of which Gardner (1983/1993) explicitly describes as:

The ability to recognize instances of the same element; the ability to transform or to recognize a transformation of one element into another; the capacity to conjure up mental imagery and then to transform that imagery; the capacity to produce a graphic likeness of spatial information and the like. (p. 176)

These abilities are used in the course of such diverse activities as orientation of the self in an environment, the recognition of shapes and objects in two dimensions or three, and identification of the elements within visual or spatial displays, such as in artwork or in natural elements. It is even suggested that this form of intelligence is of equal dominance of use as that of linguistic intelligence. Though Gardner does

not quite agree with looking at intelligences in terms of dichotomies he cedes that these two intelligences are of primary concern to the tasks evaluated by experimental psychologists in terms of storage and solution of information (Gardner, 1983, 1993).

Other theories of multifaceted intelligence exist, among them, Sternberg's (1985) theory of successful intelligence is noteworthy. This model states that there are three features of intelligence that work together to generate successful results. Sternberg further contends that success is meant to be viewed by the standards of the individual and the sociocultural context. The three aspects are composed of analytical, creative, and practical intelligence. Within this context analytical intelligence is composed of abilities associated with academic success. Creative intelligence is the skills and attitudes that facilitate going beyond the normal state of things to craft something culturally new and significant. Practical intelligence is the competence to create success in real life. Though a significant addition to this field and indicative of art as a cognitive process through its use of creativity, it should be noted that this theory is not without its detractors.

An important feature within these theories is that all claim that intelligence is multifaceted and can be learned or reinforced. This is demonstrated in Gardner's (1983, 1993) example of William Hogarth, an artist who would repeat in his mind the parts of an object in order to better recall them later in the act of drawing. It can also be seen in his example of the training of young children to look beyond the subject of a painting and see the other technical qualities such as brush stroke, which ordinarily they would overlook. Other examples are evident in a study done by Voss (1996) on whole language design, where over the course of a year she discovered that children who were struggling at reading or writing had literacies in other areas (such as visual-spatial, musical, or body-kinesthetic) which could be used to reinforce their performance in reading and writing. The view that these intelligences can be taught connects to the theories of cognitive developmental psychologists who believe that development is subordinate to learning. For instance, they believe spatial intelligence can be informed through training or education. However, before education can be prescribed and enacted, it must be deemed as developmentally relevant to its recipients.

Gardner (1982) describes an artistic development model in which to some extent the biologically based models and assumptions of psychologists like Piaget (1964/1972/2005), who formulated four developmental stages, and Chomsky (1994), who claims that some abilities are biologically inherited such as the ability to form language, seem to have relevance. Within this model children progress through stages, as in Piaget's model. However, unlike development within Piaget's model, the efforts of teaching can alter certain facets of this development. In Gardner's model of artistic development the first two years of development are the same as Piaget's sensory-motor preverbal stage. During this time the child gets to know or understand the world through direct contact with it. This entails the use of the physical senses to form understandings of the physical world of objects. The next stage, which encompasses ages two through seven, a stage both Gardner in terms of art, and Chomsky in terms of language, view as critical to the development of certain traits, symbolic, and linguistic respectively, the child begins to master symbols within its culture. This includes linguistic symbols as well as hand gestures, body movement, numbers, music, and so on. By the end of this stage, children are adept at the understanding, use, and combination of these symbols. In the next stage, sometimes referred to as the literal stage which encompasses ages seven until the beginning of adolescence, children become proficient in the use of symbols. They exhibit an approach with emphasis on convention, following established rules, and an avoidance of experimentation and novelty in symbol use. Copying forms is an example of this stage as is a pronounced emphasis and concern with realism. It is also at this stage and age that many students quit producing art, some never to return to this form of expression again. Adolescence marks for some a return to broader focus and approach in the arts. This model of development has led some academics to assign a U shape to artistic development with young children at one high end of the U, children in the literal stage in the bottom middle, and adolescents at the other high end. However, it is possible that this is misleading. Gardner and other theorists argue that this stage is important because, though convention and conservatism are at a high both in production and in content, the focus on realism may be developmental in learning about art (Gardner, 1982, 1983, 1991, 1993, 1997; Inhelder, 1964, 1969). This theory is supported through the fact that most children

show gradual improvement in their work, are able to understand and respond to work made by others, and begin to show sensitivity to the inherent qualities of art such as style, expressiveness and composition. By the end of this time children begin to show understanding and acceptance of different styles of art other than realism such as expressionism and abstract art. Academics who follow this line of reasoning claim that the literal period may be a time when students need to acquire skills rapidly, so that in their adolescence when they are more critical they have the tools to live up to that new sense of understanding and purpose. Subsequently they are not tempted to quit doing art because their skills match their desires and needs.

Gardner (1983, 1993) claims that there are important conditions that affect this developmental model. Inborn talent known as aptitude, though hard to define and measure, is a significant contributor to the rate of development. Environment is another equally important contributing factor, one of which a school or teacher has significant control over. In the early years, these controls consists of exposure and access to supplies, and exposure to work created by others. Whereas in the middle and later stages instruction and display of creative models, mediums and technique become significant. When other pedagogy research is considered (Delpit, 1995; Stiggins, 2005; Tatum, 2003), additional influential controls can be utilized. These include teacher belief in student abilities with high expectations of achievement, along with explicit instructions in what is desired and how to achieve targeted goals.

Inhelder's (Lowenfeld & Britain, 1964; Piaget & Inhelder, 1969) model of artistic development which exhibits parallels to both Piaget and Gardner. This model uses the same age groupings as the previous schemas but differs in its specificity, including more detail on the child's approach to art at various ages. In this model from birth to two, children begin artistic development through experiencing the environment through the senses. This provides the essential background experience for producing art. At ages two to four, the scribbling stage, the details of self expression begin. This occurs through kinesthetic learning where scribbling satisfies and reinforces expression. Control of motor functions, and increases in visual and motor coordination all occur through this activity. The naming of drawn forms begins which marks the beginning of transition from pure motor functioning to that of imaginative

thinking where the child forms relationships between drawing and the outside world. In addition, objects can now be drawn that are not present. Finally, drawing becomes a way of recording concepts and feelings and they exhibit visual retention of absent objects and events which is the use of symbolism. The next stage, ages four to seven, called the preschematic stage, is characterized by an egocentric focus where the self is at the center of imagery. At this time children use symbols based on self awareness, draw what they know rather than what they see, show relationships in their artwork such as spatial relationships, and begin to rely on geometric aspects of design. In the ages of seven through nine, children go through a schematic stage. This is characterized with a focus on symbolic formulas. Personal schemas are used showing concepts and generalizations. The important is exaggerated and the unimportant is removed. There is a focus on spatial organization. Grouping and sequence are also developed in artwork at this stage. The next category is that of drawing realism, ages nine to eleven. At this stage children focus on perspective, using overlapping and concealment. Formula schemas disappear. There is also interest in group work at this time. From ages twelve to fourteen, children go through the next stage, pseudo-naturalism. During this stage children use dramatization and imaginative action. Perspective is being attempted in drawing. The discovery of diminution of viewpoint is made and utilized. The human figure, usually a caricatured version, becomes important, though self portraits are avoided. Color is used to demote emotion. It is also at this stage that a child becomes increasingly critical of their work. Finally, children experience the last stage in this model, termed the crisis of adolescence, which lasts from ages thirteen through seventeen. At this stage in development children have a critical awareness of the environment. They create impressions of moments. They value relationships, emphasize abstract qualities in artwork and pay attention to aesthetic considerations in their work and that of others.

Though different in its detailed description of the components of each stage, and somewhat in its age assignments, Inhelder's model closely parallels that of both Gardner's model of artistic development and Piaget's cognitive development model. In contemplating the developmental schema of artistic development, taking a closer look at art in education exemplifies the impact

that teachers and instruction have in its promotion. In consideration of this, investigating how best to teach art to students is important. This requires viewing what options of art education are available and how to optimize the cognitive and developmental growth of students in and through art.

There exist various models of art instruction within K–12 education, the examination of which reveal artistic and cognitive development through their approach. Brown and Korzenik (1993) discuss four distinct traditions of art education which offer different approaches in curriculum and cognitive growth potentials. These components include art making as study skills, art making for jobs, art making for the spirit, and art making for understanding ourselves and others.

In art making as study skills, students are encouraged to create art in order to focus their attention on the coursework's subject matter. This kind of artwork is done in various academic classes and consists of creating a better understanding and enjoyment of the subject being taught. It teaches students that art can be about anything and used in conjunction with various subjects of interest to enhance understanding and enjoyment. The cognitive benefits of better focus and content understanding are received within the subject through its reinforcement in more than one form of learning strategy.

In art making for jobs, students are encouraged to do art with a view that it may end up contributing to their future career responsibilities or opportunities. Within this tradition, the commercial aspects of art are the focus of the curriculum. Students are taught skills which can be applied directly to jobs they may end up in as adults. In addition, they learn that the arts must function such as with a building's architecture, it must be sound and the product design must work as intended.

Art making for the spirit focuses on the imagination and feelings of students. It is centered on the student's inner life, with the focus of lessons directed on recognition and activation of the emotional and spiritual identity and experience of students. Full of unknowns, this approach requires attention to the inner knowledge and identity of students, which promotes art that is composed of feeling, personal interest, and passion.

In art making for understanding the focus is on helping students form understanding of themselves and of others. This curriculum

emphasizes interpersonal awareness using both content assignments and teaching strategies such as groupwork in teaching to these concepts. Learning about art is another focus within this field. Students discover that art is another way of telling about oneself and learning about others. In addition it provides the awareness that art matters because it makes ones ideas real, and it contains a person's experiences and identity. Finally, this focus teaches a broader identification with world art and cultures through the aforementioned qualities, and by demonstrating that art and artists reflect not only their own identity and interests but also their cultures.

However, before a meaningful expose' can really take place of what art curriculum teaches and what should be emphasized in art education to maximize the benefits it has to offer, the issue of whether art making is a cognitive function of learning, must be resolved. Although historically there has been some debate, current research indicates that art is both a cognitive process in humans and a function of human learning.

Gardner (1991) addresses the need for schools to attend to the cognitive development of all students through multiple contexts and methods:

Such well-documented differences among individuals complicate an examination of human learning and understanding. To begin with, these differences challenge an educational system that assumes that everyone can learn the same materials in the same way and that a uniform, universal measure suffices to test student learning....I argue that a contrasting set of assumptions is more likely to be educationally effective. Students learn in ways that are identifiably distinctive. The broad spectrum of students—and perhaps the society as a whole—would be better served if disciplines could be presented in a number of ways and learning could be assessed through a variety of means. (p. 12)

This statement presupposes that there are different intelligences and points to the conclusion that there are different ways of learning. It also lends credibility to the possibility that art making can serve as a cognitive function within education. In his exploration of multiple ways of thinking and learning Gardner argues that teaching which utilizes more than one intelligence is conducive

towards creating learning in which a deep understanding is more likely to occur. Further, that knowledge is reinforced through understanding it in more than one way which lends to application and transfer of knowledge beyond school. Morgan's (1997) description of cognitive style theory reinforces these views in the assertion that, "individuals utilize different patterns in acquiring knowledge" (p. 6). Schmeck (1988) also reinforces the aspect of knowing information through more than one manner. He advocates a whole brain holistic approach that uses learning styles to teach skills (information) in diverse ways, "resulting in a more holistic understanding of the subject matter" (p. 281). At a conference held in Aspen in 1977, promoted by a private nonprofit corporation and the National Institute of Education as well as the Department of Health, Education and Welfare, educators, psychologists, philosophers and researchers met to discuss the relationship of art and cognition. Madeja (1978), a co-chair of the conference, sums up the content and the reasons for the conference, stating, "If a theory of instruction in the arts is to emerge, part of its formulation would rest on whether the arts are viewed from a cognitive or a non-cognitive position" (p. 8).

Madeja (1978), described the differences between the two camps as being a discrepancy between how the arts are a part of cognition. Those who advocate the cognitive position believe that arts are a cognition, part of a larger domain of knowing, but a subset of a higher order of intelligence. The anticognitive epistemology centers on the arts as being unique, with their own structure, type of analysis, and cognitive system. The members of the conference, mostly on the side of art as cognition, discussed the anticognitive position that knowledge is general, art is particular, therefore, art is not knowledge, but noted that their views were different because they were based on the idea that knowledge is based in personal schemas. "In order for these schemata to be made known to the individual, they must be given concrete form. The arts provide one means by which these mental structures are given form" (p. 8). Although most present at the conference argued that art was cognitive they admitted that those who would argue the other way had some valid points. The research that came out of this conference made significant contributions to the discussion of the relationship of art and cognition that exemplifies art as cognition. Contributions which mirror the assertions of

other researchers' assertions on the subject include Gardner (1982, 1983, 1991, 1993, 1997), and Cohen and Gainer (1984).

Engel (1977/1978) argues art as cognition stating that it is a "language of comprehension, of thinking, of knowing, of receiving, and of expressing information" (p. 25). In this reasoning art can be viewed as a cognitive process in acquiring, processing, and dissemination of information. He continues this analogy concluding that because art is an activity within a symbolic structure-set, it is knowledge and it contains knowledge at the same time like language. Because of this he concludes that art is a cognitive process. Csikszentmihalyi (1978) concluded art was cognitive based on the outcomes of a longitudinal study (Getzels & Csikszentmihalyi, 1976) where students were asked why they wanted to become artists. In the replies they gave, they stressed cognitive reasons. They wanted to know the answers to questions that were complex and ambiguous, or which had no rational answer, such as getting to understand reality better, or the expression of a person's emotional sense of things. Csikszentmihalyi (1978) stated that these students were in the cognitive process of creating visual models or patterns of experience. In doing this they want to portray basic emotions and states of being using symbols. "They want to make real, things that do not exist" (p. 119). He further asserts that art is complimentary to reason because it explains events and ideas that cannot be explained through their reductionism. In his view art is a knowledge that describes models of reality in global terms and thus is able to describe experiences that are not clearly understood. In addition he links art to emotion and explains that uncontrollable feelings and experiences are symbolized by artists who gain control over them in the process. He finds that art is an adaptive tool to master forces in the environment, to obtain knowledge about reality, and creates models of experience that are too ephemeral for reason. Finally, he concludes that rational and artistic modes of cognition are complimentary rather than conflicting because they address the need for knowledge of reality that are inaccessible by the use of one approach alone. However, it is not through expert theory alone that one can come to the view that art is cognitive. An examination of what art curriculum teaches and what students learn reveals the cognitive nature of art (Brown & Korzenik, 1993; Cohen & Gainer, 1984; Eisner, 2002).

Eisner (2002) ascribes many different focus possibilities within art curriculum. Discipline based art education (DBAE), art as visual culture study, creative problem solving, art as preparation for the world of work, art as cognitive development, art in promotion of academic performance, and integrated arts are main focuses within education currently. DBAE has four main foci; the teaching of skills and development of imagination to facilitate quality art making, the teaching of critiquing abilities in viewing self made art and that of others, creating an understanding of the historical and cultural context of art, and an awareness of the values that art exhibits and provides. In the study of art as visual culture, students learn to decode the values and ideas within both fine art and popular culture. This arena of art is focused on critical analysis of such issues as control, political influence, power distributions, and social issues. Furthermore, it looks at the visual world through a critical lens of multiculturalism, with analysis of political and social matters at its heart. In art as creative problem solving, art functions as a manner to address design problems of social importance through technically and aesthetically efficient ways. This form of art education is in the tradition of the Bauhaus, with the same stress on understanding the potential of materials, form following function, and analysis of what will work and how to achieve that end in an aesthetically pleasing manner. Art as creative self expression—views art as "a process that emancipated the spirit and provided an outlet for the creative impulse" (p. 32). This approach stresses self expression, shies from the external application of standards both technical and in terms of form because they inhibit art making, and places the teacher in the role of artistic guide rather than intervener. Eisner's (2002) description of art for work preparation, is the same as that described by Brown and Korzenik (1993). Art as cognitive development, emphasizes perception, interpretation, meaning, exploitation of unexpected opportunity in art work, flexibility, risk taking, and the exercise of judgment, critical thinking among many other cognitive tasks. His definition of integrated arts is the same as the model used by Brown and Korzenik (1993), under the category art making for study skills. Finally, art as promoting academic performance is more an argument than a curriculum focus. Its premise is that art production boosts scores and performance in other academia. Although controversial this argument is becoming more and more popular

among art educators who perceive that the arts are being cut from programs which are focusing on academic studies over enrichment curriculum due to new national and state educational policies focused on academic achievement as noted through performance on standardized tests as required by the NCLB. With a detailed list of curriculum possibilities in mind, viewing what students learn through making art completes the vision of linking art and cognition.

Cohen and Gainer (1984) state that students learn four main things from art; to see, to think, to learn about themselves, and to learn about feelings. Bailin (1994) and Fineberg (1994), concluded in separate studies of art students that art teaches critical thinking skills. Chapman's (1998) study of an art literacy program to improve reading achievement found that this focus in art education had the effect of improving academic performance in reading. Richards (2003) studied the same focus and concurring results.

Eisner (1999) reviewed ten years of research on this matter and while he found some valid research he remains mostly skeptical on this effect of art education due to research methodology and lack of statistical significance. However he does find merit in providing art in education based on its own intrinsic value. Art can enhance learning in other fields through providing media to facilitate interest and other ways of understanding. This can be seen in the work of Floyd (2002) who studied a themed educational experience created out of a museum and school partnership. Though Hamblen's (1997) research on art instruction that effects learning in other areas finds that art does enhance learning in other subject areas, she cautions that instrumental outcomes should not be the only reasons to have art in education. Edens and Potter (2001) did a longitudinal study that linked drawing to the learning of scientific concepts but they are also leery of promoting art to boost other academic subjects. Like Eisner (1999), they contend that providing art based on its own merits is an important part of K-12 education. However, within other classes art may be another way of teaching material and this may be especially important to those who exhibit a spatial intelligence. Green's (1999) research indicates multiple approaches to classroom curriculum have positive impact on student learning. Nolen's (2003) research also indicates teaching to multiple intelligences to best serve student's learning. Both Green (1999) and Nolen (2003) use Gardner's (1982, 1983, 1991, 1993,

1997) theory of multiple intelligence in their research. Eisner (2002) claims that art teaches many different lessons to students. Among the things it teaches are; attention to relationships, improvisation or flexible purposing, using materials as a medium for creating this includes technique, shaping form to create expressive content, the exercise of imagination, learning to frame the world from an aesthetic perspective, and the ability to transform qualities of experience into speech and text.

### **Conclusions**

With the institution of the NCLB Act came mandatory high stakes standardized testing upon which school funding from the federal government is determined and allotted. With this federal focus, schools who wish to continue to receive federal funds have tried to find ways to facilitate student test scores. This effort has had many unfortunate consequences such as placing an indirect amount of stress on students whose performance in the end determines whether or not they receive a high school diploma. Consequently, the current concentration on teaching to the tests, to the exclusion of other content; and cutting classes not directly contributing to performance on the mandated tests either by default of not being included in the test, or by the perception that they actually detract from the test. Those who advocate this last position state that the classes which are not on the test need to be cut because they (a) take time away from studies that are directly linked to the tests, (b) cost money that could be spent on classes that contribute to better test performance, and (c) are cognitively unimportant to student development and growth. While there are important counter arguments to each of these positions, the most troubling one is that art is unimportant in cognition and thus has little impact on student development and growth.

The research done in this field of study underlines the cognitive gains that art has to offer students both in conjunction with other academic studies and in its own right. Art's cognitive and developmental functions and qualities have been studied throughout history. This area of study has included a number of approaches, with different ideas and foci on the subject and arguments over the meaning of results. Further, this history includes a diversity of researchers and fields which include the perspectives of philosophers such as Plato and Rousseau, cognitive psychologists such as Piaget and Gardner, and art educators such as Cohen,

Gainer, and Eisner. While there are those who argue that art is a non-cognitive function and process, there are many more who hold the opposite viewpoint. Through these countering positions, knowledge of this area has grown and developed into a well researched topic, with much knowledge present that can be of benefit to current art educators.

As the majority of the literature indicates, art is an important developmental cognitive element in students, one that needs to be included in schools and curricula in order to best serve the needs of students (Amabile, 1996; Brown & Korzenik, 1993; Cohen & Gainer, 1984; Eisner, 1999; Feldman et al., 1994; Gardner 1982, 1983, 1991, 1993, 1997; Inhelder, 1964, 1969; Morgan, 1997; Schmeck, 1988; Sternberg, 1985, 1996). While inclusion of art within other subjects offers enrichment within those classes, the cognitive and developmental benefits of art instruction highlights the importance of having art as its own subject in K-12 schools. Within the need to include art as a subject in schools there are many options contained in art that can meet the missions of different schools. With this flexibility in structuring and the researched importance of art's cognitive impact upon students comes the responsibility to include it within education. If schools are dedicated to providing a comprehensive, developmentally appropriate education, then they must include art education within their curricula. Art education has been shown to increase creativity, spatial intelligence, aesthetic awareness, awareness and sensitivity to visual elements and symbology, and an understanding of the self and the world (Amabile, 1996; Brown & Korzenik, 1993; Cohen & Gainer, 1984; Eisner, 1999; Feldman et al., 1994; Gardner 1982, 1983, 1991, 1993, 1997; Inhelder, 1964, 1969; Morgan, 1997; Schmeck, 1988; Sternberg, 1985, 1996). Further, as some researchers postulate (Engel, 1977; Getzels & Csikszentmihalyi, 1976) art is an unique way of cognitively processing information, then to exclude it from curriculum is to deny students a natural language in which to explore and express information. Finally, in a time when critical thinking skills are emphasized through interdisciplinary literacy, to deny art literacy through the exclusion of teaching art in schools is in direct opposition to the overall goals of K-12 education.

While this investigation into art's cognitive and developmental elements and the reasons for art's inclusion in education led to some conclusions by the author on the subject, there is

more research that could be done with this subject. Visual studies could be included under this topic as could art's importance to humankind throughout history from Neanderthal man to the present. Additional funding for art programs for students that work in conjunction with, but come from outside of the schools, could also be explored such as community based arts programs or museum educational offerings. Additionally, an exploration of how art colleges approach art education and what correlations and relevance their practices have to K-12 programs would also be of merit.

### **Recommendations for Practice**

The most important recommendation this study has generated in the author's view is the need for art educators to develop awareness of the researched benefits that art offers students and then to actively advocate for the inclusion of art in K-12 education. Activism for the importance of art and what it offers to students and its need within school curriculum to help meet student cognitive development must occur at all levels; school, community, district, county, state, and federal. The many misunderstandings about art's role in cognition, corresponds with its placement in the line of classes to be dropped. This is caused by a perceived need to focus on subjects that face standardized testing under the NCLB Act. The best practices highlighted by this study indicate showcasing art education's cognitive and developmental benefits in order to combat this recent trend. Another method that supports this undertaking is that of bringing to public awareness all of the content concentrations that art has to offer in a school's general mission, e.g., discipline based art, creative problem solving art, art as preparation for the world of work, art as cognitive development, art as visual culture study, and integrated arts (Eisner, 2002). In this manner, art education's versatile foci makes it a flexible tool that can support a school's themes, while still providing the opportunity and benefits that are inherent in its undertaking by students.

While art benefits the learning that occurs in other subjects, the research in this study cautions against only including art as an aspect of other subjects. The cognitive and developmental benefits of arts education merits its own place within K-12 education. Our students deserve this focus, as much as they deserve and need math, English, science, and other subjects to be offered in their own classes and not taught only through another focus.

Table 1: Research in Support of Art as Development and Cognition

Researcher	How this supports the cognitive developmental benefits of art
Plato	Learning is development. <i>Therefore, learning art could contribute to the formation of the person.</i>
Rousseau	Learning is subordinate to development. Education should be used to facilitate expansion of that already present (natural abilities) in the student's mind. <i>If art is one of a student's aptitudes, education must focus on this to facilitate an "efficient and humane" education for them.</i>
Piaget	Learning is subordinate to development. Children go through four predictable stages in development (sensory-motor, pre-operational, concrete operational, formal). <i>This is important in understanding the later stage development theories developed in regards to how art is both a process of learning and development.</i>
Vygotsky	Development is subordinate to learning. Learning only partially reflects stages. Development can be pushed by facilitation of information just beyond what a student can comprehend at their present level of ability/understanding. Culture plays a significant role in cognitive development and understandings. <i>This is important in understanding the later theories developed in regard to how art is both a process of learning and development, and what focus in art best serves these aspects.</i>
Feldman	Creativity is composed of three parts (cultural expression, reorganization, and transformation) which are interrelated. <i>This theory is important because it connects creativity to cognitive activity, and thus creates an indirect but concrete link in viewing art creation [in which creativity is an integral component] as a cognitive activity.</i>
Amabile	Creativity is composed of three parts (domain-relevant skills, creativity-relevant skills, and task motivation). <i>This theory is significant because it finds creativity is a cognitive process in which success in part relies on formal and informal education to produce meaningful results/outcomes. This is important because it creates another indirect but concrete link in viewing art creation [in which creativity is an integral component] as a cognitive activity and further links education as an important aspect towards the generation of success in this endeavor.</i>
Gardner	Theory of multiple intelligences compartmentalizes intelligences into (so far) seven areas of knowing. <i>(This is important because one of these intelligences (spatial) is directly tied to visual endeavors. Thus training in visual areas may promote and develop cognitive growth and ability.</i>
Inhelder	His artistic development model describes art creation in terms that mirror Piaget's (1964, 1972) stage theory model. <i>This is important because it shows how art is a developmental process where learning is predictable at different stages of childhood and further can be aided in all stages by educational efforts and support.</i>
Brown and Korzenik	Similar to Gardner's model and also based on Piaget's stage theory. This is another model describing the various stages of ability and learning that children go through in regard to art. <i>This is also important because it shows how art is a developmental process where learning is predictable at different stages of childhood and further can be aided in all stages by educational efforts and support.</i>
Engel	They describe four distinct traditional foci in art education, and what, when used, each tradition offers to students in terms of content and cognitive learning. <i>This is important in showing how art addresses different needs of students and missions of high schools.</i>
Csikszentmihalyi	Places art as a cognitive process in acquiring, processing, and disseminating information. Links it to use of language. <i>This is important in showing how art is used and how its teaching and involvement in learning, benefits students.</i> He did a longitudinal study (Getzels & Csikszentmihalyi, 1976) in which students stressed cognitive reasons in describing the reasons why they wanted to become artists. <i>This is important in placing art within the realm of an activity done for cognitive reasons.</i>
Eisner	He describes many distinct foci in art education, and what each when used, offers to students in terms of content and cognitive learning. <i>This is important in showing how art addresses different needs of students and missions of high schools.</i>

In order to facilitate ease in referencing the major research of art's cognitive aspects for use in best practices and activism, is a chart (see Table 1) of the major researchers and their

findings which support arts inclusion in K-12 education. Though not exhaustive it is the author's hope that this table will help those who wish to proactively pursue activism for arts



importance and continued placement in K-12 education as well as those who are defending current programs at risk of being cut from their schools.

Art education has much to offer students, is fundamental to healthy development and promotes cognitive growth as illustrated in various models of cognitive development (Amabile, 1996; Feldman, 1994; Gardner, 1982, 1983, 1997; and Inhelder, 1964, 1969). Its inclusion is one key element in offering students all of the tools they need to successfully prepare for their lives as citizens in our society. Armed with research, art educators now have the means to advocate for art education based on its positive virtues in spite of funding restrictions and standardized testing. Our students deserve no less than the best educational programs and the research shows that art is an integral part of what schools need to include in the pursuit of student development and cognitive growth.

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## Unsheltered Education: Homeless Children in Public Schools

*Homelessness is a devastating and stigmatizing condition for more than a million children in the United States, yet homelessness is widely ignored in the classroom. To provide educators a look at the place of preadolescent homeless children in public education, this study of peer-reviewed literature, scholarly books, and government documents examines the possible causes of homelessness; its emotional, cognitive, and social impact on children; and the barriers to equitable education those children face. Most of these barriers arise from the prejudices and misconceptions of educators. While the McKinney-Vento Act protects the educational rights of homeless children, those children still need a stable, emotionally and cognitively supportive classroom environment in which to thrive.*

The Stewart B. McKinney Act defines homelessness as the lacking of “a fixed, regular, and adequate nighttime residence” (Woods, 1997, p. 302). This can mean living in transitional shelters, substandard housing, cars, abandoned buildings, or shared housing situations due to economic hardship (National Coalition for the Homeless [NCH], 2004). While such definitions provide a picture of what homelessness is, it only begins to shed light on what homelessness actually means for the approximately 1.4 million (Wu, 2005) identified children across the United States who do not have a place to live.

Living without a home, write Stormont-Spurgin and De Reus (1995), means suffering the frustration and degradation of living hand to mouth, depending on the generosity of strangers or the efficiency of a government agency for survival (p. 157).” The homeless do not have a safe, stable environment to go to at the end of the day. They say, “I’m staying” somewhere, but never, “I live” somewhere. Many do not know each night whether they will sleep in a bed, a car, or at all. When they are sick, there is no medicine and no place to rest. When they are hungry, there is nothing to eat.

Homeless children live as outsiders, always in a place where they feel they do not belong, always around people they are made to feel inferior to. They do not have what other children take for granted, like material possessions or a place to be alone. While other children think about their favorite television shows or getting good grades, homeless children worry about survival. They do not have personal time or space to play; they have no opportunity to be children. The ability to trust does not come easy. Friendships, when they are made, do not last

long. They are the children none of the other children want to sit next to. They are taunted by their peers and called “shelter rats.” They are told that the situation they are in is their fault. Sometimes they are told it is their choice. Homelessness means having no control over one’s world or one’s destiny, and not understanding why.

While it might be reasonable to assume that getting an education is the least of the homeless child’s worries, most homeless children want to succeed in school. “I don’t want to be in the sixth grade forever,” says Patrice, a homeless girl (cited in Barton, 1998), “I want to move on ...or all this shit be for nothin’ [sic].” Despite the fact that these children see education as a key to their survival, many cannot get an adequate education. The prejudices of educators present the most pervasive barriers to education faced by homeless children. In order to overcome these barriers, an understanding of the causes and consequences of homelessness and the ways in which equitable education is continuously being withheld from homeless children must replace the misconceptions and bias.

Homelessness is too often absent from discussions of equitable education. It is an unsettling topic that is wrapped in misunderstanding and victim-blaming stereotypes. Sadly, children are not exempt from that blame. Also, the myth that the homeless only live in someone else’s community (Jacobson, 2002b) leads many educators to believe that homelessness among students is not a problem they need to deal with. Such stereotypes only serve to perpetuate and justify the inequities of the socioeconomic system that keeps the homeless on the streets and their children destined for poor education or no

education at all. This is what Polakow (1998) calls “an outrage in a society of mansions and second homes and unlimited personal luxuries” (p. 106).

As long as educators ignore the challenges of homelessness, these children are denied an environment in which to achieve their full potential. This paper seeks to examine those challenges, first by looking at the possible causes of homelessness as well as its physical, psychological, and social consequences. It explores the obstacles to education homeless children face both in and beyond the classroom. It then looks at the educational rights of these children and how educators have put those rights into practice, before recommending strategies teachers can use to better the odds for their homeless students in favor of resilience. This review focuses on preadolescent homeless children accompanied by families, though most of the information presented can apply to all children without homes.

Homelessness is a state that any child can potentially find him or herself in. As leaders in Washington propose economic reforms that would increase the potential for homelessness among families with children while dissolving their educational opportunities (Children’s Defense Fund, 2004; Garcetti, 2005; Katsuyama, 2005), such children can not afford to be ignored by educators.

## **Literature Review**

### **Toward an Understanding of Homelessness Among Families and Children**

Although homelessness in the United States dates as far back in history as the United States itself (Stronge, 1992), Lively and Kleine (1996) tell us “the rise in homelessness is a very recent and puzzling problem to an affluent society” (p. 29). Families with children have for the last 20 to 25 years been the largest growing segment of the homeless population, comprising 40% of that population, and children alone making up 39%. Single-parent, female-headed households make up the vast majority of these families (Kaye, 1998; NCH, 2001; Strawser, Markos, Yamaguchi & Higgins, 2002), and although these families represent a full spectrum of ethnic groups, the majority of them are non-White (Rubin et al., 1996).

Homelessness is seen by most of mainstream America as a consequence of personal choice, inadequacy, and failure. “In contemporary politics, we inevitably link words such as

‘poverty,’ ‘welfare,’ and ‘homeless’ with negative attributes as ‘lazy,’ ‘dysfunctional,’ and ‘criminally active’” (Barton, 1996, p. 297). Society’s judgment is that people are poor because they choose to be (Walsh & Buckley, 1994). This stereotype extends even to children. “Female and child poverty,” Polakow (1998) points out, “is still cast as a ‘moral’ problem, tied to public rhetoric about ‘family values’ and ‘family breakdown’” (p. 91). Many believe that the problem of homelessness would be solved if homeless people simply got jobs or got married. This rhetoric, meant to justify further cuts in social services (Polakow, 1998), ignore the fact that 20% of the homeless are employed, indicating that employment alone is not enough to remedy homelessness, and that many families are “only an accident, illness, or paycheck away from becoming homeless” (NCH, 2001, p. 2).

Stronge (1992) writes that homelessness has “no single cause... no simple solution” (p. 3). The causes of homelessness are best viewed as a combination of interrelated factors that perpetuate one another. Two major causes among families are the simultaneous increase of poverty and decrease of affordable housing (NCH, 2001; Polakow, 1998). Declining wages and changes in welfare programs account for increased poverty among families. “The proportion of homeless children being raised in extreme poverty doubled between 1975 and 1993” (Bassuk & Weinreb, 1997). According to the National Coalition for the Homeless (2001), families in 45 states and the District of Columbia would need to earn double the minimum wage to afford a two bedroom apartment at Fair Market Rent. Both the National Coalition for the Homeless (2001) and Polakow (1998) state that in the recent past, many poor and working-class families were eligible for a variety of social services, such as the Aid to Families with Dependent Children – the largest cash assistance program for poor families – Emergency Assistance, and the Job Opportunities and Basic Skills program. However, in 1996, the Personal Responsibility and Work Opportunity Reconciliation Act, passed into law under the Clinton administration, eliminated all such programs. As a result, many poor families plunged into homelessness. According to Polakow (1998), 70% to 90% of homeless families became homeless in the 1990s (p. 91).

Another strong cause of homelessness is domestic violence. As many as 63% of homeless women and children become homeless to escape abuse (NCH, 1999; Weis, Marcus & Freie,

1998). The implications of such figures are that many homeless children have either witnessed physical abuse, or have endured it themselves. Some live in fear of an abuser resurfacing. In this context, the causes of homelessness can be every bit as traumatizing for a child as the homelessness itself. After becoming homeless, many families find themselves trapped in homelessness due to the elimination of welfare assistance, funding cuts for battered women's shelters, and the increased inaccessibility of education for poor and working-class women (Weis et al., 1998).

While homelessness is often a consequence of family breakups, it is just as often a cause. "Families may be separated as a result of shelter policies which deny access to older boys or fathers" (NCH, 2001, p. 4). Other causes include children being placed into foster care when parents are homeless, or parents leaving children with family members so they can stay at regular school and do not have to deal with life on the street. In NY, 60% of residents in shelters for single adults have children who are not with them. In Chicago 54% of a combined street and shelter sample were parents, but 90% did not have their children with them (NCH, 2001).

The consequences of homelessness are as numerous and damaging to one's psychological well-being as the causes. The most obvious and most fundamental of these consequences is a lack of access to basic necessities such as stable shelter, proper nutrition, opportunities for personal hygiene, and access to healthcare (Walsh & Buckley, 1994). Homeless children are in fair or poor health twice as often as other children and have higher rates of upper respiratory infections, asthma, ear infections, fever, coughs and colds, skin diseases, lice infestation, asthma, croup, dehydration, and diarrhea (Kaye, 1998; NCH, 2001; Strawser et al., 2002), illnesses that can "have devastating consequences if not treated early" (NCH, 2001, p. 3). In addition, lack of safety is a major problem for homeless families and a major stressor for children. Homeless families more often than not must frequent areas and neighborhoods with high crime rates.

Homeless and low-income housed families experience higher rates of depressive disorders. According to Maslow's Hierarchy of Needs, it is highly difficult to develop a positive sense of self or be motivated to pursue intellectual challenges while basic needs of sustenance and safety are not being regularly met (Daniels, 1992). Homeless children manifest emotions such as

anxiety, suspiciousness, fear and insecurity, and feelings of personal inferiority (Stormont-Spurgin & De Reus 1995; Tower, 1992). While it is yet to be determined whether maternal depression is a cause or a consequence of homelessness, it is the single largest predictor of anxiety and depressive disorders for homeless children (Schteingart, Molnar, Klein, Lowe, & Hartmann, 1995). One third of homeless mothers have made at least one suicide attempt.

Several studies point to homelessness producing developmental delays and behavioral disorders in children, including delays in language, speech, motor and social skills, as well as symptoms such as short attention span, aggressive or disobedient behaviors, and withdrawal (Bassuk & Rosenberg, 1990; Kaye, 1998; Schteingart et al., 1995; Strawser et al., 2002; Walsh, & Buckley, 1994). The National Coalition for the Homeless (2001) reports that homeless children are "four times as likely to have developmental delays (p. 3). Bassuk and Rosenberg (1990) say that 54% of the homeless children they studied displayed at least one type of lag in their development. Schteingart et al., (1995) find no significant difference in the cognitive development between homeless and low-income housed children, but significantly more behavioral problems among the homeless, indicating an "underlying continuum of risk, with homeless children at greater risk" (p. 329).

According to Strawser et al. (2002), homeless children are one and a half times more likely than their peers to have behavioral problems, and twenty times more likely to exhibit symptoms of depression. Bassuk and Rosenberg (1990) report that approximately half of the children in their study were in need of psychiatric referral. While many of these problems are treatable (Whitman, Accardo, & Sprankel, 1992), "without attention to the emotional, medical, educational, and social needs of these children, it is likely that many will continue to have significant problems that will cripple their ability to function" (Bassuk & Rosenberg, 1990, p. 261).

Bassuk and Weinreb (1997), as well as Schteingart et al. (1995) conducted studies on pre-school aged children and found developmental delays. However, Rubin et al. (1996), conducted a study on children aged 6 to 11, and found no difference between homeless children and their peers in verbal or non-verbal intelligence, only academic achievement. While these studies do not necessarily contradict one another, they do focus on different determining factors, especially age. When looking at the

research of the effects of homelessness on development, several factors should be taken into account that these studies do not consider. Among these factors are the point in the child's development in which he or she became homeless, the length of homelessness for the child, the extent to which the exhibited developmental delays are a result of post-traumatic stress syndrome -- as suggested by J. Garbarino (in Polakow, 1998) -- and very important, what implications these studies might have for the homeless child's education. Can these studies be used to perpetuate over-generalizing and inappropriate classroom placement of homeless students? These considerations do not deny the value of the findings in these studies, because "although identifying and labeling emotional problems among a disadvantaged population always carries with it the risk of 'blaming the victim', ignoring psychological factors will lead to faulty social planning" (Bassuk, Rubin, & Lauriat, 1986, p. 1100). In any case, no study on the cognitive and emotional development of homeless children should take the place of proper placement assessment for each individual homeless student. As Strawser et al. (2002) point out, "there is no universal profile that fits every child who is homeless, therefore each student's needs must be addressed on an individual basis (p. 172)."

In school, homeless children will face isolation and feelings of inferiority, whether their classmates know they are homeless or not. Because of the negative associations with homelessness, children will go to great lengths to keep the fact that they are homeless as secret, including not attending school altogether. Many children face snubs, threats, mockery, and indifference for not having a home -- from their peers, their teachers, and the school system itself.

### **Barriers to the Education of Homeless Children**

Homeless children find obstacles to their academic development well before they get to the school. One of the main hindrances to a homeless child's education is the often-high mobility of his or her family. In a single year, 41% of homeless children will attend more than one school (Duffield, 2001), 12% of homeless children are not enrolled in school and 45% do not attend school regularly (Duffield, 2001; Strawser et al., 2002). Not only are children not able to attend school while their families are in transit, but the re-shuffle from one school to

another may put the child either in a situation of repeating the same material over and over, or thrown into classes where they are academically behind (Barton, 1998), resulting in uneven learning patterns (Walsh & Buckley, 1994) and academic failure (Polakow, 1998). Highly mobile students may need four to six months to recover academically after a change in schools (National Association for the Education of Homeless Children and Youth [NAEHCY] & National Law Center on Homelessness & Poverty [NLCHP], 2004; Wu, 2005). The chances that a child will repeat a grade double if that child is homeless (Duffield, 2001; Rubin et al., 1996). Likewise, the chances that that child will complete high school are cut in half (Wu, 2005).

Most homeless children do not have an opportunity to study or do homework outside of class. Living with the restrictive schedules, cramped living space, and noise of a shelter, a crowded "doubled-up" living arrangement, or the chaotic environment of the street, children do not have what many housed students take for granted: a quiet place to study (Attles, 1997; Barton, 1998; Lively & Kleine, 1996; Walsh & Buckley, 1994). Lack of a quiet personal space means more to a child than not being able to free him or herself from cramped living conditions or chaotic distractions. It means not having any mastery over his or her physical environment, which would give them a sense of control, autonomy, and positive self-identity (Lively & Kleine, 1996 p. 24). Homeless children also have to deal with not having proper materials with which to complete their homework and further their studies (Barton, 1998).

Many homeless children identify family as an essential element for their development (Daniels, 1995). However, Strawser et al. (2002) tell us "parents actually have been found to hinder their child's educational experience" (p. 166). Parental motivation not only affects a child's enrollment in school (Strawser et al., 2002), but also the level of academic support that child receives. Many homeless parents face daily frustrations and psychological distress that render them mentally and emotionally unavailable to their children (Schteingart et al., 1995), or are simply too busy trying to find a home. What's more, parent's inability to cope with the stressors of homelessness can result in child-like behaviors. The children, in turn, overcompensate by taking on the caretaker role themselves (Tower, 1992; Walsh & Buckley, 1994). In light of these "adult worries" (Kaye, 1998; Stormont-Spurgen & De

Reus, 1995), the ability to concentrate on schoolwork is a luxury many children do not have.

Many children find themselves turned away from school due to bureaucracy at the administration level. Homeless parents find it difficult to obtain and keep the records necessary for their child's schooling, or find having records forwarded to a new school all but impossible (Walsh & Buckley, 1994). Residency requirements and the absence of birth certificates, academic records, and immunization records are substantial obstructions to the enrollment of homeless children (Duffield, 2001; Sandham, 2000; Walsh & Buckley, 1994). Obtaining many of these records require fees homeless parents simply can't afford (Strawser et al., 2002). Even in light of the McKinney-Vento Act, which declares that no homeless child is to be denied enrollment in public school (Foscarinis, 1996, p. 166), many schools simply fail to comply with federal mandates (Markward, 1994).

When homeless children are able to get enrolled in the school, many find it problematic getting to the school itself due to lack of adequate transportation (Attles, 1997; Duffield, 2001; Sandham, 2000). Shelters or other locations where homeless children might be staying are often well outside any school bus route (Strawser et al., 2002).

Inside the school, homeless children often have to suffer the prejudices of the administration. Administrators often do not provide for proper assessments for these children, thinking they will most likely not even be in their particular school long enough to warrant the expense. As a consequence, homeless children run the risk of being placed improperly into special education because an administrator assumes that all homeless children are developmentally or behaviorally disabled. On the other hand, homeless children who are in need of special education may be abandoned in regular classrooms because, again, administrators assume that the child will not be attending long enough for proper records to be obtained (Markward, 1994). In some cases, even if obtaining proper assessment becomes a reality, the records of such an assessment may be lost in the shuffle to the next school (Whitman et al., 1992). Furthermore, "schools tend to feel no urgency about making sure [homeless] children are present on testing days...in part because of assumptions that the students will fare poorly

and depress schools' scores" (Jacobson, 2002b, p. 1).

School presents a dichotomy in the eyes of homeless children. On one hand, it is a source of stability in an otherwise chaotic world, "where predictability, caring acceptance, positive attention, and flexible structure are available" (Daniels, 1995). As Walsh and Buckley (1994) put it:

Although school is a continuous challenge for homeless children, it is also perceived by a number of them as a safe place where they can become engaged in the tasks of learning and be free momentarily of the worry of homelessness. (p. 10)

A 1988 study reported that 80% of homeless children say they want to go to school, compared to 62% low-income housed and 62% mainstream community children (Lively & Kleine, 1996). Despite the desire to be in the classroom, homelessness can seriously impede the child's integration into the social learning community. Daniels (1992) writes:

It is not uncommon for homeless children to be frustrated by not being able to develop lasting friendships with other youngsters their age. Personal feelings of alienation from one's peer may be further reinforced by not being able to bring friends 'home' after school, feeling out of place when friends talk about popular television shows that homeless children do not have the opportunity to view, and by not being able to have their friends call them after school to talk on the telephone. (p. 108)

Although homeless children share a classroom with their mainstream peers, they live in different worlds.

Homelessness is often a heavily guarded secret for many students. Embarrassment over living conditions reinforces nonattendance in school (Markward, 1994; Walsh & Buckley, 1994). Fearing that their classmates and teachers will associate them with the negative stereotypes of homelessness, many homeless students withdraw from other children, letting no other individual get close enough to them to discover their secret (Duffield, 2001). After becoming homeless, children will often want to change schools so that their friends will not find out they are homeless (Walsh & Buckley, 1994).

While the classroom has the potential to be a safe haven for homeless students, it also has the potential to become a “landscape of condemnation” (Polakow, 1998, p. 104). If a child’s homelessness is revealed in a classroom setting, potential negative attitudes and assumptions made by teachers and students affect the quality of the child’s learning, through the kind of attention the teacher gives to the student and through the homeless child’s exclusion from the learning community. It is common for teachers and students to stereotype the homeless members of the classroom (Attles, 1997; Costa Nunez, 1997; Whitman, et al., 1992). Many intelligent homeless children enter the classroom environment to find that their “hard-won survival skills,” (stealing pencils, hoarding food in the cafeteria) are judged as inappropriate (Whitman et al., 1992, p. 121). Children are often labeled as “delinquent” or “trouble maker” due to aggressive behaviors that result from the stressors of being homeless (Bassuk & Weinreb, 1997). These already marginalized children are then further isolated “as a result of a cycle of labeling, reactivity, and more labeling” (Whitman et al., p. 117). Teachers may feel that these “impossible” children cause them stress they “don’t want to have to deal with” (Polakow, 1998, p. 102). Homeless children have reported teasing and ridiculing, as well as fights with classmates ensuing from the discovery of their homelessness. Neglected by teachers and ostracized by peers, the homeless child’s schooling experience can translate into “rejection and humiliation” (Quint, 1994, p. 20).

### **The Educational Rights of Homeless Children**

In 1987, president Reagan reluctantly signed into law the McKinney Homeless Assistance Act. Prior to that year, the position of the federal government was that homelessness was predominantly a “local problem,” despite the dramatic increase of homelessness across the country. The passing of the McKinney Act was the U.S. government’s first acknowledgement of homelessness as a national problem. Subtitle B of Title VII of the Act guaranteed equal access to public education by homeless children (Foscarinis, 1996, p. 161). Amended, renamed, and most recently reauthorized in 2001 as part of the No Child Left Behind Act (Jacobson, 2002a), the McKinney-Vento Act puts forth federal laws requiring school districts to provide educational access and stability for homeless students, appoint a liaison to ensure the enrollment and

attendance of homeless students, and use Title I funds to serve those students (United States Department of Education [USDE], 2004).

Recognizing the transfer from school to school to be a major hindrance to academic opportunity, the McKinney-Vento Act requires school districts to allow a homeless student to remain at his or her school of origin, unless unfeasible, and unless it is against the wishes of the child’s parent or guardian. Students are allowed to remain at their original school for as long as they are homeless and until the end of the school year in which their families find permanent housing (USDE, 2004). Transportation is crucial for the child’s attendance in school, especially if he/she is to remain at the school of origin. Under the McKinney-Vento Act, homeless children are guaranteed transportation to and from their school of origin, regardless of where they are staying (NAEHCY & NLCHP, 2004; USDE, 2004; Wu, 2005).

McKinney-Vento requirements override state and local school district policies requiring academic records, residency requirements, and immunization records for enrollment in schools. The law assures homeless children immediate access to school. School districts are obliged to appoint a liaison, whose responsibilities are to identify homeless students, ensure their enrollment and attendance, and assist in obtaining immunizations or records of immunizations for children who do not have them (Jacobson, 2002a; USDE, 2004). The liaison also ensures that homeless children and their families have the opportunity to receive all the educational and social services they are eligible for. In addition, the McKinney-Vento Act ensures that homeless children are eligible to receive Title I services (academic support for students in danger of failing school), regardless of their academic achievement. Every school district’s Title I plan must include a description of services for homeless children (USDE, 2004). “Indeed,” writes Duffield (2001), “the McKinney-Vento Act is directly responsible for a tremendous increase in school enrollment among homeless children” (p. 329).

Despite federal requirements, however, the gap between law and practice remains quite large in some places. School districts may fail to comply with McKinney-Vento regulations because “the increase in homelessness has outstripped the growth in the resources available to schools to respond” (Duffield, 2001). Duffield reports that only 4% of the nation’s school



districts receive McKinney-Vento Act funding (2001). Markward (1994) writes:

The ability and willingness of regulatory agents [i.e., school districts] to comply with the McKinney Act seems contingent on resources ... With limited resources regulatory agents in some districts may be unable to meet the objectives of the act, particularly in light of the costs associated with screening and assessment to identify special needs. (p. 33)

Many districts find loopholes in definitions to escape responsibility. For example, before the 2001 reauthorization of the McKinney Act expanded the federal definition of homelessness to include families in “doubled up” living arrangements (that is, with another family due to lack of financial stability), districts avoided the cost of transportation for children living in these conditions, and kept many of these children out of school as not to compromise high-stakes test scores (Jacobson, 2002b). Strawser et al. (2000) point out that school districts will interpret the legal language – statements such as “in the best interests of the child” – in ways that allow them to circumvent McKinney-Vento provisions, delaying enrollment of the children or bouncing them from district to district. Furthermore, many children do not receive the educational services they are entitled to because they and their families either do not know about them, are intimidated by the system (Markward, 1994), or because homeless parents, like their children, try to make their homelessness invisible. These parents fear that, should their living conditions be known, their children will be taken away from them (Duffield, 2001).

In response to the numerous obstacles to educational opportunities, and to the isolation and neglect children face in mainstream public school, a growing trend has become the topic of heated discussion: the proliferation of magnet schools for the homeless. Approximately 40 schools exist across the country that service homeless children exclusively. Some argue that such schools offer a viable alternative to the mainstream system that sets homeless students up for failure. Proponents say these schools meet “every child’s physical needs by providing food, clothing, basic living supplies, even medical and dental care,” as well as “psychological counseling and individual mentors” (Salmon, 2000). Many of these schools gear teaching toward “student’s diverse emotional and

cognitive needs” (Polakow, 1998, p. 104) in a safe and non-threatening environment (Woods, 1997). Teachers and aides work with the same groups of children every day, and in some cases, lessons are taught in same-day open and close formats, accounting for the possibility that any student might not be in class tomorrow (Polakow, 1998). These schools are supported with the help of McKinney-Vento funding, which does not prohibit money from schools that segregate homeless students for short periods of time (Jacobson, 2002b; Salmon, 2000).

Opponents to homeless-only schools call their use outright segregation, and a violation of the homeless child’s civil rights (Duffield, 2001). To them, these schools are in fact barriers to quality education for homeless children because they only serve to further isolate and stigmatize students (Briggert, 2000; Duffield, 2001; Sandham, 2000). Duffield (2001) writes, “segregating homeless students from their housed peers increases the stigma associated with homelessness, causes unnecessary disruption in the lives of homeless children, and deprives homeless children of the full range of educational opportunities to which they are entitled.” Opponents of these schools call instead for integrated education programs within mainstream schools that work to transition homeless students into the mainstream classroom environment (Briggert, 2000; Duffield, 2001). Jacobson (2002a) points out that separate schools for homeless children have indeed shown success, and adds to the debate by asking: “What do you do when a segregated system works for some kids?”

By looking at homelessness among children from several angles – its demographics, its stereotypes, its possible causes, and its psychological and emotional consequences -- misinformation can be replaced with a multifaceted understanding of the problem of homelessness. By looking at the barriers to quality education for homeless children, their educational rights, and the ways in which schools have responded to homelessness, educators can better place homeless children into the context of public education and begin devising informed strategies for the academic and emotional resilience of these marginalized children.

### Conclusions

Each family’s story of how they came to be homeless is unique. There are, however, leading and often interrelated causes of homelessness

that prevail in the United States. Among them are an increase in the cost of housing while livable wages decline (NCH, 2001; Polakow, 1998). Many families turn to welfare and job assistance programs, only to find those programs unavailable or defunct (NCH, 2001). Domestic violence is found to be another leading factor in a family's turning to homelessness (NCH, 1999). Many families attempt to escape the traumas of abuse only to meet the trials of living without a home.

The consequences of this existence can be devastating, especially for children. The difficulties they face include a lack of the basic necessities for survival, such as proper nutrition, hygiene, and health care (Walsh & Buckley, 1994). Lack of a safe environment is another issue that plagues homeless children (Polakow, 1998). Many dwell in areas where the rate of crime and violence is high. Homeless children face difficulties such as depression and feelings of insecurity (Stormont-Spurgin & De Reus 1995; Tower, 1992). Many experience cognitive and linguistic delays, especially those that enter homelessness in early childhood (Bassuk & Rosenberg, 1990).

Homelessness carries with it many negative social consequences. Homeless children experience isolation, have few friends, and frequently experience humiliation at the hands of their peers (Daniels, 1992; Quint, 1994). Many do not have a constant reliable caregiver, and must often become caregivers for their siblings, or even their parents.

School holds a duality of implications for children who are homeless. On one hand, school can be a place of stability in an otherwise unstable world, and an opportunity to eventually break the cycle of poverty. On the other hand, school can be another place of condemnation (Polakow, 1998). A high transfer rate from one school to another results in inconsistent learning and causes many children to fall behind academically (Barton, 1998). Many children cannot get to school due to lack of transportation. In school, homeless children are often inappropriately placed in remedial or special education classes without being properly assessed. Many educators do not want to hassle with the time and cost of assessments (Markward, 1994).

Homeless children must often endure the negative attitudes administrators, teachers, and fellow students. By their teachers they are misunderstood and ignored; by their peers they are taunted and rejected (Attles, 1997; Whitman

et al., 1992). Children often strive to keep their homelessness a secret, sometimes to the extreme of leaving school. Beyond the classroom, these children have no place, physically or mentally, to focus on schoolwork. Likewise, they often do not have access to materials with which to complete assignments (Attles, 1997; Barton, 1998).

The McKinney-Vento Act entitles homeless children to equitable access to a proper education despite factors that would otherwise keep them out of school, such as not having proof of residency, academic records, or records of immunization. Children are guaranteed the right to attend the same school for the duration of their family's homelessness as well as the right to transportation to that school. The McKinney-Vento Act calls for every school district to appoint a liaison who ensures that the rights of homeless children are being met (USDE, 2004).

Despite the provisions of the McKinney-Vento Act, many children do not receive a standard education due to loopholes in the educational system used by school districts that are either unwilling or unable to comply with McKinney-Vento provisions (Duffield, 2001). Children are often without an advocate in these situations because their parents are either unaware of their children's educational rights, or are afraid to stand up for them. Furthermore, by remaining silent about their homelessness, many children are not receiving the services they are entitled to (Duffield, 2001).

One response to this educational dilemma has been the establishment of schools for homeless children (Salmon, 2000). These schools have been a topic of controversy. Supporters of homeless-only schools claim that students are allowed to thrive in an emotionally supportive environment while receiving the specialized education they need – an education that most mainstream schools are not giving them. Opponents call these schools a practice in blatant segregation that will only perpetuate the stigma of homelessness for children (Duffield, 2001). Regardless of the debate, mainstream schools can take a lesson from the academic support homeless-only schools provide to their students, by giving them an educational experience that will promote their success and their well-being.

### **Recommendations for Practice**

Homelessness among students presents problems for which there are no quick and easy solutions. However, many strategies for positive interventions exist, and because issues facing

homeless children are often interrelated, any attempt to provide relief in one area may help bring about change in another (Walsh & Buckley, 1994).

The first obstacle that teachers who want to make positive interventions in the lives of homeless children may face is that of identification. It is estimated that over 1.35 million children in the U.S. experience homelessness every year. With that number comes the understanding that for every child identified as homeless, many more go unidentified (Wu, 2005). The homeless population of the U.S. is not static. Students can fall in or out of homelessness in the course of a school year. Teachers are entirely likely to have homeless students in their classes and not know it, regardless of grade level. Educators cannot provide assistance to homeless students if they do not know who those students are, and will not know as long as those students remain silent. Researchers and educators have identified physical characteristics indicative of homelessness, such as poor hygiene, unattended health problems, and malnutrition, as well as behavioral traits including social withdrawal, fatigue, low self-esteem, and hoarding tendencies (Tower & White, 1989). Despite these signs, teachers should not assume that all homeless children – and only homeless children – will exhibit some of these characteristics. Confronting students about possible homelessness needs to be handled with the utmost sensitivity, once a trusting relationship with that student has been established. Nevertheless, a teacher who suspects that a student is homeless should make contact with his or her district's liaison, who can recommend children for McKinney-Vento services. The homeless student and his or her family make the ultimate decision to accept or deny McKinney-Vento services, once their rights under the Act have been explained to them (NAEHYC & NLCHP). Wu (2005) suggests that standard enrollment forms and student residency questionnaires written with non-stigmatizing language can help educators identify homeless families. Since teachers can have homeless students in their classes without knowing it, many intervention strategies can be modified to benefit homeless students while addressing all students.

The most urgent needs of many homeless children are access to food, medical attention, shelter for those without it, and proper hygiene. Working with a district liaison or school

counselor, teachers can become informed about what kind of emergency relief and assistance is available for families in need, through either government agencies or local organizations (Walsh, 1994). Teachers can have nutritious snacks on hand in the classroom for children who haven't eaten (Tower & White, 1989). They can also see to it that homeless students are receiving free lunch, and free breakfast where available. School facilities such as showers can be made available to meet hygiene needs (Daniels, 1995). Such information can be shared with students by addressing the entire class verbally, or posted in writing in the classroom. In this way, homeless children can then have access to the information anonymously. Teachers should, however, talk directly about issues of health, safety, emotional well-being with students they know to be homeless (Daniels, 1995).

Counseling services must be made available for homeless students (Daniels, 1995; Tower, 1989). Children need the opportunity to express the anxieties they endure in and beyond the classroom. Daniels (1995) writes: "group and individual counseling interventions that focus on stress management and reduction, coping skills, problem-solving strategies, self-esteem building activities, and anger management skills would address common themes raised by these youngsters" (p. 170).

The classroom needs to be a safe, emotionally supportive, and stable environment for homeless children. Allowing students to keep personal belongings in the classroom, or to make artwork that will decorate the walls, creates a place to which children can feel they belong and have ownership of (Tower & White, 1989). Often, children cannot complete homework assignments or study because they do not have a place to do so. By allowing an open class space for as little as an hour after every school day and access to materials, teachers can provide such a space (Daniels, 1995). Simply being able to complete and turn in assignments can have an unfathomable impact on a child's sense of efficacy and motivation. Tutoring can also be given to children in need of extra help (Tower & White, 1989). For children who have nowhere to go in the afternoon, save a crowded shelter, involvement in before-and-after-school programs can provide opportunities for positive peer interactions (Daniels, 1992; Walsh, 1994; Wu, 2005). Unfortunately, many children might not be able to take advantage of an open class time after school due to issues of transportation,

shelter schedules, or family obligations. If problems turning in homework persist, teachers should discern the reason (Tower & White, 1989) and either modify assignments or explore alternative methods of assessment (Stormont-Spurgin & De Reus, 1995) that retain the level of expectations given to all students.

Homeless children will continue to remain outsiders in the classroom community as long as prejudices persist. Teachers can begin dispelling the myths surrounding homelessness in their classrooms by interrogating media images (Walsh, 1994) and the assumptions that students may have of what it means to be homeless. They can hold discussions with the class about the causes of homelessness and the experience of having no place to live (Tower & White, 1989). As Daniels (1995) states, "classroom interventions, guidance activities, and school wide assemblies aimed at promoting sensitivity for diversity are important strategies for reducing prejudice and promoting diversity in the elementary school" (p. 170). Children need to know that people without homes are just that: people, with the same intelligence, motivation, hopes, and interests as anyone else.

It is important that the voices of homeless children be heard in the classroom. Books and articles containing children's first-hand accounts of homelessness take the discussion beyond the statistics and the generalizations. They allow students and teachers to see the daily experiences, frustrations, and the potential for strength and spirit that these children possess. Such first-hand stories are widely available. Books such as *Changing Places: a Child's View of Shelter Living*, by Margie Chalofsky, Glen Finland and Judy Wallace, present the experiences of homeless children in a manner appropriate for elementary-aged children. *Eric is Homeless*, by Keith Elliot Greenburg and Carol Halebian, and *Shooting Back: a Photographic View of Life by Homeless Children*, by Jim Hubbard, and Robert Coles, provide narrative at a middle-school reading level, while *Moving to Nowhere: Children's Stories of Homelessness*, by Mary Walsh, is appropriate for high-school level readers. Students can also view the documentary film *Outriders*, directed by Pamela Yates and Peter Kinroy. *Outriders* chronicles the journey of poor and homeless families on the New Freedom Bus Tour, a cross-country trip to collect testimony of people living in poverty. The film not only puts a human face on the issue of poverty, but also shows that people living in poverty can be agents of social change who find

immense support in mainstream society.

Creating a classroom community that is sensitive to the emotions of homeless children will allow students to open up and share their experiences (Daniels, 1995; Walsh, 1994). The invisibility of homelessness notwithstanding, teachers should address such issues whether they think they might have homeless students in their class or not.

Teachers can involve their students in projects related to the issue of homelessness, such as organizing a food and clothing drive. Such projects should proceed with caution, however, and be done in a way in which a homeless student is not made to feel he or she is being "saved" by his or her peers. This will only perpetuate their sense of inferiority and shame (Tower & White, 1989). They need to be fully active participants in any project. In the case of a food and clothing drive, for example, a homeless student can not only collect donated items, but may also be able to coordinate with the staff of the shelter he or she is staying at when the time comes to make the donation. The student will have then turned his or her unique living situation into a benefit for the group work. For more everyday practice, providing homeless children with more opportunities to take on authority roles in the classroom and in group activities can increase their sense of involvement and empowerment.

Teachers cannot begin to guide their student toward an understanding of homelessness while their own biases and misconceptions persist. A critical reflection of one's own biases of homelessness and homeless people of different ethnic and cultural backgrounds (Daniels, 1995) is an essential step toward establishing a relationship of trust with homeless students and their parents. The interrogation of prejudice must not stop with the students and the teacher, but should expand school-wide, to include administrators, other teachers, counselors, bus drivers and so on. Faculty workshops related to issues of homelessness and poverty can be arranged for this purpose (Walsh, 1994; Wu, 2005). A visit to a homeless student's family at a shelter can give a teacher a clearer picture of the environment these students must function in, as well as an opportunity to work with parents and make them aware of their child's educational rights (Daniels, 1995).

By stepping outside the school to meet with parents, teachers send the message that they are genuinely interested in the well-being and academic success of students. Daniels (1995)

cites the importance of involving homeless families in the educational lives of their children. Teachers can do more than keep parents informed about their child's academic progress, or seek advice on how to effectively communicate with their son or daughter. Parents, who may be weary and suspicious of a school system that they feel does not value their child, need to see an ally in that child's teacher, one willing to assist the family in accessing community resources, and willing to advocate for their child's educational rights.

Hope is an essential tool for resilience in children who are living in dire straits. This fact is not lost on homeless children. In her study on strategies for engendering hope, Herth (1998) tells us that, regardless of age, children "felt that hope was absolutely essential despite their distress about the constant disruption and lack of stability in their lives" (p. 1057). In her study, children identified connectedness and internal resources as strategies for maintaining hope, and that maintaining hope was a continuous process. In the classroom, a homeless child's senses of hope, motivation, and capability are reinforced through genuine positive feedback from the teacher (Tower & White, 1989). Positive feedback reminds children of their self-worth and their ability to master challenges.

Feelings of hope in homeless children can be engendered through a trusting relationship with a caring person (Daniels, 1992, 1995; Herth, 1998; Tower & White, 1989). For many children experiencing homelessness, building hope goes hand in hand with building trust. According to Daniels (1995), "establishing a positive and trusting relationship with such youths tends to promote a greater willingness to share their feelings and concerns about their life situations in an open and honest manner" (p. 167). Teachers need to be willing to listen when children are willing to talk about personal issues. Trusting relationships with these children are not made easily, as most of the people they encounter are only temporary figures in their lives. Tower and White (1989) reassure us, however, that with patience and encouragement, children often come around. In Herth's (1998) study on hope strategies, homeless children also identified the importance of laughter in the maintenance of hope. Relating this strategy to studies of terminally ill children, she writes, "resilient, highly stressed children score higher in humor generation than highly stressed less resilient children" (p. 1059). Allowing for a classroom environment that encourages children

to express humor, teachers can put this theory into practice. Herth (1998) suggests that it is never too late to begin engendering hope strategies in homeless children; hope, like hopelessness, can be learned.

Teachers must keep in mind always that due to unpredictable circumstances, the homeless child sitting in class today might not be there tomorrow. The transition of children from one school to the next can be made easier in the ways suggested by Tower and White (1989) and Stormont-Spurgin and De Reus (1995). Teachers can give records of a student's academic progress to his or her parents. This will give teachers and administrators at the next school that the child attends a quick record of the child's academic accomplishments, helping to insure appropriate placement for that student. If a teacher knows ahead of time that a student is leaving, he or she can give the child a self-addressed, stamped postcard with which they can send to the teacher the name and address of the new school. The teacher can then arrange for the transfer of grades, immunization records, and assessment results. Teachers in public schools are all but destined to encounter homeless students during their teaching careers. With effective intervention strategies, those teachers can turn the homeless child's schooling experience into a source of hope and resilience.

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### Teaching the Vietnam War in U.S. High School History Classrooms

*This paper examines how the Vietnam War is taught in high schools and the reasons for why it is rarely addressed in detail. It discusses why the war should be taught more comprehensively and provides instructional approaches for how to teach it effectively. The study argues that teaching about the Vietnam War in detail is necessary for the health of the U.S. democracy because it provides students with critical thinking skills and helps them better understand current U.S. foreign policy. Details of various teaching approaches include the use of first-person accounts, literature, primary sources, role-play, a broad historical framework and the Vietnamese-American perspective. The paper draws primarily on peer-reviewed literature, government documents and academic texts.*

The American public continues to be confused by and fascinated with the Vietnam War. It was a war that divided the nation and continues to have a lasting legacy on how the U.S. views and operates within the world. This legacy continues to be controversial, which adds to the continued interest. Students in U.S. high schools bring this curiosity to the classroom, but the subject often receives cursory treatment for a variety of reasons. This conference paper examines these reasons, various ways that teachers do approach the war, and the effect on students as participants in a democratic society.

The conflict, which involved the United States and various Vietnamese factions, some allied and some not, began unofficially as early as the late 1940s with the U.S. supplying financial resources to the French during the colonial struggle in Vietnam and officially in 1964 when Congress passed the Tonkin Gulf Resolution (Asia Society, 1983). The U.S. began bombing campaigns against the North after the Tonkin Gulf Resolution and the first Marines went ashore at Danang in a direct combat role on March 8, 1965. By the end of 1965, 184,000 troops were stationed in Vietnam, which steadily increased until Nixon implemented his “Vietnamization” program in 1969 that was intended to transfer combat operations entirely to the South Vietnamese army. Bombing of North Vietnam, Laos and Cambodia increased as a result of this plan until Congress passed a resolution to end all bombing campaigns and other military intervention without Congressional approval in July 1973. American troops had been almost completely withdrawn by this time, but fighting continued among the Vietnamese for the next two years until Saigon fell on April 30, 1975, rendering the North

Vietnamese victorious and reuniting North and South Vietnam into one country that was ruled by the North Vietnamese government in Hanoi.

At the height of American involvement, 543,400 troops were stationed in Vietnam. The largest protests against U.S. involvement in the war in Vietnam drew crowds in the U.S. in excess of 100,000 and about as many are thought to have fled the U.S. to avoid the draft (Asia Society, 1983). An estimated 58,000 Americans lost their lives in the conflict and as many as 5 million Vietnamese are believed to have perished as a result of the war (Smith, 2000). The U.S. dropped three times as many explosives as it did during all of WWII, yet many still believe that U.S. military objectives could have been met had the U.S. been more dedicated to winning (Loewen, 1995). Others believe that the war was not winnable from the start whereas still others believe that the war was completely immoral (Sharp, 1992). Due to these varying perspectives, teachers have a difficult time navigating which history should be taught.

Wineburg (2001) suggested analyzing the purpose of studying history to help answer the question of how to teach it. He argued that this analysis could illuminate the importance of history on the present and future as well as how the past is understood. He offered that history has the capacity to help people better understand each other and themselves. He writes, “History holds the potential...of humanizing us in ways offered by few other areas in the school curriculum” (p. 5). By humanizing, he meant that history can bring people together by closing distance between what people know and what is strange to them. He argued that people are able to redefine themselves when looking through lenses that are different from their own and



expand the meaning of self beyond what is ascribed to an individual at birth. By connecting past experience to the present, people harbor less fear and are able to open up and understand different perspectives more easily. The past becomes a construct for how the present is perceived, which has a direct influence on future outcomes and behaviors.

People continue to have strong opinions about the U.S.' involvement in Southeast Asia, yet the nature of the conflict leaves interpretations up to worldview (Winterstein, 2000). Junior high school teacher Bill McCloud (1988) investigated this when he wrote to hundreds of people in 1987 who had significant societal contributions during the war era—former Presidents, former members of Congress, Army officials, reporters of major newspapers, peace activists, and authors to name a few—and asked them this question: “What do you think are the most important things for today’s junior high students to understand about the Vietnam War?” (p. 56). The answers show that strong sentiments still exist and that there is a lack of a unified or common perspective on the legacy of the war. Did the United States enter the war on moral grounds or did it enter the war on political grounds and what does it matter? The answer depends on the worldview of the person responding.

President George H.W. Bush (1989-1992) noted that all wars should have full support by the American people and have clear political goals and objectives. Former Secretary of Defense Robert McNamara (1961-1967) warned that the U.S. should be careful not to interpret events in other countries based on its own history, politics, culture, and morals. Nicholas Proffitt, *Newsweek* Bureau Chief in Saigon in 1972 argued that students should be taught that all wars are failures and that good and evil people existed on both sides. Folk singer Pete Seeger suggested emphasizing the significance in every individual’s voice and the necessity for people to take action against what they feel is immoral (McCloud, 1988). Whether the U.S. fought the war on moral or political grounds, or a mixture of the two, is a matter of perspective, but the question is as relevant to investigate today as it was 40 years ago because it inherently affects how students understand the war.

Because current foreign policy, like the present, is a composition of the past with future implications, students must have a firm grasp on past events, most notably for this conference paper, the Vietnam War. This paper examines

how the Vietnam War is represented in high school classrooms in order to gain an understanding of how students interpret this event, with an eye to implications for the present and the future.

### **Review of the Literature**

Scholars have noted the lack of understanding most students have about the war by the time they graduate from high school and reasons for this gap in knowledge. Loewen (2000) suggested that this is because teachers rely on textbooks that are designed to promote nationalism. This reliance can be explained in part by teachers feeling overburdened by the scope of the war due to their limited knowledge base, its complexity or possibly the difficulty for teachers to sort out their own personal feelings they have on this emotionally charged topic (Kirkwood-Benton & Tucker, 2002). Schlene (1996) and Sharp (1992) add that time constraints on teachers and a lack of supplementary instructional materials contribute to this phenomenon. Wineburg (1993) notes that questions of the morality of the war could cause strife between the family and the teacher. Franklin (2003) feels that the lack of education about the Vietnam War is an overt attempt by the political establishment to continue to militarize American foreign policy. As a result of all of these reasons, students are left with a limited and romanticized vision of the war due to Hollywood and popular culture (Franklin, 2003; Johannessen, 2003; Percoco 2001; Stempf, 2000). If this subject is so difficult to address and so controversial, why should it be addressed at all?

This literature review first examines Jerold Starr’s curriculum, which was one of the first comprehensive curriculums designed for secondary schools on the Vietnam War. It included analyzing the issue of morality, which the paper discusses next. Various approaches to teach about the war follow and include teaching about the war from a broad historical framework, using first person accounts, using a literature-based approach, using primary sources, and using role-plays in the classroom. The last section of the review discusses teaching about the Vietnam War through a multicultural curriculum that places the war in the context of Vietnamese Americans.

### **Starr’s Curriculum**

Starr (1989, 1995) was one of the first to recognize that almost no high schools and many

colleges were not incorporating the Vietnam War into their curriculum (Stempf, 1992). Because he also felt that texts painted a limited and distorting perspective on the war, he founded the Center of Social Studies Education, which authored and developed its own curriculum, specifically on the war. *The Lessons of the Vietnam War*, published in 1988, approached teaching the Vietnam War from a critical perspective. The curriculum aims to provide the student with a myriad of perspectives using materials that are “historically accurate and politically balanced” (Center for Social Studies Education, 1988, p. 2). *Lessons* provides many resource lists including: contact information for veterans’ organizations and peace organizations categorized by state, works of poetry, documentary films, commercial films, fiction and non-fiction books, interviews, letters, diary entries, court testimony, letters, songs, sketches, and government documents. The curriculum is built around 12 thematic units and is designed to help teachers focus on issues of power, morality, and politics, but not on right or wrong answers. Starr (1989) writes:

In the final analysis, my students’ enlarged capacity for empathy and analysis does not lead them to more certain answers to the questions they brought to class. However, it does provoke them to examine the unstated assumptions of those original questions and to come up with better ones. (p. 92)

By getting at the unstated assumptions, the students are in a position to see the commonalities and differences of their positions, a necessary skill to being active, informed citizens. Starr (1989) suggests that it is the responsibility of educators “to prepare students for democratic citizenship precisely by teaching them how to evaluate competing policies and perspectives so that they might represent the larger public interest” (p. 86). He advocates for teaching critical thinking skills through analysis of the Vietnam War to promote an equitable democracy.

Stempf (1992) is critical of “the lessons” that students will learn from Starr’s curriculum. In a review of Starr’s (1989, 1995) curriculum, he accused it of guiding the student to the moral questions involved with the war instead of an understanding of the facts. He contended, “His curriculum is intent not so much upon informing as upon guiding the teacher, and by extension the student, through the war’s manifold complexity

to its moral meaning” (Stempf, 1992, p. 42). He argued that this subjective approach to the topic will invariably lead students to conclude that the war was immoral and that the cause was “nothing to warrant the loss of 58,000 American lives” (p. 51). He felt that an open-ended curriculum, and this curriculum in particular, will lead students to the same message, the message explicitly being “not that we couldn’t have won...but that the United States, for reasons inherent in its political makeup, *shouldn’t* have won” (emphasis in original) (p. 43). He criticized the curriculum’s focus on empowering students to construct their own conclusions of the war based on varying perspectives, instead of focusing on what he considers the “facts.” Stempf argued that students need to be taught about the danger of the spread of communism, the Cold War, and the fiendishness of Ho Chi Minh and other world leaders who opposed U.S. foreign policy. He argued that Starr’s curriculum denies the students information pivotal to understanding the war by focusing instead upon cause and effect of actions, American racism, and the legality of the war. In short, he accuses the entire project of being biased and categorically inappropriate for use in public schools.

### Questions of Morality

This question of taking a moral stance was debated when the Foreign Policy Research Institute hosted 40 high school and college history teachers to answer a similar question that McCloud (1988) had asked 13 years earlier, “How should we teach the history of the Vietnam War today?” (Winterstein, 2000, p. 3). While concluding that teachers need to expose students to competing perceptions, the group was wary of trying to draw parallels between past and present. They argued that teachers should understand that interpretations of the war are dependent on each individual’s perception and worldview. Consequently, trying to derive lessons from the war that apply directly to other conflicts is an exercise in futility because they are dependent on the individual. Scholars in attendance suggested focusing on historical evidence and investigations from different perspectives, as opposed to focusing on the morality of the war. They outlined two strategies for accomplishing this task:

The first is to provide an overview of the context and progression of events, then concentrate on key details in order to

illuminate the major themes and dilemmas of the war...An alternative would be to place Vietnam within larger historical contexts that could include, among others, the Cold War containment strategy, great power relations...decolonization and the rise of nationalism in Asia, and the problems of waging a limited war. (p. 6)

These two different approaches can provide historical context for students to understand the war in terms of the time period. It can also help students develop critical thinking skills and give them a more tentative understanding of the war, leading them away from definitive conclusions. They noted that the examination of historical evidence combined with the passage of time can help bring people together and develop a more common understanding of the war.

Other opinions do not reflect leading students away from questioning morality. Loewen (2000) suggested that all textbooks should at least discuss basic questions such as (a) why the U.S. fought in the war, (b) what the war was like before the United States entered it, (c) how the war changed the United States, (d) why the antiwar movement became so significant and what its criticisms were, (e) what were prevalent attitudes of the Vietnamese populace, and (f) what types of lessons should be taken from the war (pp. 158, 160). He argued that teachers have an obligation to teach students about the war because it can have direct implications on American policies at home and abroad. He states,

Textbooks and teachers fail to help the students think critically about the Vietnam War and marshal historical evidence to support their conclusions. This crime robs students of the tools to understand their own society today and also fails to give them any grasp of how American citizens have affected and sometimes have failed to affect the policies of their government. (p. 171)

From this perspective, teachers are obligated to help their students analyze these complex themes and they must do it by using a myriad of sources, not only the textbook.

Loewen's criticism of American history textbooks is extensive. He analyzed the content of 12 high school American history textbooks in his 1995 book *Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong* and studied four other more contemporary textbooks for his 2000 study *The*

*Vietnam War in High School American History*. Loewen (2000) identified five images that he argues have become most analogous with the Vietnam War:

- the little girl running naked down Highway One, fleeing a napalm attack
- a Buddhist monk sitting at a Saigon intersection immolating himself to protest the South Vietnamese government
- the national police chief executing a man suspected of being in the Viet Cong, with a pistol shot to the side of his head
- the bodies in the ditch after the My Lai massacre
- Americans evacuating the U.S. embassy by helicopter, while desperate Vietnamese try to climb aboard. (p. 152)

He found none of the photographs in all of the textbooks with one exception. He suggested that the absence of these photographs limits students' understanding of the complexity of the war. Further, the omission undermined the significance the photographs had on how people viewed the war at the time. "Leaving those images out of history textbooks shortchanges today's students, for not only did these photos report the war, but they also *made* history, for they affected the way Americans—and Vietnamese—thought about the war" (emphasis in original) (p. 155). These photographs forced Americans and Vietnamese to analyze their position on the war and influenced many to oppose it. The images create context for students and without them, they will have difficulty understanding the war's severity. He reported that the textbooks instead contained uncontroversial images that left students uninterested and lacking perspective on the brutality of events. He concluded that students were not exposed to the divisive images and issues that captured the complexity of the war and were left thinking uncritically as a result.

### **Broad Historical Framework Approach**

Goodman (1990) also suggested that textbooks are asking the wrong questions, which he argued has long-term effects on how the war is viewed by future generations. He noted that by not asking why the U.S. got involved, why the peace was lost, and did the War even matter to the U.S., textbooks are not providing students the opportunity to understand current political ramifications of this major historical event. He

suggested that students are primarily being taught about the war through either anecdotal accounts about the fighting and decision-making at home and abroad or within the context of the Cold War. As a result, students are left with the impression that the war has little relevance in today's society and foreign policy. His approach to teaching the war is through a much broader historical framework that helps students analyze the question of "when to use force and when to use diplomacy" (p. A36). He argued that this can help future generations avoid situations like the Vietnam War because students would have a more holistic view of why the United States chose force and the political ramifications that resulted.

Gilbert (1991) agreed with looking at the Vietnam War in a more historical framework, but he argued that the inclusion of the Vietnamese perspective is imperative to understanding the war. He saw teaching about Vietnam and Vietnamese history as the most useful tool for understanding the Vietnam War and provided an extensive resource list to accomplish these aims. Gilbert (1991) advocated a strong multicultural curriculum because he cites the failure on American foreign policy in Vietnam resulting from a lack of cultural understanding, both domestic and foreign. He writes,

A number of scholars came to the conclusion that America's ignorance of the Vietnamese, its ethnocentric view of the wider world, and its lack of self-knowledge contributed to the failure of American policy in Southeast Asia and its painful aftermath at home. (p. 79)

He noted that the combination of U.S. policymakers' view of the world, their lack of knowledge of Vietnamese culture, and their lack of knowledge of American culture all contributed to the failure of U.S. foreign policy in Vietnam, and the consequential effects of events at home. Teaching from a multicultural context can give American students more perspective on the conflict, which can help them better understand the U.S.' role. He states, "It is axiomatic that failed allies and the enemy have little place in the study of a nation's military defeats, for that effort is primarily an exercise in self analysis" (p. 81). High school students must understand all sides of the war if they are to understand the U.S.' role in it.

### **First Person Accounts**

Dunn (2003) also advocated the use of teaching the Vietnam War through the perspectives of the major groups of participants, including the South Vietnamese allies of the United States, the North Vietnamese and the Viet Cong, American government and military leaders, American war participants, and participants in the antiwar movement. He contended that the emphasis of a unit should be placed on first person accounts from all of these perspectives in conjunction with analysis of the causes, policy processes, impact, and continuing legacy of the war. He provided descriptions of all the first person books in each of these genres that he felt were the most effective to accomplish these aims. Although most of these resources are geared for higher education, many of them could be incorporated to units at the secondary level. Although Dunn noted the criticism from scholars like Goodman (1990) that curriculum "must rise above 'anecdotal accounts of what the fighting and decision making were like,' an important place still exists for introducing students to the perspectives of participants and the first-person account is an excellent tool" (pp. 29-30). He suggested that a balanced approach is necessary but the inclusion of first hand accounts, fiction and non-fiction is essential.

### **Literature-Based Approach**

Johannessen (1993, 2000, 2003), Kirkwood-Tucker and Benton (2002), and Franklin (2003) devoted much of their discussion to using literature to teach the Vietnam War. Johannessen (1993) focused on adolescent literature to combat the images young people have on Vietnam. He suggested that young adults' strong desire to learn more about the Vietnam War can be a motivator for students to engage in literature, providing a venue to teach both Vietnam War history as well as different types of literature. He focused on four genres: the combat narrative, literature on the antiwar movement, novels on the refugee experience, and works that focus on the legacy of the Vietnam War. He reviewed specific books that teachers can use in their classrooms for these purposes. Johannessen explained that because many books about the war are told from the teenagers' point of view, they are naturally appealing to teenage students. He argued that young adolescent literature on the Vietnam War can give students a more realistic picture of the complexity of the war by combating the negative stereotypes that Hollywood has created. Writes Johannessen,

Having our students read [young adolescent] literature of the Vietnam War may help them to move beyond their romanticized views. Once students have read one or more of these works, they may have a much more sophisticated understanding of the Vietnam War and of the literature dealing with the war. (p. 11)

Students need to have a more complex understanding of the war to give them a realistic picture of its nuanced history.

Kirkwood-Tucker and Benton (2002) also reviewed adolescent literature to assist teachers in finding developmentally appropriate materials for adolescents. They suggested that in light of the current political climate of post-September 11, students should be exposed to the Vietnam War, which can help provide critical thinking skills to better understand complex global issues. They suggested a teacher's duty is to provide students with skills to interpret events in multiple ways and that multiple interpretations are necessary for understanding. They stated, "But whether teaching about September 11<sup>th</sup> or the Vietnam War, social studies teachers have an obligation to help future generations understand that there are multiple interpretations of global events" (p. 362). This obligation helps students think critically and empowers them to interpret events on their own. The materials they review can provide children with multiple perspectives that can help "students develop a more complete and intellectually challenging approach to world events" (p. 365). This is necessary if students are going to begin to understand the complex issues at play in the Vietnam War and contemporary events alike.

Franklin (2003) provided a critique of mainstream governmental views on Vietnam in light of the first Gulf War that he viewed through the lens of comments made by George H.W. Bush (1989-1992) as well as common perceptions of the Vietnam War in the media. He suggested that the government views Vietnam as a noble cause that divided the nation and, therefore, needs to be forgotten. He exhibited the changing perception on the war over the past 20 years by juxtaposing two Vietnam War films that both won The Academy Award for Best Picture, *The Deer Hunter* in 1978 and *Forrest Gump* in 1994. The first film presented an alternative view of aggressor and victim, and the latter presented Vietnam as a personified jungle that kills American soldiers for no apparent reason and is later to be forgotten. These images create a view

that the Vietnam War was wholly enigmatic and should be left out of the present public conscience. He argued that teaching the literature of the Vietnam War is necessary to combat this mainstream view and stop the "fantasy" that accompanies the disappearance of history. This fantasy is manifested in images of veterans being spat upon by hippies, the misconception of an invasion of the democratic nation "South Vietnam" by the communists of "North Vietnam," and the notion that the liberal media controlled perceptions of events at home and abroad which did not mirror reality. Franklin commented on this perception that college students have on the Vietnam War by stating, "That fantasy lives inside their minds, its myths and phony images filtering and obscuring their vision of history, of America's actions in today's world, and even of themselves" (p. 28). He suggested that the "fantasy" is the conscience of the collective people who have consumed government propaganda and popular culture media, and now have a distorted image of Vietnam, and by extension, the United States' current role in world affairs.

Franklin (2003) argued that literature on the Vietnam War is the best way for people to move beyond this misconception and put people back in touch with significant aspects of the war such as the antiwar movement and the literature itself. Franklin suggested that literature can act as an agent for change and help people reassess what they want their government to be. Unlike scholars who focus on a broader historical framework, Franklin saw education on the war coming from rich cultural sources that continue to flourish. He suggested that literature can help students analyze their preconceived notions and assist them in seeing contradictions in their ways of thinking. Reading and discussing Vietnam War literature can help students analyze their understanding of current events and give them more context to understanding the Vietnam War. He argued that students must understand past mistakes to avoid future ones and that literature is the means for this change.

### Primary Sources

Howlett's (2004) work on using primary sources to teach the Vietnam War is an example that uses community resources to teach a complex subject while using students' prior knowledge and experience. He starts with the premise that

[s]tudents need to feel a tangible connection to the land and people where they live. This may mean shifting emphasis from the larger events and figures of history to the smaller things, the not so famous lives and events, which are just as important in the sweep of historical change. (p. 459)

He focused a year-long research project on the antiwar movement of the school's community to provide students with a basis for understanding the complexity of the war era while providing them with research and critical thinking skills. This provided a way to get students out of the mindset of fact-oriented learning that eases the teacher burden of providing right answers about the war and puts the student at the center of their learning. This approach does not remove the teacher from responsibility of providing learning opportunities, however, but instead of lecturing, the teacher "must develop assignments, based on primary resources, which call attention to areas of controversy and are subject to differing interpretations, each calling into play meaningful connections" (p. 459). This can include print materials and interviews with Vietnam Veterans and Vietnam War protesters. The students have the opportunity and responsibility to make their own conclusions about the information they are examining and receiving from interviews. "It is not enough for them merely to accept what is found in print, but to examine as well the way in which historians arrive at their conclusions" (p. 459). This can help students understand the ways in which knowledge is constructed.

Sharp (1992) presented an alternative use for primary sources by suggesting that students have access to more high profile public documents such as press releases and speeches of U.S. presidents to provide students with a historical framework that they help to construct. By using government documents instead of textbooks, students have the opportunity to understand motives and goals of various decision-makers during the war and to decide for themselves how decisions were made. They can then analyze how decision-making and power affect democratic principles in order to provide them with lessons on working in a participatory system as well as developing critical thinking skills and lessons on how to construct knowledge.

Potts (as cited in Schlene, 1996) listed four reasons for using primary documents in a unit on the Vietnam War. The first is that primary sources can be an extension to the coverage in the textbooks and aids in providing a more

balanced approach to the war. The second is that primary documents are more interesting to read than textbooks. The third is that primary sources expose the student to a wide range of perspectives concerning the war and the last is that primary sources force teachers to come to terms with their own subjectivity toward the conflict. All of these methods help students develop critical thinking skills and put them more in control of their learning.

### **Role-playing**

Starr (1989, 1995) and Johannessen (2000) both advocated the use of role-play exercises in their Vietnam War teaching. Role-play provides more of a human context for students to explore various issues involving the war. Because morality is a central component to understanding the war, a role play can be an effective way for students to feel connected to perspectives that are not their own and improve their comprehension of future reading assignments. Johannessen (2000) uses a simulation on mines and booby traps to help students better empathize with characters of soldiers they will read about. Doing class simulations helps students get outside of their preconceived notions and enables "students to move beyond the myths of war and confront the more complex and difficult issues" (p. 6). He argues that doing these types of activities is more valuable than trying to cover the entire curriculum. In response to a colleague who lamented that there was not enough time to do the simulation, he answered with Applebee's vision of the future classroom:

Such classrooms will be more complicated and less predictable than classrooms based on an orderly transmission of basic knowledge and skills....They will require the guidance of the professional teacher, empowered to shape and support the interactions that emerge in ways that will help each student to progress and grow. (Applebee cited in Johannessen, 2000, p. 8)

Johannessen shares this vision that transmission of knowledge is not meeting the needs of students or society.

Starr (1989, 1995) used role-playing to get at the heart of controversies. He simulated a role-play using many different perspectives to have students debate the specific reasons the United States was involved in the war. Perspectives included members of the military, the State Department, Congress, and college faculty and

students both for and against the war. This helped students gain a more universal truth about the war and prepared them for future classroom readings and activities relating to the Vietnam War and other controversial issues.

### **Inclusion of the Vietnamese American Perspective**

Whereas scholars writing about the Vietnam War have advocated for including the Vietnamese perspective in understanding the Vietnam War, no one included a discussion of the effect on Vietnamese-American students, many of whom are second generation, whose parents immigrated to the United States as a result of the war. Sharp (1992) noted that students come to class with high emotions on the issue; Vietnamese Americans are no exception. Students from Vietnamese descent will generally have a vastly different starting point than will students of non-Vietnamese descent.

One study from Orange County, California, an area with one of the largest Vietnamese-American populations in the country, focused on an inclusive multicultural curriculum project that centered on Vietnamese Americans and was titled "Vietnamese Americans: Lessons in American History." Beevi, Lam, and Matsuda (2003) developed this project in part because Vietnamese Americans suffer from an over generalized stereotype that stems from a limited knowledge base in mainstream American culture of the Vietnam War. Beevi et al. (2003) explained,

The study of Vietnamese Americans in particular, is limited to the study of the Vietnam War in U.S. History classes. There is a lack of historical awareness about Vietnamese Americans within U.S. society, other than broad media images of the 'natives' of the Vietnam War. (p. 167)

School curriculum typically works in conjunction with popular media to paint a very limited and damaging depiction of Vietnam and Vietnamese people. These distorted images can make it difficult for Vietnamese Americans and other Americans to understand one another. This curriculum aims to break down these stereotypes and provide some insight into the struggles that Vietnamese Americans have gone through. This can help students better understand one another as well as better understand the complexity of the Vietnam War.

While acknowledging that the war is often included in the general curriculum, Beevi et al. (2003) recognized a significant knowledge gap in students' understanding of the war. They advocated a strong curriculum on the Vietnamese experience before Americans were involved that incorporates the war and follows through to the establishment and continued budding of present day Vietnamese American communities. To accomplish this, Vietnamese Americans are the focus of the curriculum, and historical and political perspectives of the war, the emigration of Vietnamese from their homeland, and the formation of Vietnamese American communities are covered thematically. This strong multicultural perspective is designed to be inclusive of Vietnamese Americans and provide a broader understanding for all students. Students also develop critical thinking skills by viewing a topic that has tended to be examined through an ethnocentric lens when examined at all.

### **Conclusions**

The topic of how to teach about the Vietnam War has received an abundance of attention from historians, politicians, teachers, and scholars. Scholars cited in this review all noted that teaching the Vietnam War provides teachers with an opportunity to help students develop critical thinking skills, which are necessary for understanding the war. They agreed that it is a topic that must be given significant attention at the secondary level; the controversy lies in how it should be taught.

Most scholars in this review agreed that the key to a successful unit on the Vietnam War needs to incorporate a multitude of perspectives. Starr (1989) suggested that the varying perspectives on the war should be regarded as an asset to teachers rather than a deficit because students can construct their own conclusions about the war. Stempf (1992), on the other hand, advocated for using the war to teach nationalism and allegiance to the United States and feared that Starr's approach would have the opposite effect on students. His view of teaching history is more closely aligned with traditional methodologies, which tend to promote a glossy view of U.S. history, encourages very little dissent, and treats students as blank slates who consume knowledge with no value judgments placed on the information being fed to them. This view is contrary to Wineburg's (2001) supposition that history should have meaning to students. Stempf's notions limit students' ability

Table 1: Teaching Approaches to the Vietnam War

Approach	Descriptions and Benefits
Broad Historical Framework	<ul style="list-style-type: none"> <li>Places Vietnam War in context of other global events happening at the time</li> <li>Effective for teaching about Vietnam and Vietnamese perspective of war and other global events</li> </ul>
Using First Person Accounts	<ul style="list-style-type: none"> <li>Uses first person accounts of different participants of war and peace, both American and Vietnamese</li> </ul>
Literature-based	<ul style="list-style-type: none"> <li>Effective for teaching different genres of literature to focus on various aspects of conflict</li> <li>Provides students with different perspectives to help analyze global events</li> <li>Can help to combat mainstream views of war</li> </ul>
Using Primary Sources	<ul style="list-style-type: none"> <li>Puts students in touch with members of the community</li> <li>Student-centered learning to construct knowledge</li> <li>Use of high profile documents enables students to analyze decision-making practices</li> <li>More engaging than textbooks, exposes students to a wide range of perspectives</li> </ul>
Role-playing	<ul style="list-style-type: none"> <li>Provides human context which enables students to feel connected to different perspectives</li> <li>Improves comprehension of future readings</li> <li>Helps students work through controversial issues</li> </ul>
Inclusion of Vietnamese American Perspective	<ul style="list-style-type: none"> <li>Bridges knowledge gap between cultures</li> <li>Provides broader view of Vietnamese experience beyond the conflict</li> <li>Utilizes expertise of members of community</li> </ul>

to create personal meaning from history, which can have detrimental effects on the democracy.

Table 1 summarizes the various approaches to teaching about the Vietnam War discussed in this literature review. Suggestions included using first person sources such as memoirs, the inclusion of the Vietnamese perspective, teaching from a broad historical framework, using role-play exercises, teaching through fiction and non-fiction, using primary resources of both written and oral sources, and using a multicultural curriculum that focuses on the Vietnamese-American perspective. Some writers advocated a more nuanced approach encompassing a multitude of sources and others warned against definitive and conclusive opinions regarding the war. They agreed that the media played a significant role in the formation of perceptions on the Vietnam War for young and old alike, and these perceptions

tend to be damaging and misleading. Literature, role-plays, and primary sources can be effective methods for combating these perceptions and help students develop a more realistic view of events.

### Recommendations for Practice

Traditionally, history has been taught in a vacuum, with no discussion as to how it relates to students' lives. Students often spend more time learning about the War of 1812 than they do about the Vietnam War. The War of 1812, however, is an historical period that has very little relevance to today's students while the Vietnam War is still alive in the minds and conscience of the American people. As Wineburg (2001) suggested, the past, present, and future are inextricably linked, which means that the Vietnam War is somehow part of the current political climate. Many scholars agreed



that a comprehensive understanding of the Vietnam War was necessary to understanding contemporary U.S. foreign policy. The current war in Iraq may or may not be similar to the Vietnam War but schools are doing a disservice to students and the country by not teaching about the Vietnam War in detail.

Loewen's (2000) position that students should study the war from sources other than the textbook is sound. Textbooks only provide one voice and that voice is often from a major publishing corporation that tends to have a political agenda outside of the students' interests. Loewen also suggested looking closely at the media's role in the Vietnam conflict, arguing that this coverage had a significant impact on the war and on U.S. government policy. Teachers could create a thematic unit on the role of media in contributing to the war effort by comparing and contrasting mainstream media coverage of the Vietnam War with that of the Iraq War.

Table 1 summarizes effective approaches to teaching about the Vietnam War. These approaches do not need to be viewed as distinct from each other and can be combined to provide a more comprehensive approach, depending on the teachers' needs. Goodman (1990) suggested that students need a *political and historical context* to best understand the Vietnam War and its implications on current U.S. foreign policy. He argued that students who were only exposed to war stories would be unable to make connections to other conflicts. Furthermore, he noted that teachers should concentrate on the implications of using force over diplomacy in dealing with other sovereign nations, which can help students see that war is a choice and not a necessity, providing them with a framework for analyzing justification for war. This can be an effective method of approaching the war as long as it is done using multiple sources of *varying perspectives*. If teachers use a textbook or only one source to provide this framework, students may come away without the opportunity to use or enhance their critical thinking skills, which can have the consequence of a limited perspective, and thus, a limited understanding of the war.

Like Wineburg (2001), Gilbert (1991) advocated studying cultures and perspectives outside of one's own to provide a wider view of events. His end was to help students develop a better understanding of the U.S. role in Vietnam, as opposed to an understanding of Vietnam itself. The *inclusion of the Vietnamese perspective* is a necessary component to

understand the war and can also help students gain a better understanding of the world beyond the borders of the U.S. Gilbert provides an extensive resource list in his book *The Vietnam War: Teaching Approaches and Resources* to accomplish these aims.

Beevi, Lam, and Matsuda's (2003) curriculum expands on Gilbert's ideas by putting Vietnamese Americans at the fore of the discussion. Beevi et al. (2003) recognize that the Vietnamese-American community is a significant part of American society, largely as a result of the war. Their curriculum has the dual purpose of educating about the war as well as educating about Vietnamese Americans and Vietnamese-American culture. Their curriculum would be a contributive asset to all schools learning about the Vietnam War, but especially those districts with a large Vietnamese-American community. Due to limited school budgets, the current political climate, and the fact that the curriculum does not yet align closely with state standards, this curriculum has not been widely distributed and the efficacy of it has yet to be proven.

Using different types of *literature*, including fiction, non-fiction, and *first-person accounts*, is another compelling way to provide multiple perspectives to students on the Vietnam War, while at the same time allowing them to personalize information in ways that are meaningful to them. Johannessen (1993) and Kirkwood-Tucker and Benton (2002) provide resource lists of developmentally appropriate fiction for adolescents and young adults to teach about various aspects of the war. Johannessen (2003) has also focused on non-fiction literature that can give students realistic depictions of the war in more of a human context. Dunn (2003) provides a first-person resource list of fiction and non-fiction books from a multitude of perspectives, giving teachers and/or students' choice, depending on their interests and objectives. Using literature is advantageous for providing multiple perspectives but can be limiting if students do not have historical context with which to understand these perspectives.

Another extremely effective method for providing students with a chance to personalize history is through the use of *primary sources*. Howlett's (2004) example of using primary sources gives students the opportunity to learn about their community and understand the role of history in the present. By sending students into the community to learn about the Vietnam War era, students can take control of their

learning and receive various perspectives from people they interview as well as through primary documents that they research. This helps students to “render value judgments necessary for interpreting events in their correct historical perspective” (p. 466). Students get first-hand experience as to how people were affected by the Vietnam War, at the same time enabling them to make parallels to current events. It also provides students with the chance to understand their communities better and make partnerships with organizations and people who they may not know existed. This type of unit, therefore, has many positive attributes in addition to teaching about the Vietnam War.

*Role-playing* can also be effective for humanizing history and forces students to wrestle with feelings and decisions that historical participants may have faced. This affords students the chance to grapple with moral issues of the war, which is a significant component to understand events and actions. Students are more able to pass judgment when sitting at a desk reading a textbook, but when placed in a situation where they have to relate to someone’s perspective, passing judgment becomes more difficult. Again, students have the chance to personalize what they are learning and place it in a context that is meaningful to them. If they lack a proper historical context, however, they could oversimplify the situation and personalize it to the point that the role-play loses historical connotations and takes on the personality of the student.

Educators in the field of history should investigate their reasons for teaching history. It is one of the most dynamic subjects in high schools and has the potential for helping students see the world in ways that are meaningful to them. It also has the potential and responsibility for promoting a healthy democracy by teaching citizens the importance of their role in it. For young people, school is the only chance students may have for any formal learning on this extremely relevant topic that continues to play a role in the ongoing development of the American psyche.

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## **Interdisciplinary Art Education at the Center of a Multicultural Curriculum**

*Placing art at the center of a multicultural curriculum would promote development of cognitive and multicultural skills needed in schools. If art is placed at the center of a multicultural curriculum, all students will have access to a meaningful education that will ensure their place as productive citizens in a democracy. A review of peer-reviewed literature, suggests that an interdisciplinary art education can preserve art education despite current education reforms, and facilitate the acquisition of the skills necessary for civic responsibility. Sharing knowledge through art can balance power between Anglo-Americans and People of Color, and provide a safe place for students to create a learning community based on equity.*

Art education has struggled historically to maintain its place in the curriculum. Art education now faces decreasing support since the implementation of the No Child Left Behind Act (NCLB) (Chapman, 2004). Being that high stakes testing measures skills in math, English, and science, educators are forced to devote more time to those subjects. Art education is viewed as “enrichment” for those students who complete test material. In this way, the arts become a bribe/reward for succeeding in test subjects, the important work (Chapman, 2004).

In this paper I discuss how the arts in schools are threatened with extinction by current legislation, and the need to preserve the arts. I argue that eliminating the arts is detrimental to child development and contributes to poor achievement which can widen the achievement gap between Anglo-American students and Students of Color. I present an interdisciplinary approach to an art centered curriculum that addresses the preservation of the arts while attending to issues of equity. The preservation of the arts is tempered with a multicultural philosophy to ensure that school curricula reflect the diverse population of the United States and help narrow the achievement gap.

The United States is a country founded by immigrants, and immigration continues to shape its cultural landscape. Today’s diverse population is a direct result of past and present immigration, of the Native Americans and Mexicans that were already here, and of forced immigration of African slaves (Takaki, 1993). Rather than embracing cultural diversity, public schools were charged with the task of assimilating all to conform to an idealized American standard. For many immigrants, assimilation meant mixing Europeans into the

melting pot of American society and creating opportunities for oneself and family. For others however, assimilation did not necessarily include the economic benefits reserved for those in the Anglo-American culture such as access to employment, housing, and education. Public schools in the United States have a long history of assimilationist policies. Evidence of this can be found in Native American boarding schools and European Immigrants targeted by Americanization campaigns (Spring, 2001). German language schools were shut down during the World Wars and the English language was pushed to the forefront of the assimilationist machine that was and continues to be public education (Spring, 2005).

Cultural diversity in U.S. public schools continues to grow due to immigration. There is an increasing need for a curriculum that reflects this diverse population (Banks, 2001; Spring, 2001; Takaki, 1993). Students of Color, in particular, are in need of curricular designs that reflect their own experiences. Many Students of Color experience alienation from school curriculum resulting in a variety of issues including dropping out, poor self esteem, and widening of the achievement gap between Anglo-American students and Students of Color. There is a need for a curriculum that avoids the psychological damage of alienation. Takaki asks, “What happens...when someone with the authority of a teacher describes our society, and you are not in it? Such an experience can be disorienting – a moment of psychic disequilibrium, as if you looked into a mirror and saw nothing” (1993, p. 16). Transforming the curriculum to reflect the experiences of all students would create an inclusive pedagogy in which “individuals from diverse cultural, ethnic,

and social-class groups have equal opportunities to function and participate” (Banks, 2001, p. 117). Multicultural curriculum would also benefit Anglo-American students as they negotiate through the world outside school walls. A transformative multicultural approach will give all students the skills and sensitivities to function meaningfully with those who are different from themselves.

Multicultural education has taken many forms throughout its conception since the Civil Rights Movement, but has generally lacked certain characteristics. For example, cross-cultural studies and ethnic studies all lacked an anti-assimilationist agenda to deal with the historically based racial issues most salient to this nation (Vavrus, 2002). Many models of cultural education have ignored the notion of white privilege and its damaging effects on intercultural relationships (Banks, 2001; Vavrus, 2002). Effective multicultural education must attempt to eliminate institutionalized racism that persists despite many attempts of Civil Rights Legislation. Public schools are now more segregated than they were before the *Brown v. Board of Education* decision (Irons, 2002). For example, children born to wealthier families have greater opportunities to learn outside school and have a clear advantage at the kindergarten level.

A multicultural curriculum centered on the arts can transform education in the U.S., and can level the playing field between People of Color and Anglo-Americans. “Essentially, an art-centered approach to diversity education in teaching and learning can help students to understand how culture shapes experience and also help students to see culture as a complex web of significance” (Johnson, 2002, p. 20). All cultures need equal attention if dearly held democratic ideals of equality, human dignity, and justice are to be realized. A multicultural, art-centered education can realize this country’s ideal of democracy by giving a voice to marginalized groups threatened by institutionalized racism.

### Literature Review

There is a constant gap in achievement between students of color and Anglo-American students (Multi-Ethnic Think Tank, 2002). Ignoring the benefits of art education may further widen the achievement gap. Those students who are likely to gain experience in the arts already have a distinct advantage over those who will not have an opportunity to explore art. Chapman

(2004) states that wealthier schools can afford to keep the arts as part of the main curriculum while poor schools that already struggle to maintain Adequate Yearly Progress (AYP) will have no choice but to cut funding to the arts as a main subject and offer it only as “enrichment.” With the NCLB Act, there is little room in the curricula for art education when high stakes testing compels educators to teach to the test. Eliminating art however harms student learning. As Efland (2002) implies, the development of cognitive flexibility that results from arts education benefits core subjects, since “the richer the array of subjects experienced, the wider the range of cognitive potentialities that learners are likely to develop” (p. 158). He further states:

Cognitive flexibility is the ability to change strategies as one becomes mindful of the structural demands of each domain, and the ability to activate the appropriate means to secure meaning or understanding. To be flexible one needs a repertoire of strategies from which choices can be made, many of which are learned in the arts. (Efland, 2002, p. 160)

Learning is an impetus for development as a student draws from many cognitive strategies to solve a problem. Intuitive, creative, and emotional strategies can be acquired through art (Efland, 2002).

The arts can promote an understanding of culture as well as cognitively applicable skills to other subjects. Art education should be centrally located within a multicultural curriculum. Figure (1) illustrates this concept.

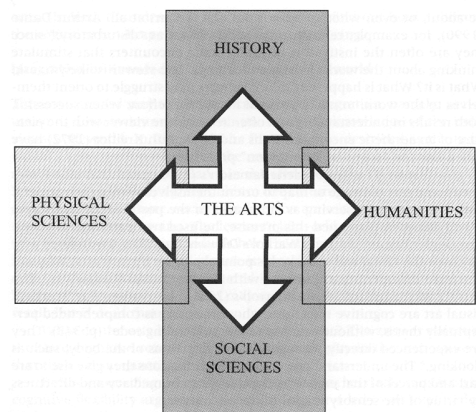


Figure 1. Integration of Knowledge Through the Arts. From: Efland, A. D. (2002), p. 165.

“[Art] becomes meaningful when it is seen in the context of the culture, and the culture becomes understandable as read through the arts” (Efland, 2002, p. 164). Art can be placed at the center of the curriculum in order to facilitate cognitive flexibility, and to place learning within an informed cultural awareness. Although Efland (2002) mentions culture, he does not take a distinctive multicultural perspective of knowledge construction. In the hands of multicultural educators, integration of knowledge through the arts can maximize knowledge of subject content and understanding of all cultures. Efland’s (2002) theory of the relationship between art and culture becomes a tool to transform the construction of knowledge from one culture to many. When seen from both the lens of knowledge integration and the lens of multicultural perspectives, interdisciplinary art education becomes a tool to transform the current curriculum into an inclusive pedagogy (Efland, 2002; Vavrus, 2002).

Since children are already influenced by their heritage culture and common culture of society, Freedman (2003) and Thompson (2003) suggest that students critically examine how culture impacts their art production. Freedman (2003) describes art as the study of visual culture and explains its impact on democratic education. Freedman insists that visual arts are infused in the daily lives of postmodern peoples and proper attention to its influence on identity development is necessary. Students can acquire an education in the visual significance of art through culture. “Visual Culture Art Education (VCAE) is a paradigm of art education in which teachers and students critique and make images with the goal of understanding the roles that images play in society as well as the importance of images in their own experiences” (Pauly, 2003, p. 264). When students have an understanding of the role of visual culture, they can be better equipped to critically examine racial and cultural input from the media. Thompson (2003) mentions the invasiveness of kinder culture on art production in the art classroom, and advocates monitoring and debriefing what children absorb from popular media. Kinder culture is typically the label for children’s popular media that includes products such as television programs, foods, toys, video games, and the like. Thompson (2003) warns that unmonitored kinder culture can be invasive to childhood artistic development. For example, childhood art becomes a duplicate of kinder visual culture instead of genuine expressions of emotion or

ideas. The invasiveness of kinder culture seems limited to this duplicating phenomenon and does not seem to interrupt the stages of artistic development. Lowenfeld (1982) devised a theory of developmental stages in early childhood art. His stages of art development outline cognitive development that can be monitored through various stages of image production. Although Lowenfeld’s (1982) theory is still evident in art production, Thompson (2003) calls attention to the media as a source of kinder culture and its influences on early childhood art, and gone unmonitored can affect original artistic expression.

A transformative multicultural education in the arts would assist children in acquiring the skills needed to participate actively in the increasingly diverse environment of the United States. Skills such as critical and analytical thinking, intercultural communication, and multicultural advocacy promote a sense of civic responsibility to ensure justice and equity for all as guaranteed in democracy. The United States defines democracy as the preservation of justice, equality, human dignity, and those rights protected in the Constitution and Bill of Rights. This is evidence of children as both culture bearers and culture makers. Children enter the classroom carrying many cultural traits gathered from both the media and their home environment, including the cultural identity that resulted from the intersection between their heritage culture and the common culture of the surrounding society. Very often heritage and common cultures do not coincide and are very different. The intersection between the two cultures plays a large role in the lives of students of color as they face sink or swim decisions concerning the preservation of their heritage. Experiencing art facilitates the acquisition of skills needed to function meaningfully in both heritage and common cultures, thus creating a common means of communication and therefore sharing knowledge between two cultures. There is a certain amount of power involved in controlling knowledge. To function meaningfully between the two cultures means to share knowledge and power.

The arts can be a primary source for students to draw research from, as well as facilitate critical thinking skills and internalizing topics for better understanding. Producing art could also encourage children to become culture and knowledge makers. For example, video is becoming a popular medium in art production. “Students can become involved in videotaping

events or subjects, and the videotapes can be shown in class for instructional purposes. In this way the learner and teacher become not only knowledge consumers but also knowledge producers” (Ovando, Collier, & Combs, 2003, p. 306). As students acquire the many intercultural skills needed to function meaningfully within increasingly diverse classrooms and society, art will become a form of communication between people with different cultural values. Becoming culture and knowledge producers through art can be empowering for all students, it can help bridge the achievement gap created and maintained throughout history.

Ideally the Arts would serve as the center of the whole school curriculum to elicit students’ interest. Parsons (1998) believes that in order to integrate the arts more effectively into the curriculum, cognition and culture must be addressed. He believes that, “students’ interests, abilities, and cultural backgrounds are as important to curriculum planners as are the structures of knowledge” (Parsons, 1998, p. 103). For Parsons (1998) culture plays a significant role in the production and experience of art. “[W]e have limited access to culture without language, and without language, artworks have a very limited connection with culture...to distinguish sharply between thinking visually and thinking linguistically is also to keep apart art and culture” (Parsons, 1998, p. 105). “We” educators must not ignore the roles of culture and language in child cognition since to do so would retard their development. This would be especially dangerous for children who are already disenfranchised and seen as Other (Delpit, 1995; Irons, 2002; Santa Anna, 2004).

Parsons (1998) also asserts that the role of culture in the artistic experience of producer and audience is essential if one seeks a complete interpretation of a work of art. If a work of art is only interpreted by the visual data one would only get a physical description, not a terribly engaging experience for the artist or audience. A work of art comes alive when viewed by an audience. “Interpretations are functions which transform material objects into works of art...Only in relation to an interpretation is an object an artwork” (Danto as cited in Parsons, 1998, p. 106). Although the elements of design are important visual data, cultural interpretations add depth in meaning. If an artwork is solely interpreted by visual appearance and ignores culture, what then is the point of producing art? Art would be reduced to wall hangings in a home

that merely serve to compliment a color scheme or some furnishing design. There are few communicative qualities of an object unless culture is incorporated into an interpretation to extrapolate the meaning of an artwork. Thought must move freely to connect visual and cultural elements (Parsons, 1998).

### **Art in Math and Science**

In the science and math classrooms, art can be used to display understanding of mathematical and scientific concepts and to intellectually bridge them with art (Papacosta & Hanson, 1998). Although this connection seems uncommon, the relationship is rather natural and surprisingly frequent. Faculty from the art, math and science departments at Case Western Reserve University and Chicago’s Columbia College have required their students to participate in projects that combine artistic, scientific, and mathematical skills (Bartlett, 2004; Papacosta & Hanson, 1998). Although these projects were conducted by college students, the experience of mixing art with math and science can be recreated for high school students and modified to be more developmentally appropriate.

Students can learn by example from artists who combine mathematical concepts with visual arts to create unique and expressive works of art. For example Koos Verhoeff’s piece, “Pythagorean Fractal Tree” is based in geometric principles and fractal formations (Peterson, 2001, p. 7). Verhoeff drew inspiration from a mathematical equation and cast it in bronze. The “Pythagorean Fractal Tree” is an example of an art form that can be made from a variety of materials, many of which are only limited by a student’s imagination. There are also the math and science informed works by M.C. Escher and Leonardo da Vinci (Field, 1997; Peterson, 2001). Da Vinci’s work, which characterized art during the Renaissance, incorporated math by applying perspective to create optical effects that reproduce 3-dimensional forms on a 2-dimensional surface (Field, 2001). While cultural meaning may not be immediately noticeable, these works of art provide windows for the times in which they were created. For example works of art created during the Renaissance describe religious doctrine to educate the faithful, and works by Verhoeff and Escher provide comment of postmodern American society.

### **Art in Social Studies**

In the social studies classroom—which

includes humanities, history, and language arts—the work of Jacob Lawrence, the painter, can be used to complement a lesson on the Civil Rights Movement. One work of art is of particular interest. “The Ordeal of Alice, [Lawrence’s] work about the tragic 1963 church bombing of four young girls in Birmingham, Alabama is an example of the visual art’s ability to inform history” (Johnson, 2002, p. 19). Art brings humanity back into a history lesson and reminds students that the people they read about were real and that their lives have left a cultural legacy.

### Art in Language Arts

In the language arts classroom, art production is possible. It may be more advantageous for emerging readers and writers to participate in the analysis of art in the form of essay. Art critique, analysis, and interpretation are all respected endeavors in art communities (Barnet, 2003). Art can be used as an Entry Point Approach (EP Approach) by using a work of art to create a context for a topic in class. An EP approach is a metacognitive tool that scaffolds knowledge. Davis (2000) conducted a study in which the EP Approach was used “as a vehicle with which to experience, examine, and reflect on the various perspectives that are so naturally accessed through works of art” (p. 342). In other words, an EP Approach would engage students in a metacognitive analysis of an artwork and of their own experience when viewing it. For example, the class could study “Guernica” by Pablo Picasso (1937) (see Figure 2), or “Fountain” by Marcel Duchamp (1917/1999) (see Figure 3).



Figure 2. “Guernica” by Pablo Picasso, 1937.



Figure 3. “Fountain” by Marcel Duchamp, 1917.

Davis (2000) describes two EP Approaches: (1) is a window frame activity in which a frame with various questions to be answered is written along the edge, (2) is an entry point questionnaire. The following list (Davis, 2000, p. 350), describes the window frame activity and lists the five frame types and their questions. Each window frame has one of the following, and the artwork or object is viewed through it.

- *Narrative Entry Point:* Story window: Tell its story- What is it about? Write the story of the object.
- *Experiential Entry Point:* Action window: Do it, make it- How can I experience it? Make a picture of it.
- *Aesthetic Entry Point:* Seeing-sensing window: Look at it carefully- What do I see? Write down the details of what you see.
- *Logical-Quantitative Entry Point:* Reason window: Figure it out- why and how do these things fit together: Write down some questions you’d like to have answered about the object.
- *Foundational Entry Point:* Fundamental window: Reflect on it- Why is it important? Write down your theory about why the object is or is not important- why it matters if it does.

By looking at these artworks through the different windows or answering the entry point (EP) questions the student is engaged in a metacognitive assignment. The students participate in a metacognitive exercise, thereby engaging the student in their own learning. The exercises would have an even more profound effect if they were incorporated across the curriculum for all subjects, inside and outside the classroom. They can use the exercises, as Davis (2000) suggests, at a museum and also repeat it for different artworks, and school subjects.

The second entry point activity is an Entry Point Preference Exercise (see Table 1) in which the student reflects on an artwork by answering questions the student finds most engaging, and noting the letter of the kind of question the student selected (e.g. “A” for Aesthetic). Then the student analyzes his/her answers by looking at the type of question he/she preferred and answering the following questions (Davis, 2000):



Table 1: Entry Point Preferences Exercise

Question Set	Questions (Entry Point)
One	<p>What textures do you see in this work of art? (Aesthetic)</p> <p>What are the figures or objects in this work saying to one another? (Narrative)</p> <p>How would you go about making this work twice as big as it is? (Logical/Quantitative)</p> <p>Is this art? Why or why not? (Foundational)</p> <p>Can you move like the motion you see in this work of art? (Experiential)</p>
Two	<p>How would you describe the shapes that you see in this work of art? (Aesthetic)</p> <p>Where does the story depicted in this work take place? (Narrative)</p> <p>Is there a part of this work of art that seems to tie the whole thing together? Is there part of this work that doesn't seem to fit? (Logical/Quantitative)</p> <p>Does this work of art speak to you? If so, is it asking you a question or giving you an answer? (Foundational)</p> <p>Using only lines, can you draw the emotions that you see in this work? (Experiential)</p>
Three	<p>Does this work of art look true to life? (Aesthetic)</p> <p>When does the story of this work take place? (Narrative)</p> <p>Why do you think this work of art is the size that it is? (Logical/Quantitative)</p> <p>Does this work of art have a purpose? What is the purpose of art? (Foundational)</p> <p>If this work is the artist's half of a conversation, what do you say back to the artist? (Experiential)</p>
Four	<p>How does this work of art feel? Is it happy? Sad? Angry? (Aesthetic)</p> <p>Does this work of art remind you of a story you know? Which one and why? (Narrative)</p> <p>Does it look as if the artist spent a long time making this work, or do you think the artist put it together quickly? How can you tell? (Logical/Quantitative)</p> <p>Is art a language? Why or why not? (Foundational)</p> <p>Can you clap a rhythm that sounds like what you see? (Experiential)</p>
Five	<p>How do you think the colors of this work contribute to the emotions it expresses? (Aesthetic)</p> <p>If you were to give this work of art a title, what would it be? Why? (Narrative)</p> <p>Which part of this work do you think the artist considered to be most important? Why? (Logical/Quantitative)</p> <p>Does it matter if this image is an original work? Why? (Foundational)</p> <p>Can you respond to this image in clay? (Experiential)</p>

Note: Adapted from Davis, J. H. (2000), p. 352-353.

- Take a look at your responses. Did you most often choose: Aesthetic? Narrative? Logical/Quantitative? Foundational? Experiential? Or did you not seem to have a clear preference?
  - Do you think you would have responded differently if you were looking at a different work of art than the one you were considering?
  - Do you think you would have responded differently if you were considering a non-art object (like a human skeleton or skull) instead of a work of art?
  - Do you think you would be most interested in the entry point you most often chose, regardless of what you were looking at or learning?
- This activity is similar to the window frame activity, but is geared towards older students. This metacognitive approach can be applied to any object, subject, art medium, artwork, or culture, to draw student interest.
- The windows are a physical metaphor for the individual entry points that frame an object, art, topic (Davis, 2000), and the entry point questions are to be answered when

studying/looking at an object or artwork. Once these are done the last set of follow up questions ask the student to reflect on why certain problems were answered over others (Davis, 2000). The last set of questions is key, because they ask the student to reflect and think about their thinking. These metacognitive exercises also have multicultural implications. Davis (2000) explains:

In working to develop a climate of mutual respect among students who emerge from so many different cultures, encompassing a broad range of definitions of culture, why not let thought, broadly and variously defined, be a subject for students' direct consideration? And in considering such a subject, why not invite students into the same conversation that engages those of us behind the scenes or in charge of leading classrooms and other educational scenarios? Who knows what we may learn from one another and whose futures may be transformed by the participation in an authentic conversation that has implications for useful learning about self, other, text, and context. (p. 356)

From this we may interpret transformative multicultural education that supports emerging readers and writers to initiate topics that encourage participation and interest for all.

Students may use the Entry Point Approach as an initial free-write, and then build a thesis that incorporates the elements of design (Barnett, 2003; Davis, 2000). Students may want to analyze an art work's elements of design in comparison with a similar work. Students can discuss as a group or in their individual papers the cultural significance of the notion of an established *canon*. Barnett (2003) defines *canon* as "largely a construction made for political reasons by a self-serving elite" (p. 24). Typically a canon is viewed as an acceptable standard of something, in this case art. Not only will students have an opportunity to read and write for meaning, but they will critically examine who decides which objects are works of art and which are not.

### **Art in English as a Second Language**

In the English as a Second Language (ESL) classroom, art can be used to give students with limited English abilities a voice in an English dominant school system. Art production here facilitates a content rich environment for students to practice and develop their English

language skills (Rivin, 1996). In the process of art production students are asked to keep working logs of their daily progress, and are given writing assignments related to their artwork (Rivin, 1996). All writing is done in English and content is student driven and avoids being watered down. Inclusion of multiculturalism can also be student motivating as the teacher can invite students to share information about themselves and the country they are from. ESL programs are just one type of language program and are typically used to phase out the child's first language. Ideally a bilingual education program would maintain the first language while it builds the second language, in this case English. In this way multicultural education can be inclusive of language minorities as well.

### **Art in World Language**

In the world language classroom a multicultural curriculum could support all students through art integration. In the world language classroom, art would be an EP for a certain topic—grammar, culture—by using a variety of art mediums to transfer first language knowledge to the world language classroom. The EP approach is endless as students can study art produced by speakers of the target language to further cultural studies. The Q & A exercises could be done in the target language to bridge language use to art (EP). The study of world languages can create a school wide climate that values all languages. But simply taking a world language class does not ensure cultural understanding. Extra effort on the world language teacher's part to create a curriculum that addresses cross-cultural understanding is needed. Bateman's article (2002) promotes cultural learning, in addition to the world language, in order to build cross-cultural understanding through ethnographic interviews. The study also includes a questionnaire students use to monitor their cross-cultural development by comparing their responses before and after they have conducted their ethnographic interviews. The questionnaire can be used to develop a multicultural curriculum by allowing students to analyze their own views toward the target language and culture. The major aim of the Bateman (2002) study is to dispel the myth that world language students are open to culture learning in addition to world language acquisition. Bateman's (2002) study on ethnographic interviews serves two functions: (1) explain a technique to enhance/encourage

multicultural awareness, and (2) support cultural learning through world language acquisition. Learning a world language does not guarantee the student is also willing to learn the culture of the target language, and ethnographic interviews will increase a positive attitude towards speakers of the target language (Bateman, 2002). The desired outcome of an ethnographic interview is to produce students who “progress from an ethnocentric view of the world to one in which they acknowledge the existence of different cultural perspectives, learn to accept cultural differences, and perhaps even integrate them into their own worldview” (Bateman, 2002, p. 319). The goals of this study are consistent with those of more transformative multicultural approaches.

This study recognizes as one of its limits the time constraints set by the needs of the participants (Bateman, 2002). Since the study was conducted in a short period of time, the ethnographic interviews had little effect on the attitudes of some students, but it has effectively begun the process of cross-cultural development. A project conducted over a longer period of time might have more of a transformational effect on its participants. On average the ethnographic interviews increased positive attitudes toward Spanish and in particular to its native speakers. A project conducted over a longer period of time would reach those students that are taking world language to fulfill graduation requirements. It is these culturally encapsulated students that can benefit the most from a transformative multicultural education that would begin in the world language classroom. For example, it would be desirable for an ethnographic interview project to begin in the first weeks of world language instruction and continue through to the end of the school year. Of course this would not be the only cross-cultural approach but would serve as a good base for a transformative multicultural education to flourish in the world language classroom.

The world language department of a school can serve as a center of linguistic resources that provide linguistic support from the community. The world language classroom is a good place to build language appreciation. Once a foundation for cultural appreciation has begun with ethnographic interviews then art is used to maintain and build on that appreciation. Art, in this situation, can serve various purposes to promote cultural appreciation and acquisition. The class could follow historical events through art and carry on through current events. Art could also be used to access authentic

communication between the target language and students’ first language. The Entry Point Approach applied previously for the language arts classroom could be used in the world language classroom to encourage a dialogue of culture in all forms: differences, similarities, and multicultural transformative perspectives. While an EP approach may be linguistically advanced for some world language students, with proper scaffolding lower level students could benefit from an activity just beyond their zone of proximal development.

### Conclusions

In light of the research conducted by Chapman (2004), all students need access to art education to maintain power balances between Anglo-Americans and People of Color. Chapman (2004) warns educators of the detrimental effects of the NCLB Act on art education, with the widening of the achievement gap if art is eliminated. Further research suggests that art can be a means of communication between different cultures. Efland (2002) describes art as a cognitive tool to support cultural understanding through art. The studies conducted by Freedman (2003), Pauly (2003), Thompson (2003), and Parsons (1998) promote critical examination of images in the media, understanding the role these images play in reaffirming racial and cultural identities, and the invasiveness of these images on art production. Providing a means of communication, through art, different cultures can share power.

Viewing art creates an opportunity to share power by sharing the art experience. Dewey describes that experience to be shared knowledge between the art producer and audience (Sullivan, 2002). The audience experiences that knowledge and then creates more knowledge. Duchamp, who created “Fountain,” views the experience of art in the same way: audience members are producers of art through their experience (Sullivan, 2002). The artist or knowledge producer has a particular intent, and when viewed by the audience new knowledge or ideas of art is the result. Duchamp’s “Fountain” is an example of the audience becoming artist through experience. As time progresses “Fountain” takes on a new experience as socially constructed meanings change.

An interdisciplinary approach to education grounded in the arts can provide students with the opportunity to succeed in their school careers. Bartlett (2004), Peterson (2001), Field (2001), and Papacosta and Hanson (1998)

support bridging math and art to enhance qualities that the two share. Johnson (2002), Barnett (2003), and Davis (2000) urge social studies educators to use art to enliven history, by interesting emerging readers and writers in the analysis of art. Rivin (1996) provides English as a Second Language students with a rich context to aid language acquisition in transferring first language knowledge to second language through the arts. Bateman (2002) used ethnographic interviews to encourage cultural appreciation in the world language classroom, and make an art-centered multicultural education possible. Contextual applications between art and all other school subjects are infinite. Teachers can incorporate the cognitive and linguistic needs of all students through an interdisciplinary art education. Narrowing the achievement gap takes time, but its narrowing can be hastened through student-led art content. A transformative multicultural vision for all subjects is possible despite discouraging pressures from the NCLB Act. And with time and support from cultural resources from the school and community, students can maintain their heritage culture as they acquire the new dominant culture of the United States. Hopefully rash assimilationist ideals will fade and our efforts will transform the curriculum to reflect this country's multicultural and multilingual reality.

### **Recommendations for Practice**

In addition to the interdisciplinary examples presented in this paper, educators can create a curriculum tailored to their students. Texts that take a distinctive Eurocentric view of art and the world can be critically examined to begin a discussion of justice and equity. This examination can grow to be a student-lead definition of democracy; a definition that would serve the class as a whole. Although Efland's (2002) study does not take a distinctive multicultural approach, it is valuable to classroom practice in that it addresses the relationship between art and culture as salient to students' cognitive development. It is possible for teachers to combine Efland's study with the studies conducted by Freedman (2003), Pauly (2003), Thompson (2003), and Parsons (1998) to invite a classroom discussion on how cultural and racial images found in the media affect their identities.

If texts are critically examined to uncover already present inequities, then any resource can be used to address issues of equity. The bridging of math and art is used to raise awareness of

equity issues from a multicultural perspective. The studies that Bartlett (2004), Peterson (2001), Field (2001), and Papacosta and Hanson (1998) conducted rely on the common qualities between math and art to provide a context and inspiration for the acquisition of skills for each.

In addition to Johnson (2002), Barnett (2003), and Davis' (2000) encouraging use of art in the social studies classroom, team teaching between history and art teachers could produce a powerful curriculum for students. Team teaching in this way could be especially helpful for teachers to draw from each of their strengths. It is also possible to include ESL teachers. This teamwork would be an example of Rivin's (1996) study that focused on contextualizing language for better transference from first language to second language.

Bateman's (2002) use of ethnographic interviews is not a common practice for intercultural awareness, and may present problems for creating a genuine connection between people of different cultures. This use of ethnographic interviews in the world language classroom makes them somewhat limited in encouraging students to address their ethnocentrism in depth. Further ethnographic exercises would be beneficial to separating otherness from speakers of the target language. The process of eliminating otherness from those who are different can be a rewarding experience for those sincerely attempting to create multicultural alliances.

An exemplary text that shows how to combine art and multicultural education to address issues of equity, justice, and human dignity is *Contemporary Art and Multicultural Education*, edited by Susan Cahan and Zoya Kocur. Cahan and Kocur (1996) present, as the first lesson, a unit on immigration in the United States. Students are asked about their own families and invited to share family origins. Students create a class list of the reasons why their families chose to live in the United States. Students explore their family heritage and histories. Students begin to see that there are different ideas of what it means to be an American citizen. This unit uses various works of art to begin discussions on immigration in a safe, inclusive environment that would provide a basis for future multicultural discussions.

It might seem a stretch to do a unit on immigration (similar to the unit suggested previously for ESL) in the math and science classrooms; however, educators in these fields are encouraged to be creative in their

presentation of integrated units. In addition to the discussion about family heritage, math classes could critically examine their math texts for Eurocentric views and explore the historical and present contributions of People of Color to the field of mathematics. In the sciences, students can explore the geological influences on cultures around the world and historically in the Americas. Science students may also be interested in biological studies of pathogens, viruses, diseases (Cahan & Kocur, 1996). Art is used to synthesize the results of such inquiries, and, where appropriate, reflect students' understanding of scientific theory.

I wish I could say that in the nine years since the publication of Cahan and Kocur's text (1996) that public education no longer needs to address cultural issues. Educators cannot deny the existence of the achievement gap. The literature presented recommends that all educators develop a multicultural pedagogy to ensure equity and justice for all their students. It is not my intention to present art as the great cultural equalizer as this would only highlight similarities rather than celebrate differences. Therefore, placing art at the center of a multicultural curriculum serves two purposes. The first is to ensure a better quality of life for all citizens in the United States. The second is to ensure a place in the curriculum for the arts for future generations of students.

By setting art at the center of the curriculum, educators can ensure preservation of the arts as it is essential in light of current educational reforms that threaten to eliminate art. I would like to see all students given the opportunity to participate in a meaningful education in the arts, but I must also remain realistic about current educational reforms. Setting art at the center of the curriculum will ensure its survival and all students will be given an opportunity to experience art. There is a need for further studies into designing a comprehensive curriculum for interdisciplinary art education centered in multicultural education. Combining subjects that are developmentally appropriate can be a powerful curricular tool to reach all students. Each unit would include language development strategies such as reading and writing in addition to multicultural studies. A comprehensive interdisciplinary art curriculum would challenge current education reform and narrow the achievement gap by addressing issues of equity.

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## Benefits of Incorporating Music in Interdisciplinary Education

*This paper focuses on why music should be incorporated in interdisciplinary education. A combination of peer-reviewed articles, research studies, and ethnographies are used to explore a thematic approach of musical intelligence, neuromusical research, the “Mozart effect,” academic development, ethnomusicology, and classroom application. Theoretical, curricular, and instructional concerns are applied and addressed, resulting in a summary of conclusions that advocate for a broader inclusion of music in interdisciplinary programs. The major findings include: Music can reduce stress and anxiety, music increases motivation, musicians and high academic achievement share a positive relationship, musical intelligence is a powerful way of knowing, and music is a central element to being human. Conclusion of the study results in five recommendations for practice.*

A casual search in today’s education journals reveals literally thousands of articles dealing with the concept and implementation of interdisciplinary studies. While what interdisciplinary education is will be briefly reviewed in the introduction to this paper, addressing that question is a lengthy work in itself. The purpose of this paper is more specific. I aim to veer away from the “how” to implement interdisciplinary education question that most articles seem to address, and deal more with the “why.” Specifically, this paper addresses the following question: why should music be considered for interdisciplinary studies? The first part of this paper provides an introduction to the issue and makes known some of the tensions with interdisciplinary education. The second part of the paper consists of a review of literature and studies from a wide range of sources that document the impact of music in educational environments. The third section focuses on the findings and offers recommendations and conclusions.

### An Overview of the Issue

There are a variety of definitions of what interdisciplinary education is, but most agree that it is an approach that consciously applies 2 or more disciplines of study within a central theme to promote greater understanding of all involved areas (Burton, 2001). Interdisciplinary education is the counterpoint to traditional subject-area education (Wiggins, 2001) and has become an extremely popular movement over the last 30 years (Burton, 2001). Wiggins (2001) argues in part that the recent movement in interdisciplinary education is responding to Howard Gardner’s (1983) theory of multiple intelligences and work

done by Frances Rauscher on what has become dubbed the “Mozart effect.” Ellis and Fouts (2001) suggest that the movement is founded in the progressive educational philosophy of John Dewey and others in the early 20<sup>th</sup> century.

When interdisciplinary education is implemented along side the already diverse subjects of language arts and social studies, educators who incorporate music into a broader curriculum are often questioned about the effectiveness of an approach combining music with more central core programs (Ellis & Fouts, 2001). This question raises yet another question: what subject areas in school are most important to teach? Eisner (2004) addresses this issue by arguing, “The kind of intelligence a culture prizes influences its development,” (p. 32) and today students live in a world where an “A” in math is valued more than an “A” in music. Works done by Rauscher and Shaw (1998) and their colleagues argue that music is able to increase learning and intelligence in other areas. They argue for a more central place of music in an education plan where special and peripheral programs are being cut to satisfy new budget demands.

There are many questions being raised about the aspects of interdisciplinary education. Wiggins (2001) organizes these questions into 3 areas of concerns: theoretical, curricular, and instructional. Among the *theoretical concerns* are: Does interdisciplinary education work better than teaching standard subject-area methods? Who benefits? Why is there a lack of consensus on what exactly interdisciplinary education is? Chief among the *curricular concerns* is the justification used to propose certain curriculum, and evidence suggests that there are instances

where art and music educators embrace the integration of disciplines to justify their position in the school and keep their jobs. Another curriculum question is which subject areas are most advantageously connected for this type of approach, and why? The *instructional concerns* are very direct: What will be the new expectation of teachers? What will the interdisciplinary lesson plans look like? What will be the expectation of student performance? (Eisner, 2004; Ellis & Fouts, 2001; Wiggins, 2001). This paper addresses the following specific questions and concerns from above as they relate to music as an interdisciplinary study: (1) What is the effectiveness of an approach combining music with more central core programs? (2) Does it work better than the standard subject-area methods? (3) Who benefits? (4) Which subject areas are most advantageously connected for this type of approach? and (5) What will the interdisciplinary lesson plans look like?

Before music can be considered for an interdisciplinary curriculum, first what music is and what it does must be identified. The following section is a thematic approach to reviewing literature from a wide range of fields to explain the interaction between music, intelligence, the body, academic and cognitive achievement, communication, the very core of what it means to be human, and applications of music in the classroom and school levels.

### **Music and Intelligence**

According to the National Commission on Music Education (2000), “music is beginning to be understood as a *form* of intelligence, not merely as a manifestation of it” (emphasis in original) (p. 106). Gardner (1983) offers the ground-breaking theory that we are comprised of many types of different intelligences. In his initial work he identifies one of them as musical intelligence. Demorest and Morrison (2000) support Gardner’s theory that intelligence is actually composed of separate intelligences with none of any greater importance than the others. Eisner (2004) offers that “we have in the idea of multiple intelligences not only a theory but more importantly a generous image of the varieties of human capacity” (p. 39). The National Commission on Music Education (2000) lends relevance to this study of intelligences by concluding that “since music is, for some learners, a powerful *way of knowing*, it can become, for teachers, a *way of teaching*” (emphasis in original) (p. 107).

Gardner’s (1983) research suggested that humans are equipped with a set of multiple intelligences, instead of one general intelligence, which blend together to form a unique whole for each of us. On describing what an intelligence is, Gardner offered that “intelligences should be thought of as entities at a certain level of generality, broader than highly specific computational mechanisms (like line detection) while narrower than the most general capacities like analysis, synthesis, or a sense of self” (p. 68). He also suggested that each intelligence operates according to its own rules and that each of them should be thought of as an individual system defying direct comparison to other intelligences. Gardner’s work identified 7 initial intelligences, while stressing that there can never be a single list of finite intelligences and continued searching will inevitably encounter new areas of human intelligence. The initial intelligences described by Gardner (1983) were linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, and the personal intelligences (interpersonal and intrapersonal). Focusing on musical intelligence, Gardner (1983) notes that first the cores of music have to be understood. These cores identified by Gardner are pitch, rhythm, and timbre, and all fall within the core description of music elements as given by others in the field (Fiske, 1990; Swanwick, 1988). In this theory pitch is identified as melody, rhythm as auditory frequencies grouped together by a system, and timbre as the characteristics and qualities of a tone.

Gardner (1983) also covers the development of musical competence, which is central to understanding musical intelligence. He posits that in infancy children begin to emit individual sounds, singing as well as babbling. Moving into the second year of life children begin to explore various sound intervals on their own, vocalizing series of tones that explore note relations at first difficult to notate, but swiftly move to produce sections of familiar songs from their environment. At two or three many children can match large segments of familiar songs, and by school age most can understand the basics of songs from their environment and can imitate and recreate those that are commonly heard. There is very little further musical development among most children, excepting those thought of as gifted, when school begins.

Gardner’s presentation of musical development is supported by Swanwick’s (1988) study, in which he identifies eight developmental modes organized into four phases, expanding on



the age-specific ranges offered by Gardner. After the mastery phase (age 0-4) and the imitation phase (age 4-9), Swanwick offers that upon pursuit of music children of ages 10-15 go through an imaginative play phase, and after around age 15 they reach the meta-cognition phase. The imaginative play phase involves the child speculating about music, making new relationships among sounds, experimenting with new ways to make and organize sounds, and to basically let the imagination take fire. During the meta-cognition phase, children pass through symbolic and systematic stages whereby music begins to carry a sense of value and meaning, as well as becoming personally significant for the individual (Swanwick, 1988).

Musical intelligence, as with all the intelligences, shares many positive relationships with the others (Gardner, 1983). As with language, musical intelligence is not dependent upon physical objects in the world and ability can be elaborated by simply exploring and exploiting the oral-aural channel. The link between music and bodily-kinesthetic is exemplified in young children who can rarely sing without engaging in accompanying body movements. The location of most musical abilities in the right hemisphere of the brain suggests that spatial and musical abilities may be closely related, especially given that many musicians can create sounds off visual representations, such as musical notation or contours of lines. Emotions occupy a prominent role in interpersonal and intrapersonal intelligence, and music can serve as a powerful way to capture and transmit emotions. Logical-mathematical and musical intelligence have long been thought to have many similarities. Gardner (1983) concluded as well by arguing, "When it comes to an appreciation of basic musical structures, and of how long they can be repeated, transformed, embedded, or otherwise played off one against another, one encounters mathematical thought at a somewhat higher scale" (p. 126).

While Gardner (1983, 1995) offers that music is an intelligence that interacts with other intelligences, Fiske (1990) suggests "that there is good reason to consider music as a metalanguage, processing of which is controlled by a self-contained, information encapsulated, domain specific, modular cognitive system" (p. 23). He offers two hypotheses, suggesting that music is a metalanguage and music listening is a process of making decisions. Fiske's

conclusions are encompassed in his 6 axioms of musical systems. They are:

- (1) Music cognition is unique to human brains...
- (2) Identification of patterns is limited to tonal and rhythmic relationships...
- (3) Music cognition requires time and effort...
- (4) Music pattern comparison procedures represent a semantically closed (self-reference), metalanguage) system...
- (5) The pattern comparison component of music cognition is a multi-stage decision hierarchy...
- (6) Musical meaning is the set of realized (i.e., constructed by the listener) tonal-rhythmic relationships resulting from the relative success in penetrating the music decision-hierarchy; depth (profoundness, richness, etc.) of meaning is dependent upon extent of hierarchy penetration. (Fiske, 1990, pp. vii, ix, xi, 16, 42, 85)

Taken together, these axioms illustrate that music is a complex and integral system of the human being.

Reimer (1999) posits that humans use different, distinctive modes of reasoning, thinking, and creating for various experiences in domain-specific ways. Reimer states,

Work in cognitive science has clarified the fact that human knowing and intelligence are multifaceted and that various musical involvements provide opportunities to operate at the highest levels of cognition that humans are capable of – to understand, to create, and to share meanings as only music allows people to do and to exercise the intelligence particular to and dependent on each musical role. We have learned that musical doing, thinking, and feeling are essential ways in which humans make contact with, internalize, express, critique, and influence their cultural contexts. (Reconciling Musical and Other Purposes section, para. 5)

Reimer also argues that transfer of information from one area of knowledge to another isn't automatic or readily accomplished. Transfer is uncertain and an arduous task (Reimer, 1999).

Responding to the field over a decade after his initial theory was published, Gardner (1995) attempted to clarify use of the ideas of

intelligence and domains. Gardner claims partial blame for the misunderstanding use of the concepts in not being as careful as he should have been when using the terms in his initial work. An intelligence is summed up as a biological and psychological potential which is further realized. Gardner (1995) responds to critics by clarifying, "In contrast, a domain is an organized set of activities within a culture, one typically characterized by a specific symbol system and its attendant operations" (p. 201). Gardner further states that one attribute of a domain is that it can be realized through several intelligences, and gives an example of the domain of a musical performance which involves both musical and bodily-kinesthetic intelligences.

### **Music, the Brain, and the Body**

Neuromusical research is a school of study that is being used to help understand the relationship between music and the brain (Gardner, 1983; Hodges, 2000), but the reporting of information from the field is often found in either scientific magazines or in simplified articles of mass media. Hodges (2000) highlights five key findings from the field of neuromusical research that are pertinent to examining music and its relationship with the body and the brain. In the following paragraphs I use the summary of findings by Hodges to organize a review of neuromusical research.

Hodges (2000) offers as the first finding that the human brain carries the innate ability to participate in music. Music is a species-specific trait that only humans have and is one that all humans have (Demorest & Morrison, 2000; Hodges, 2000). Compared to animals, only humans immerse themselves in musical cognition and musical activities (Fiske, 1990). Most, if not all, animal sound-making involves signaling, territoriality, courtship, and mating. The claim that animals are musical is lost when such animals are unable to recognize patterns of sounds structures when they are transposed to a different key, whereas humans are able to grasp the change (Hodges, 2000). As touched on previously, sound structures are at the core of musical understanding (Fiske, 1990; Gardner, 1983; Swanwick, 1988).

The second finding, summarized by Hodges (2000), is that the human brain operates musically at birth and continues to do so throughout life. Babies actually begin responding to music before they are born (Hodges, 2000; Weinberger, 2000). Also, learning to play

musical instruments is advised by neuroscientists to help avoid Alzheimer's disease and other cognitive debilities (Hodges, 2000). The healing properties of music on the body and brain are discussed below.

The third neuromusical finding is that early musical training affects brain organization, more so if the training is ongoing (Hodges, 2000). Hodges offers that anything done in early childhood probably has an effect on how the brain is organized. However, studies note that the auditory cortex is increased in size, and parts of the cerebral hemisphere are increased in thickness when comparing musicians to non-musicians (Hodges, 2000; Wilcox, 2000).

In the fourth finding of neuromusical studies, Hodges (2000) summarizes that the human musical brain is comprised of widely distributed neural systems that involve specialized regions. Some of the different systems involved include the auditory, visual, cognitive, affective, memory, and motor systems. Physiological and physical changes in listeners of music can include rhythmic foot tapping and head bobbing, as well as changes in body systems such as heart rate and blood pressure (Campbell, 1997; Hodges, 2000; McCaffrey & Locsin, 2002).

Summarizing the final finding, Hodges (2000) reports that the musical brain of humans is extremely resilient. He continues by stating that even people who become deaf, blind, retarded, affected by an emotional disorder, or develop disabilities or diseases continue to have a meaningful musical experience. This is possible because various music functions are handled in different portions of the brain, and musical therapists offer that their disabled and extremely ill patients are still able to function by understanding different elements of music (Hodges, 2000).

Studies done by Roseman (1991), Campbell (1997), Montello (2002), and McCaffrey and Locsin (2002) all suggest that music can take an active role in healing and calming. Music is a powerful tool for stress management, and both active and passive listening to calming music can reduce stress and anxiety (Campbell, 1997; McCaffrey & Locsin, 2002; Montello, 2002; Wilcox, 2000). According to McCaffrey and Locsin, music with a speed of 60 to 80 beats per minute that also avoids qualities such as instrumental or vocal swells, heavy percussion, and recurrent bass lines is restful. When actively listened to or used in the background, restful music can reduce anxiety and stress among listeners through the process of entrainment.

McCaffrey and Locsin (2002) state, “When the body becomes entrained to music with a slow, smooth rhythm, the heartbeat can be slowed, breathing rate can become slower, and blood pressure can be reduced” (para. 19). Entrainment can also produce a steady shift from one physical or emotional state to another by gradually changing the pace or content of the music listened to (McCaffrey & Locsin, 2002).

In a study on adolescent depression, Hendricks, Robinson, Bradley, and Davis (1999) conducted a test in a junior high school to see if they could reduce levels of student depression with music therapy. They subjected the test group to a variety of group-based strategies attempting to stimulate them by playing music of certain energy levels at certain times to elicit hypothetical responses. The control group held weekly discussions and participated in supportive group activities. At the end of the 10-week study the test group made significantly greater improvement on the Beck Depression Inventory compared to that of the control group (Hendricks et al., 1999).

A very active effect that music can have on the body is a type of pain killer. Some dentists and doctors have even begun to use music pain-control therapy with consensual patients to reduce the amount of anesthesia used (Wilcox, 2000). McCaffrey and Locsin (2002) offer that when through entrainment a place of very slow rhythm has been reached, patients require less anesthesia and recover more readily from surgery with a reduction in side effects. In her ethnographic study, Roseman (1991) describes the Temiar people of Malaysia and their unique approach to healing. Through the medium of healers, the Temiars perform ritualistic dream songs that are actively used for pain-killing, restorative, and curative effects through social musical interaction and trancing ceremonies. It has also become clear that the study of music at any age can increase quality of life (Wilcox, 2000).

### **On the “Mozart Effect”**

Over the past decade discussion about the “Mozart effect” of music on listeners has been much debated (Wilcox, 2000). The effect, while having a variety of informal explanations, has been widely used to make the general claim that music makes people smarter (Campbell, 1997; Demorest & Morrison, 2000). Research subjects of studies done in 1993, and again in 1995, who listened to 10 minutes of Mozart’s Sonata for Two Pianos in D Major (K. 448) exhibited

improvement in spatial-temporal, and spatial reasoning tasks (Demorest & Morrison, 2000; Rauscher & Shaw, 1998). The increased improvement on the specified tasks lasted for 10 minutes. The piece of music was selected because it has extended use of symmetry and sequences of natural patterns and a complex structure. All of these elements are essential, and music lacking these patterns does not yield the “Mozart effect” (Rauscher & Shaw, 1998; Reimer, 1999).

Rauscher and Shaw (1998) summarize the trion model of the cortex to explain how the effect may take place. In the model, the neural network of the cortical column “can be excited into complex firings which, in the trion model, are exploited in the performance of tasks requiring ability to recognize and classify physical similarities among objects –*spatial recognition tasks*” (emphasis in original) (p. 835). The model also suggests that the firing patterns themselves allow for the more complex spatial-temporal tasks to improve, such as paper-folding. Leng and Shaw propose “that exposure to music might excite the cortical firing patterns used in spatial-temporal reasoning, thereby affecting cognitive ability in tasks that share the same neural code – spatial-temporal tasks” (as cited in Rauscher & Shaw, 1998, p. 836).

Spatial-temporal reasoning can be found in tasks such as mathematics, engineering, and playing chess (Rauscher & Shaw, 1998; Reimer, 1999), and involves the manipulating and understanding of images. Gardner (1983) expands on the issue by stating, “Central to spatial intelligence are the capacities to perceive the visual world accurately, to perform transformations and modifications upon one’s initial perceptions, and to be able to re-create aspects of one’s visual experience, even in the absence of relevant physical stimuli” (p. 173). Furthermore, it is argued that music also shares the same aspects of temporal neural activity of mathematics, engineering, science, and chess (Rauscher & Shaw, 1998). Reimer (1999) suggests, “If particular kinds of music and particular kinds of musical training improve such reasoning, then the case can be made that music should be included in education because of its positive effects on math, science, and other such learning, rather than because of its own worth” (para. 13).

Of major importance to the argument is that these studies apply to one spatial subtest of the Stanford-Binet intelligence scale, and the effect is narrower than can be reflected in the IQ

measurement of general intelligence (Demorest & Morrison, 2000). The results of the spatial-temporal paper folding task given to participants of the study were significantly higher for the group who listened to the aforementioned Mozart Sonata than the test groups who did not. Two other tests that were offered, which were non spatial-temporal tasks, involving matrices tasks and pattern analysis, showed no relevant evidence of improvement in any of the groups studied (Rauscher & Shaw, 1998). Subsequent attempts by several researchers to duplicate the effects documented by Shaw and his colleagues have failed (Demorest & Morrison, 2000; Reimer, 1999).

Because of the narrow scope of the actual “Mozart effect,” critics such as Demorest and Morrison (2000) suggest that applying this field of findings to the general and music education of children may be inappropriate. Reimer (1999) also argues against broadly applying the documented positive gains in spatial reasoning under the “Mozart effect” to other cognitive areas, because the field of needed research is still too small. He questions the reversibility, experimental selectivity, measurement methodologies, and the external validity of the studies done by Rauscher as well as by her colleagues. Costa-Giomi (2000) argues that “it is unclear which type of spatial abilities are affected by music instruction, and it is also unknown whether the improvement in spatial abilities is long lasting” (p. 59). Rauscher and Shaw (1998) themselves concluded, “Although it is likely that music-induced enhancement of spatial-temporal reasoning can increase over time, more work is needed before substantial practical applications can be derived” (p. 840).

Another consideration for applying the “Mozart effect” is that of a potential backlash. Scholars are concerned that if the research done by Rauscher, Shaw, and their colleagues become too conclusive or misused, that the purpose of music education may become compromised (Racin, 2000; Reimer, 1999). Racin (2000) continues by identifying three main issues along this line of reasoning: “Questions about the soundness of the research being publicized; problems inherent in communicating scientific research to a mass audience; and basing a philosophy of music education on non-musical benefits of music study” (p. 20). Racin’s last issues segues into a profound question by Reimer (1999). Reimer asks that if music programs become supported purely for their basis to develop spatial-temporal reasoning

abilities, then what would it mean for music education?

### **Academic Achievement and Cognitive Growth**

While the findings of the “Mozart effect” and its long term implications are still under review, the field at large is in agreement that music and high levels of academic achievement share a positive relationship. A wide range of studies and articles claim that students who study music in school score better on standardized achievement tests, win more academic honors, and earn higher grades than students in the general school population (Catterall, Chapleau, & Iwanaga, 2000; Costa-Giomi, 2000; Demorest & Morrison, 2000; National Commission on Music Education, 2000; Rarus, 2000; Trent, 1996; Wilcox, 2000). Specifically, higher grades in math, English, science, and history are reported, with higher test score results in reading, citizenship (Demorest & Morrison, 2000), and mathematics (Catterall et al., 2000; Rarus, 2000). Music education also promotes higher order cognitive skills such as critical thinking, problem solving, and teamwork (National Commission on Music Education, 2000).

Rarus (2000), using 1999 SAT test result data reported by the College Entrance Examination Board, notes that:

SAT takers with coursework/experience in music performance scored 53 points higher on the verbal portion of the test and 39 points higher on the math portion than students with no coursework or experience in the arts. Scores for those with coursework in music appreciation were 61 points higher on the verbal and 42 points higher on the math portion. (p. 56)

In this report only students with coursework in “Acting/Play Production” or “Drama: Study or Appreciation” scored higher than students with music coursework, with differences of 3 points between the highest drama and music categories of both the verbal and math mean scores.

Trent (1996) conducted a study on high school students “to determine the extent to which instruction in instrumental music as a performing art influences academic achievement in selected non-music areas, including: Mathematics, language arts, and reading” (p. iv). The study groups consisted of (a) a group of instrumental music students, (b) those who participated in non-music extra-curricular activities, and (c)

students who participated in neither. Trent found that students who participated in the program of instrumental music instruction scored significantly higher in both math and language arts on standardized tests than the group who participated in non-music extra-curricular activities, and even higher than the group who participated in neither of the activities. Accounting for the difference in results, Trent offers that encouragement by teachers and activity instructors, involvement by more motivated students, and the possibility that students involved in extra-curricular activities stay out of trouble could all be accountable factors. Trent concludes that “there is evidence that the study of music has a positive effect on other academic areas” (p. 50).

Catterall, Chapleau, and Iwanaga (2000) conducted a two-year research study exploring arts and human development, and their interaction with achievement. The focus of the study was on students from the 8<sup>th</sup> to 12<sup>th</sup> grades, and results were reported for both all students and low SES students. The major finds of the study indicated that there were gains in academic development, especially mathematic achievement, for music-involved students. These gains were noted both at the 8<sup>th</sup>-10<sup>th</sup> grade and 10<sup>th</sup>-12<sup>th</sup> grade measurement stages and were more noticeable over time. Specifically in math at the 12<sup>th</sup> grade level, the researchers measured the probability of scoring high in mathematics (as measured by attaining level 4 or 5 on the National Educational Longitudinal Survey NELS:88 – see Catterall et al., p. 74). The average student had a 20.9% probability of scoring high on math while students of high SES and a high musical background had a 48% chance. According to Banks (2001) and Ovando, Collier, and Combs (2003) SES is the largest predictor of academic achievement. Catterall et al. (2000) noted that low SES students with a high musical background had a 33.1% probability to score high on math compared to the 15.5% chance that low SES and no music students had. Catterall et al. suggest that involvement in instrumental music helps develop an increased cognitive development in mathematics. In conclusion they argue, “The main implication of this work is that the arts appear to matter when it comes to a variety of non-arts outcomes, some of them intended and some not” (p. 98).

Various studies offer that instrumental instruction in piano/keyboard can assist in academic achievement, cognitive development,

and spatial reasoning (Costa-Giomi, 2000; Demorest & Morrison, 2000; Eady & Wilson, 2004; National Commission on Music Education, 2000; Trent, 1996). Costa-Giomi (2000) conducted a study measuring the cognitive development of children over the course of 3 years of piano instruction in a study group of 117 children, none of whom had participated in music instruction before. The study group was divided into groups of those who would learn piano over the next 3 years and those would not. The results of the study show at the end of the first and second year a significant rise in scores of the cognitive and spatial abilities of the group learning piano over those who were not, but by the end of the third year there were virtually no difference in scores of cognitive and spatial ability between the two groups. Based on these findings Costa-Giomi (2000) concluded, “If it is true that music instruction produces modifications in children’s neural processes, one would expect the cognitive improvements to be permanent” (p. 68). She further states that her research could be of interesting use to educators seeking to help children develop cognitive abilities over a one or two year period of time.

Fiske (1990), as noted in a previous section, offers as his third axiom of musical systems that “music cognition requires time and effort” (p. xi). Costa-Giomi (2000) noted that “after the initial enthusiasm disappeared and progress in learning the piano required more effort and intense involvement, the continuous effect of musical instruction on cognitive development became more dependent upon student’s dedication to the task” (p. 69). What Fiske and Costa-Giomi point out is clearly an element of diminishing returns when looking at the cognitive benefits associated with music learning. Gardner (1983) identifies several stages in music learning where the time required to continue music development increases to the point of interfering with other aspects of a child’s life, and the important decision of whether to continue learning music or not has to be answered. Motivation is a key attribute of learning (Ovando et al., 2003) music successfully (Costa-Giomi, 2000; Eady & Wilson, 2004; Trent, 1996), and factoring it into a study of this size is problematic.

Demorest and Morrison (2000) and Racine (2000) look at the soundness of the research. Racine recounts that most students who receive musical instruction are not your typical students, but are academically better students to begin with. Demorest and Morrison support the

thoughts shared by Racine (2000) and use an example of how 5th grade band students who scored high on their Comprehensive Test of Basic Skills (CTBS) were really a group of students who scored high on their CTBS in the 4th grade before beginning band. Demarest and Morrison continue by arguing that “instead of claiming that ‘music makes you smarter’ (academic achievement as a result of music study), we accept the equally likely conclusion that students who participate in music and the other arts tend to be the most academically successful” (Music and Academic Achievement section, para. 7).

### **Music and Being Human**

This section draws on the body of literature used for this paper in an attempt to explain how music is at the very core of what it is to be human. A daunting task to be sure, but the articulated thoughts of a wide range of scholars should do the topic justice. The following section builds on the neuromusical research information presented in a previous section, specifically finding one that the human brain carries the innate ability to participate in music (Hodges, 2000). Hodges sums up that “we all have the capacity to respond to and participate in the music of our environment. Music, then, is one of the hallmarks of what it means to be a human being” (para. 10).

Looking at the role of teaching and learning music, Reimer (1999) identifies that music has been recognized to meet a variety of human needs and argues that some human needs can only be met by music through the meanings, satisfactions, and significances that only musical sounds provide. Catterall, Chapleau, and Iwanaga (2000) are in agreement with Reimer. Among these needs is the recognition of students who identify themselves through the arts, and a more active involvement of the arts in school curriculum would have a series of positive impacts on these students. Addressing these impacts they offer, “Not the least of these are skills in the various arts themselves, competencies as critics of art forms, aesthetic awareness, cultural understandings, appreciations valuable in their own right, and newfound powers and joys to see and express” (p. 96).

Music has been found to have a positive impact on motivation and the drive to succeed. Wilcox (2000) summarizes that regardless of biological or socioeconomic backgrounds children who actively pursue music become better listeners, more sensitive, and more

confident. They also tend to become natural leaders and do better academically than their peers. Catterall et al. (2000) further argue that the arts do matter because not only do they promote cognitive growth, but also because they serve as agents to motivate students for academic success. The National Commission on Music Education (2000) found that music helps foster growth in self-esteem, self-discipline, and individual creativity. Eady and Wilson (2004) found that there is a connection between music and continuing motivation of a student, and summarize that students who are unmotivated often become motivated because of music.

The diversity that music brings with it to a classroom has often been praised. The National Commission on Music Education (2000) states, “Music is one of the few areas of study available to children that can bring such a diversity of positive factors together in the same classroom at the same time” (p. 112). Johnson (1985) suggested that music can reflect the cultural context of an environment, and that it “may also help to shape attitudes, values, and perspectives in the sense that people of almost all societies learn something external to the music sound from the music they experience” (p. 53). Johnson also argues that music and songs have the power to teach or enculturate. Music is rarely presented on its own for understanding; it is usually preceded, followed, or accompanied by speech, drama, dance, or other multi-media events. Johnson later clarified that music should not be used to enculturate on its own, and should be used in a diverse educational environment.

Music is often thought of as a universal language, able to span barriers that formal language may present. Robertson (1985) supports this idea, going so far as to say that music allows for message coding, teaching metaphors, and assistance assimilating complex social explanations across cultural and linguistic differences. Cross-cultural studies have concluded that if music is not a universal language (taking into account that we do not automatically understand the music of different cultures), music itself is universal (Hodges, 2000). Garfias (1985) articulates that as we become a more culturally diverse nation, music will help bridge the difference between cultural perspectives. He offers that “music represents the most complete, complex, and fully articulated means by which man communicates with his fellows” (p. 28). As an ethnomusicologist and museum educator, Johnson (1985) often deals with people of varied levels of communicative

ability, and asserts that music is able to help create effective transmission of perspectives, concepts, and understandings to those who may otherwise be unable to grasp the information being presented in formal methods.

Emotions are a powerful aspect of humanity that can be included in music. Gardner (1983) claims that “if music does not in itself convey emotions or affects, it captures the *forms* of these feelings” (p. 106) (emphasis in original). Racine (2000) touches on that a supporting argument for music education programs is that when words fail to express human thought, the symbols of music instead can be used to communicate man’s innermost feelings.

Addressing the social aspect of music, Swanwick (1988) states, “Above all, music is a social art, where playing with and listening to others is the motivation, the experience and the learning process. This is music education by *encounter*” (emphasis in original) (pp. 127-128). Culture by definition is a social construction (Geertz, 1973; Ovando et al., 2003), and the interaction between two or more people allows for a social encounter and cultural transmission. Fiske (1990) builds on the idea of the social music encounter and notes, “Appearance-value is created by the listener in which an affect, based on the listener’s own life experiences, finds ground with particular musical patterns” (p. 129). Fiske further clarifies that since individuals make their own connections to music, as either listener or performer, different values and connections can be made based on the experiences and identities of the individual. Given this, similar values between performer or music and the listener can only be attained if all parties involved have similar value systems or levels of music cognition.

The body of literature on the interaction between music, culture, and being human is extensive, and a work of this length is unable to include even a fraction of the material available. That is a book or three in itself, but a final thought from Gardner (1983) should help to place the essence of music against the larger whole of being human. “The anthropologist Lévi-Strauss is scarcely alone among scientists in claiming that if we can explain music, we may find the key for all of human thought – or in implying that failure to take music seriously weakens any account of the human condition” (p. 123).

### **Music in the Classroom and School**

The following section refers to literature from both teachers and researchers in an attempt to illustrate the theoretical concepts noted above and to ground this work in the practicality of classroom and school-wide situations.

While examining the correlation between music, reading, and writing in primary grades, Langfit (1994) observed, “Music is a powerful medium that educators can and should incorporate into their classrooms” (p. 430). She found that by using the power of music her students were aided in becoming more successful at reading and writing, and adjusted her teaching approach thematically to support this method. Specifically, Langfit reported that her students exhibited great enthusiasm in writing new verses to well-known children’s songs. Spelling and grammar were examined and taught after all the students had created their own verses that use sentences the students themselves had created. She concluded by arguing that having children create their own book was the best way to get children excited about reading. The books she used to teach reading and grammar were created by students writing their own story lyrics to the tunes of familiar songs (Langfit, 1994).

Eady and Wilson (2004) report that rap and jazz are excellent musical forms to use for incorporating music into more engaged secondary language arts classrooms. Rap music has a steady beat that verbal passages can easily be read to, allowing students to stress the rhythmic nature of language and poetry by personalizing their readings. Jazz is highly improvisational, with the character of the music changing as tempo, volume, and rhythm are altered over the course of a single tune. Students who read passages to jazz are forced to change their style of reading as the music shifts along improvisational movements. These movements create great opportunities for students to take turns during the segments to do call and response reading to each other. Excitement is generated to read during extended passages as solos while improvising the cadence of the literature to match the music. Peer acceptance is also more readily acquired during this process as skills in constructive self-criticism and self-evaluation are developed (Eady & Wilson, 2004).

Math has often been said to have the most in common with music among the core subjects in school (Gardner, 1983), and along with science offers a wide variety of hands on interdisciplinary opportunities. Johnson and Edelson (2003) report that music is a great way

to help teach math concepts in elementary classrooms. They suggest, “All a teacher needs is a set of rhythm instruments, many of which can be made by the children; a few charts or posters depicting musical instruments; a phonograph, tape recorder, or CD player, a few musical selections; and an object that can serve as a baton” (para. 3). With these tools the children are able to explore the sign systems of both math and music to construct meaning. Johnson and Edelson also explore pattern relationships in math that can be beaten out in patterns on rhythm instruments, and then have students analyze the rules of the pattern to predict what will happen next. They offer that using music in this way helps students develop the skills of analyzing and predicting (Johnson & Edelson, 2003).

Specific concepts can be taught with the aid of music. Ratios and fractions stand out as remarkably easy to teach with this type of approach. According to Johnson and Edelson (2003), ratios are at the heart of why instruments are constructed the way they are to produce sounds, and fractions are easily taught by getting students to figure out how to make beats of certain lengths fit into the time signature of a given musical piece. They conclude that, among other things, music integrated mathematics helps children who are strong in logical-mathematical areas and provides a student-valued learning environment. Favorite songs can also have their note relationships graphed out for symbolic patterns, not only to examine how the song works, but to teach graphing skills as well (Brown & Brown, 1997). Yasso (1991) suggests that at the secondary level, the learning of concepts in physics can be benefited by the students figuring out how certain musical instrument types such as string and wind instruments work. Understanding the process of how music is created by these instruments can lead to a greater level of mathematical and scientific understanding.

According to Rosenbloom (2004), social studies is already a conglomeration of disciplines and that adding music to the classroom helps to develop natural connections to both subjects. In his findings, he argues that in the interdisciplinary approach music “vivifies and humanizes” a class that could otherwise be a dry list of facts, and that music is “an integral and indispensable” part of a student’s education (p. 42). Rosenbloom (2004) notes that using musical pieces to help explore historical issues is only meaningful if the music was written close to the period of events it refers and relates to, not

with contemporary pieces that illustrate historical significance. He offers extensive curriculum connections between social studies and music. One example consisted of students learning more about the missionary efforts of Pope Gregory I through the singing of Gregorian chants -- specifically the work *Liber Cantualis* (Rosenbloom, 2004).

Encouraged by the idea that music can help foster positive atmospheres, Chalmers, Olson, and Zurkowski (1999) conducted research to see what the effects of playing music in an elementary school lunchroom would be. Using a hand-held decibel meter, they recorded that over a period of many observations playing classical music in the lunchroom tended to lower the noise level by 7%, while popular music created a 12% reduction. The researchers also noted that during lunch when music was playing, behavioral problems were reduced by approximately 65%. Among their recommendations, they offer that appropriately selected music should be consistently played in the background of classrooms to help establish mental and physical focus to allow for a more relaxed learning environment and to provide stress reduction (Chalmers et al., 1999).

### Conclusions

This paper has touched on many dimensions of music in the classroom. A review of music and intelligence has revealed that music-minded students benefit from using music during instruction. An overview of areas such as neuromusical research, the “Mozart effect,” and the relationship between music and academic development have made it clear that music can be included in effective teaching strategies. A highlight of how music is being used in several classroom environments has provided examples of what interdisciplinary lessons that involve music can look like. Combining all of these elements, it has also been touched on that using music is a pathway to explore what it means to be human. Based on the research provided, the following summaries can be concluded:

- Music is an intelligence on its own, and is a powerful way of knowing and understanding the world in which we live.
- The brain is musical before birth and persists musically throughout life.
- There are positive connections between music and the nervous system that allow music to aid in the reduction of stress and



- anxiety, assist as a pain killer, and provide an active role in restorative and curative healing.
- While the specific findings and implication of the “Mozart effect” are still being analyzed, there is empirical evidence that suggests music does improve the ability to perform spatial tasks, however the duration of such benefits is still inconclusive.
  - The question of whether music should be used to teach non-musical abilities, as opposed to its normal role in music education, needs to be addressed by educators.
  - There is a positive relationship between musicians and academic development as measured by grades and standardized tests. It is inconclusive as to whether music aids in increasing the achievement or if the students who normally succeed are the ones who pursue music, but research shows that students of low SES (which is the primary predictor of academic achievement) can increase their academic growth by pursuing music instruction.
  - Music has a powerful communicative ability that can transcend language and cultural barriers, as well as sharing emotions, meanings, and systems of understanding to those who otherwise may not be able to communicate through spoken or written language.
  - The act of participating in music is a social event and can assist in the transmission of culture.
  - Music is a powerful motivational factor among students.

In addition, music is already being used in schools in ways that support many of these findings.

There is much work that can still be done on this subject, but I believe that is the case with any study. It is essential that future educators further explore and define the role that music can hold in public education. Educators need to determine whether they are going to use music for the sake of music, use music to nurture other skills, or to include music in interdisciplinary studies to balance the use of music as both a subject and a process. The implications of the “Mozart effect” need to be specifically given more attention, as justifying the teaching of music on the basis that it can develop other non-musical abilities will place the future of music education in a precarious position if the hypothesis becomes unfounded. We are just

beginning to understand the more complex functions of the brain, and more specific information on how the brain interacts with music needs to be researched, as well as analyzed, before any implementation is done. The last area covered in this paper that needs further research is whether or not playing music increases academic achievement, or if those students who pursue music are already the high academic achievers.

It can be concluded from this summary that music is truly a powerful force that can be harnessed in the classroom. The juxtaposition of its innateness to being human and its view as a specialized field in dominant United States culture have probably left many future teachers so confused by what music is that they are apprehensive about drawing upon it as a resource. The next section contains several recommendations for teachers interested in incorporating music into their classrooms.

### **Recommendations for Practice**

The hardest step for any educator may be taking theoretical knowledge and transitioning it to practical application within a classroom. Below are recommendations for the practical use of music in an interdisciplinary classroom based on the preceding review of literature:

- *Use music as an environmental tool.* The research here suggests that playing calming, relaxing music in the background during instruction can help foster a less stressful environment, reduce anxiety, and increase the motivations of students. This music should be familiar enough to the students so that they are not totally focusing on elements so foreign within the sounds that they are disconcerting (e.g., don’t play Chinese or Bulgarian folk music unless a teacher is prepared to have to students focus just on the music), and the music should not have swells, solos, or other attention-grabbing sections.
- *Encourage students to pursue musical instrument instruction.* Regardless of which is the cause and which is the effect, the positive relationship between students who pursue instrumental music instruction and increased levels of academic achievement is clearly documented.
- *Have students use music as a form of expression in combination with presentations or writings.* Research has shown that setting phrases, stories, or poetry to music allows for a greater of chance of the information being

remembered. If you have students read in class, you can have them do so to rap or jazz so help foster their innate musical abilities, as well as increase their interest and chance of remembering the material later.

- *Use music as a tool to illustrate historical events or differences between cultures.* Music can be an inviting way to illustrate to students to differences between cultures, to feel the way people live in different places and societies. Research has also shown that music composed during specific events can also be explored by students so that they get a sense of what people were thinking and going through at that time.
- *Encourage music participation from all students.* Neuromusical research has shown that all humans have a musical brain. Teachers can musically encourage their students by having them participate in relatively simple exercises, such as beating out rhythms on drums or shakers. Patterns can be explored during these exercises, chanting can be set to it, and rhythms of other cultures can be explored. These experiences will help students realize that music is part of everyone, and not just something done by specialists.

### Closing Thoughts

This paper has attempted to bring together the many complexities of what music is, how it interacts with humans, and why it should be thought of as more than mere entertainment by teachers. To reach more students effectively, music needs to be included in appropriate interdisciplinary studies. The conclusion by the National Commission on Music Education (2000) is revisited here again: "Since music is, for some learners, a powerful *way of knowing*, it can become, for teachers, a *way of teaching*" (emphasis in original) (p. 107).

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## **Incorporating Critical Inquiry Pedagogy in Social Studies Curriculum**

*This is an exploration of the rationale and justifications for the implementation of critical inquiry pedagogies within social studies curricula. Critical inquiry pedagogy is a constructivist approach to knowledge formation that critiques traditional knowledge constructs and includes essential elements of critical theory and other progressive educational theories. It is pedagogical perspective that involves the interrogation of traditional funds of knowledge through co-participatory and non-hierarchical discourses. This paper focuses on the following aspects of critical inquiry pedagogy: theoretical origins, views and perspectives of contributing radical and progressive theorists, an exploration of the conservative opposition and the progressive response, and an introduction to the application of critical inquiry pedagogy in classroom environments.*

This paper analyzes critical inquiry pedagogies within social studies curricula. The perspectives are those of progressive and radical educators, philosophers, and historians who recognize the failing of traditional social studies curricula to address its racial inequalities, political marginalization, and historic Eurocentric and cultural biases. Critical inquiry pedagogy seeks to expose students to debates on issues of social justice, yet not predetermine the outcome of the debate. As Fecho (2000) posits, critical inquiry pedagogy facilitates an environment where students can come to their own conclusions about the current status and future direction of democracy within the U.S. (p. 194).

According to Graff (2000), progressive educators generally agree that the democratic ideals of western culture are “compromised by issues of domination and inequality within society” (para. 8). Yet as currently constructed, social studies curricula perpetuate racist and sexist ideas in U.S. society and furthermore supports its classist social paradigm (Banks, 1995; Giroux, 2004; hooks, 1994; Loewen, 1995; Spring, 2005; Swartz, 1993). This paradigm is reinforced by teachers who provide their students with a Eurocentric pedagogy and curricula that excludes or minimizes the contributions of people of color to U.S. history (Loewen, 1995). As a result, students of color and white students of low socioeconomic status whom hooks (1994) defines as the traditionally marginalized are under represented in the curricula.

Teachers who do not engage in critical discourse of U.S. society do their students a disservice and contribute to a gap in achievement

between middle class majority students relative to students of color and low socioeconomic status (Bartolome, 2004). According to Giroux (2004), knowledge within social studies curricula should reflect the sociocultural and political realities of society (The role of curriculum in critical pedagogy section, para. 3). As Banks (2004) explains, knowledge construction in a society is directly related to the social, political, and economic contexts in which knowledge exists (p. 228). Furthermore, progressive pedagogies based on an additive or contributions approach have been attempted by educators since the Civil Rights era (p. 235). However, these pedagogies have failed to change continuing inequitable conditions within schools and within curricula. Graff (2000) suggests the creation of critical pedagogies based on student inquiry to facilitate a more equitable learning environment for students of color and white students of low socioeconomic status.

Fecho (2000) also describes curricula that are critical of the inequalities within U.S. society. He reaffirms Graff's calls for a critical pedagogy based on inquiry, and proposes an alternative to hierarchical discourse on issues of social justice and the historical marginalization of various minority populations. He instead proposes a pedagogy based on student inquiry that “crosses cultural boundaries and empowers students” (p. 195). He calls this concept critical inquiry pedagogy.

The discussion of critical inquiry pedagogy in social studies that follows is divided into three parts. The first part is a discussion on various progressive pedagogical perspectives and the historical and theoretical origins that have led to the construction of critical inquiry pedagogy.

Next is an examination of opposing views held by conservatives and progressives on critical theory and critical pedagogy and their application in critical inquiry pedagogy. The third part is an exploration of applied critical inquiry pedagogy in classroom environments. The third part also includes descriptions of what can result when critical inquiry pedagogy is introduced in classroom environments.

### **An Overview of Critical Inquiry Pedagogy**

In this section I review literature that is a summation of the perspectives that have led to the concept of critical inquiry pedagogy. Critical inquiry pedagogy is a constructivist pedagogical concept, according to Fecho (2000), that combines aspects suggested by various authors of progressive educational material. Critical inquiry pedagogy combines parts of equity pedagogy, transformative education, engaged pedagogy, inquiry pedagogy, and critical theory into one unified theory that promotes the formation of transformative knowledge through deeper analysis of established hegemonic constructs.

An equity pedagogy “exists when teachers modify their teaching in ways that will facilitate the academic achievement of students from diverse racial, ethnic, cultural and gender groups” (Banks, 1995, p. 392). This equity pedagogy is a key aspect of Banks' concept of transformative education. Vavrus (2002) states that transformative education “counters neutral, isolated images of educational policies and practices by bringing to the forefront critical theory's unifying concept of power relationships” (p. 7). An engaged pedagogy as propagated by hooks (1981, 1994) is similar to Banks' ideals of transformative education. However, hooks' theories are influenced heavily by her extensive studies of the social and economic constructs of the African nation of Kenya (Florence, 1998). Hooks' (1994) engaged pedagogy can best be described as a reconceptualization of the current knowledge bases of both students and educators in regards to issues of racism, sexism, and classism.

Inquiry pedagogy is also a building block in the construction of critical inquiry pedagogy. Inquiry pedagogy is “a process where students formulate investigative questions, obtain factual information, and then build knowledge that ultimately reflects their answer to the original question” (Fecho, 2000, p. 194). Critical inquiry pedagogy also includes aspects of social critique from critical theory. As described by Giroux

(2004) and Gordon (1995), critical theory seeks to provide a radical critique of knowledge, by taking into account the situations, structures, and interests that influence the construction of knowledge. Furthermore, when applied to curricula, critical theory embraces radical philosophies that run counter to pervasive Eurocentric hegemony (Swartz, 1993).

King (1995) defines hegemony as “the processes of domination that are maintained not through sheer force, but through consensual social practices” (p. 268). King further describes hegemony as the powerful winning the consent of marginalized populations through systemic and institutionalized oppression (p. 268). According to Gordon (1995), “[C]ritical theory is the critique of (hegemonic) domination” (p. 190). Critical theory posits a world that is progressively becoming less free. From this understanding, critical theory seeks to affect change upon the mechanisms of domination within U.S. society. It further implies that present configurations of society are not static and can be changed by concerted effort among the oppressed and their progressive majority allies (pp. 190-191).

### **Theoretical Origins of Critical Inquiry Pedagogy**

Each of the proceeding authors appears to have their theoretical roots in the philosophy of John Dewey. Dewey was a radical educational theorist in his time and his writings have served as a source of inspiration for subsequent generations of radical educators. He is cited numerous times in nearly all the works included in this review of literature. Therefore, when discussing such derivative matters, it is useful to begin with his words. Dewey (1915) sought a different kind of education, not one that would adapt workers to the existing industrial regime. Instead, he sought the creation of knowledge that would alter the existing industrial regime and ultimately transform it (p. 40). Dewey supported a type of education that would create a society that was more mindful of issues of social justice and equity—especially for the working class. According to Dewey, much of the education within U.S. schools serves as indoctrination into dominant ideals, “especially with reference to narrow nationalism under the name of patriotism, and with reference to the dominant economic regime” (Dewey as cited in Hursh & Ross, 2000, p. 60). This flawed idea of patriotism that Dewey speaks of has become one of the central aspects in the dominant culture's

arsenal to subvert transformative ideas. It has become overlaid with Eurocentric beliefs that reinforce Anglo hegemony in society (Kivel, 2002, pp. 86-87). Similar to Dewey, Counts (1932/1978) spoke of critical classroom pedagogies in opposition to societal hegemony. He called for teachers to use the classroom to build a socialistic society, and for teachers to become leaders, not just in their schools or local communities, but also as an effective, powerful political force.

Along with Dewey and Counts the Brazilian educationalist Paulo Freire is also one of the most quoted and prolific progressive educational theorists. His writings on issues of pedagogical reformation and progressive education have served to heavily influence the theories of many of the authors cited in this discussion. Freire (1985) explained that when textbooks exhibit culturally hegemonic, exclusionary, and non-representational approaches to history, they reinforce and legitimize ideals of hegemony over marginalized groups. In his book *The Politics of Education*, Freire (1985) suggests this hegemony is a social justice issue in that “any situation in which humans prevent others from engaging in the process of inquiry is one of violence” (p. 17). Moreover, Freire suggests an aspect of self-preservation in the suppression of knowledge and the educational policies of majority groups. Freire contends that “it would be extremely naive to expect the dominant classes to develop a type of education that would enable subjugated classes to perceive social injustices critically” (p. 102).

### **Other Progressive and Radical Theorists**

Others have joined Freire in citing self-preserving aspects of dominant culture. Mendel-Reyes (1997) states that the excessive exercise of democracy was written out of the Constitution from the nation's inception. Furthermore, he posits that the “founding fathers” methodically set up a procedural republic, held together by nationalism and other forms of self-definition in opposition to the “Other” (p. 231). Additionally, in response to various progressive movements within our society, members of marginalized groups who have assimilated and embraced dominant ideology have been placed in positions of prestige within the U.S. society. As Ogbu (1992) explained, these members of marginalized groups “who have made their way out of the ghetto, barrio, and reservation” often serve as the most tenacious defenders and

protectors of majority point of view and the status quo (p. 3).

Throughout the 20th century, despite these protections and barriers created by the dominant culture, progressive thinkers have promoted education as a means to develop the social conditions and intelligence that can enable citizens to make social decisions that support their community's welfare (Hursh & Ross, 2000, p. 3). These progressive educators believe that schools have the power to construct the ideals of democratic society, pass those ideals onto students, and encourage them to use those standards as a benchmark to judge both their own and other societies (Urban, 1978, p. x).

The idea of using education as a means of social reformation has its roots in a variety of theories and philosophies. Some, such as Giroux (2004), cite Marx and his critiques of the hegemonic social practices within capitalist societies. Giroux (2004) suggests the formation of critical pedagogies that appropriate theories from “feminism, postmodernism, and neo-Marxism” to counter pervasive conservative and assimilationist ideas within traditional social studies curricula (The role that teachers play in critical pedagogy section, para. 5). Giroux states that “practices of racism, sexism, and capitalist exploitation” inhibit the expansion of “social justice and human emancipation” within U.S. society (Affirming modernity's democratic legacy section, para. 4).

Although Bowers (1967) agrees with Giroux, Bowers' argument comes from a different perspective. Bowers supports the case for pedagogy in opposition to traditionally racist, sexist and classist knowledge construction, not through the ideals of Marx, but through a critique of the ideals of the founding fathers themselves. Bowers' writings are an indictment of the structure of our government through the words of Madison. According to Bowers, the Constitution does not necessarily represent the high-minded ideals that are often associated with it. Instead, it is a work that reflects the views of men who believed in private property over government and, furthermore, that government was not subject to control by majorities through popular sovereignty (p. 461). As Bowers asserts, the Constitution is a document that facilitates the exploitation of the masses rather than their governance (p. 462).

Vavrus (2002) illustrates this exploitive aspect of the American system, and explains that “people are objectified economically as a resource for consumption” (p. 107). The U.S.'

existence is a direct result of European colonial expansion. Upon their arrival Europeans began a society based on military seizures and the forced colonization of people in order to access cheap goods to trade with other colonial powers (Vavrus, 2002). However, this version of history is rarely taught in social studies curricula.

### **Progressive Views on Social Studies Education.**

The ideals taught in traditional social studies curricula are deeply deficient in critiques of America's historical actions (Loewen, 1995). Banks (2004) concurs with this analysis and advises educators about the ingrained barriers set up by the dominant culture; he states that scholars who are outside of the mainstream must construct oppositional knowledge to combat institutional hegemony (p. 230). According to Gordon (1995), these pedagogies must go beyond the contributions approach as described by Banks (2001) and be transformative experiences for students:

Challenging the omissions and distortions of this hegemonic regime of truth is thus not merely a matter of infusing more information into a faulty premise, but of reconstituting the conceptual systems that govern models of humanness and models of being.... In both form and content, it signals the transcendence of a new world civilization. (Gordon, 1995, p. 184)

This cannot be accomplished through a contributions approach to the histories of marginalized populations—a transformative approach to education must be taken. However, the introduction of transformative knowledge is unlikely to be warmly received by the established power structure.

Currently, meritocratic ideals perpetuate the marginalization of students who are outside of the dominant culture. This is a flawed development of the classical ideals of education. According to Brown (1999), the classical goals of education in general and social studies specifically are to produce an enlightened citizenry and strengthen intellectual powers within society (p. 327). However, as presently constructed, only a selected few from marginalized populations become the next generation of political elite (Spring, 2005). This meritocratic paradigm is by its nature discriminatory.

According to King (1995), the introduction of transformative knowledge can expand areas of study to be more reflective of the composition of our society (pp. 275-276). The resulting more equitable pedagogy would decrease feelings of exclusion from curricula among various traditionally subjugated classes. To accomplish this goal, social studies needs new curricula (Brown, 1999, pp. 327-332). The difficulty in creating these new curricula is that unfortunately the democratic ideals that are most often taught in schools, and that are pervasive in society are based on the philosophical perspectives of 18th century social contract theorists like John Locke (Ross, 2000, p. 57). Locke was part of an oligarchy that reserved individual liberties and freedoms for themselves and members of their class. Subsequently, members of this elite class constructed a non-egalitarian society in which systems of domination flourished (Ross, 2000, pp. 57-58).

Allen (1999) states that there cannot be a true democracy where all people live as equals when there are “systems of domination” (p. 2). According to King (1995), under conditions of domination, social and cultural differences are negated by the majority in preference of a “single normative common culture” (p. 271). This common culture reflects the biases of those in power. Within it Eurocentric ideals of individualism are emphasized to the benefit of those who possess the ability to exercise them, and to the detriment of those who do not. In response King proposes an alternative pluralistic model that facilitates greater social cohesion and equity through “shared pluralism” (p. 271). Under this model ambivalent views of marginalized students and the preponderance of Eurocentric ideas, as propagated in texts, are highlighted and discussed. This contributes to an increase in group autonomy for traditionally marginalized students. Furthermore, this model facilitates an inquiry into rationale behind the traditional construction of social studies curricula and a demand for a more accurate representation of the roles traditionally marginalized students play in society (pp. 270-272).

If schools are to disrupt stratification of success by race, class, and gender, new critical pedagogies must be created. These critical pedagogies must defy Eurocentric hegemony and promote different politics to confront unequal distributions of power and wealth in contemporary society (Swartz, 1993). The traditional role of the school, according to Banks (2001), has been to prepare students to accept



their “assigned status” in our society (p. 99). Accordingly, current curricula replicate the socioeconomic and political structure in which they exist (p. 98-100). Considering the current U.S. socioeconomic structure and the assault by conservatives on multiple aspects of public life, according to Giroux (2004), educators must revitalize previous democratic education movements of people such as Counts. Giroux supports the creation of a new movement, in which pedagogy is linked to social change in an effort to develop “critical agency and critical subversion of the dominant power” (Affirming modernity’s democratic legacy section, para. 4).

*A Conservative Opposition.* Attempts at transforming education and implementing critical pedagogies can incur significant opposition from conservatives, who, according to Giroux (2004), have commenced an intense program to counteract the efforts of progressives. Giroux further states that in a concerted and global effort conservatives are successfully dismantling historically guaranteed social provisions within the welfare state. Additionally, they are shaping definitions of democracy to exclusively refer to “market freedoms and profit making for rapidly expanding corporate states” (Critical pedagogy as a matter of context, ethics, and politics section, para. 1).

Conservatives tend to dismiss multicultural education and oppositional historical pedagogies, criticize them as distorting reality and threatening the social fabric of U.S. society, and promote group rivalry among marginalized groups and the dominant culture (Shor, 1993, p. 7). They instead cite a presumed supremacy of Western culture as an inducement to the preservation of traditional values in social studies curricula (Hursh & Ross, 2000, pp. 7-8). Presently, in the U.S., the dominant voices in public discourse reside on the political right. Currently, conservative forces have been successful in popularizing a message in opposition to social welfare, bilingual education, and ethnic studies programs. In juxtaposition authors that are more progressive have been less successful at promoting their point of view to the American populace (Banks, 2004).

*The Progressive Response.* According to Steinberg (2000), right-wing ideology speaks to ideas of self-direction and individualism, yet it ignores society’s obligation to define “the sociopolitical forces that undermine such efforts” for marginalized people (p. 130). If democracy

has already been achieved as conservatives posit, then the primary purpose of a social studies education is to teach students its agreed upon meaning. However, if progressives are correct in believing that democracy is a project, then social studies education must teach students not a fixed content, but a method for questioning, evaluating, and recreating the meaning(s) of democracy (Mendel-Reyes, 1997, p. 233). Social studies is an interdisciplinary subject that is appropriate for the creation of both democratic and cultural citizenship (Steinberg, 2000, p. 131). This potential for the creation of new democratic and cultural ideas is the essence of critical inquiry pedagogy: students must be given the opportunity to determine their own construct and definition(s) of democracy and the direction in which they prefer it progress, if at all (Giroux, 2000).

Social studies is a course of study that lends itself to social activism through the initiation of critical inquiry pedagogy. Cohen (1993) proposes a literal usage of the word social studies. She suggests social studies become a vehicle for the study and critique of unequal social structures. She posits that equity within classrooms can be increased through direct discussions of relevant issues that may not necessarily be directly tied to the curriculum, but are relevant to students’ everyday lives. This can be taken one step further through the application of Banks’ (2001) concept of contextualized discourse of relevant global issues in social studies classrooms. The main challenge to the implementation of a critical pedagogy and a democratic dialog is establishing these concepts within a public education system and a society at large that are “inherently antidemocratic” (Marker, 1993, p. 144).

Brown (1999) posits that new perspectives and knowledge bases are not learned from data that has already been processed through the filter of dominant ideology. The introduction of oppositional knowledge can enhance the understanding of larger societal concepts and issues. Social studies teachers can redirect the rationale and focus of the curriculum to encourage critical thinking and evaluation of societal issues (p. 329). Critical pedagogical perspectives facilitate working to eradicate deeper “ideological and material” barriers faced by students (Bartolme, 2004, Educators as dedicated cultural brokers section, para. 3). Because social studies can make it possible to link social sciences, art, culture, literacy, and self-identity, social studies can become a tool to

analyze and transform economic, political, and cultural forces and create a more democratic society (Hursh & Ross, 2000, p. 10).

Changing school to be more democratic means more than changing the structures and processes that are used in making decisions (Kohli, 2000, p. 33). As Mendel-Reyes (1997) explains, a contradiction exists in traditional interpretation of democratic education. Democracy presupposes people can and should rule themselves, whereas schooling encourages people to be changed through a multi-year process that involves being led by someone else. Therefore, critical inquiry pedagogy is necessary to facilitate student formation of oppositional knowledge that will facilitate societal transformation (p. 224-227). Teaching methods that are openly political, eschew the traditional illusion of neutrality, and urge their own critique are pivotal to classroom practices that seek to work against the appearance of more modern forms of fascist ideology and practices (Hursh & Ross, 2000, p. 53).

However, Graff (2000) cautions educators against proselytizing when he states that “overtly trying to radicalize students is the least effective way to radicalize them” (para. 6). It is difficult to have a truly democratic classroom if one is attempting to force a perspective on students; they must be encouraged and allowed to develop their own pedagogies. According to hooks (1994), hierarchical power relationships between students and educators reinforce historical ideals that support the inevitable development of class divisions and non-equitable power distributions. These undemocratic hierarchical power relationships contribute to lower student achievement among marginalized communities (p. 204). Allen (1999) therefore argues that teacher preparation programs need to model a democratic process that can translate to K-12 classrooms (p. 13).

### **The Application of Critical Inquiry Pedagogy**

As reported by Bartolome (2004), critical inquiry pedagogies have been successfully implemented in classroom environments and have contributed to a reduction in the gap in academic achievement between traditionally marginalized students and students from the majority culture (The study section, para. 5). At the school cited in her case study, educators using critical inquiry pedagogies credited them as contributors to an increase in student classroom engagement, for students of color and majority students living in poverty (Awareness

of asymmetrical power relations section, para. 1). Additionally, Harmon and Katims (2000) reported “significant gains” (p. 287) in note taking behaviors, student involvement, and comprehension test scores in middle school social studies classes through the implementation of critical pedagogies (pp. 286-288).

Critical inquiry pedagogies serve as way to socially empower and engage traditionally marginalized students in social studies curricula (Fecho, 2000). Accordingly, a historically marginalized student in America operating under critical inquiry pedagogy would question why cultural ideals and characteristics of the majority are presented as the *beau ideal* within society (hooks, 1981). The goal of teaching knowledge as a social construction through critical inquiry pedagogy is to neither make students cynics nor encourage them to desecrate European heroes such as Columbus and Cortes. Rather, the aim is to help students to understand the nature of knowledge and the complexity of the development of U.S. society and to understand how the history that becomes institutionalized within a society reflects the perspectives and viewpoints of the “victors rather than the vanquished” (Banks, 2001, p. 11).

The issue at hand is whether social studies should promote a certain “view of history” and “brand of citizenship” or promote a more critical citizenship aimed at transforming society (Hursh & Ross, 2000, p. 55). Swartz (1993) prefers the latter; she speaks to a new understanding of social studies and calls for a reconceptualization of patterns of teaching and learning:

This pattern involves a deliberate sharing of power and non-hierarchical positioning of once dominant and once marginalized voices in the discourse and enactment of post-Eurocentric schooling. Within such a context, it may one day be possible to disrupt the stratification of achievement and success by race, class, and gender. (p. 504)

The elimination of sociocultural stratification in academic achievement is a primary goal of critical inquiry pedagogy (Fecho, 2000).

Students cannot become advocates for societal change through the strictly establishment perspectives that comprise the majority of current social studies curricula. Allen (1999) therefore asks if it is the role of social studies education to give students the tools to succeed in society as it is currently constructed or to give students the tools to be effective advocates and

conduits for change (p. 14). Traditional social studies curricula fail to examine historic injustices and in doing so provide tacit approval of societal, historical, and political injustices. These dominant classroom social studies curricula usually include “text-oriented, whole group, teacher centered instruction” where emphasis is placed on memorization of facts. This method lasted throughout the last century and into the current one because of “the pressure of organizational setting and school culture” (Hursh & Ross, 2000, p. 47). These pressures work as a homogenizing force against the efforts of progressives.

Conceptually social studies education is at the cusp of a reformation. Steinberg (2000) envisions that history will no longer taught from the point of view of the victor, but with “equity and consideration to all” (p. 129). In so doing, U.S. public schools have the opportunity to alter their historic role of replicating and reproducing social inequalities. Ending the replication of social inequalities in schools is likely to move the U.S. away from the traditional pedagogical paradigm. As described by Banks (2004), under the current paradigm non-critical assimilationist knowledge is pervasive because it supports “the perspectives and assumptions of the dominant political forces within a society” (p. 231). Critical inquiry pedagogy endeavors to undermine this paradigm and to raise questions about the origin and effects of dominant political force. Giroux (2004) explains that in defiance of traditional pedagogies, critical pedagogy seeks to provide a way of reading history as part of a larger project of reclaiming power and identity, particularly around the categories of race, gender, class, and ethnicity (What is critical pedagogy section, para. 3).

In contrast a traditional mainstream social studies curricula rarely questions the basic assumptions of the educational environment. Questions like “are schools situated in the ways that best benefit student learning?” and “is the curriculum an authentic reflection of the nation's history?” are rarely asked. (Prilleltensky & Nelson, 2002, p. 96). According to Banks (2001), a social studies instructor should aide students in the creation of their own pedagogies through inquiry based curricula and ensure that students do not become consumers of only status quo knowledge. Social studies teachers should furthermore push students towards new ways to “organize, conceptualize, and think about information” (p. 205). Clark and Lutzenberger (1999) state that social studies teachers should

use their respective disciplines, discourses, and conventions as “cultures” (para. 9). They posit teachers should view their students as “metaphorical travelers in a foreign land” and impart them with multidisciplinary, non-traditional, and progressive concepts (para. 9). In doing so teachers can facilitate the creation of critical perspectives through inquiries of established conventions throughout various disciplines. This can contribute to the creation of students with unique radicalized pedagogies (p. 3).

Banks (1995) engages in critical inquiry in this critique of the book *The Bell Curve*. Banks asks, “Why was the book so well received by educated people? Who benefits from the arguments contained therein? And why do arguments about the genetic inferiority of African-Americans continuously resurface?” (p. 397). These types of questions are at the heart of critical inquiry pedagogy for students. Banks (2004) contends that critical pedagogies enable individuals to construct different ways to conceptualize the world. Moreover, he posits critical pedagogies illustrate how groups in power create knowledge that maintains their power (p. 230). In this example Banks provides no answers; he only poses critical questions.

If a teacher is authoritarian, little student engagement occurs. According to Marker (1993), teachers must avoid being authoritarian in regards to instilling a political ideology. To facilitate the development of critical and analytical skills, an opportunity for social critique must be provided. Teachers, especially those working with politically and socially subjugated students must possess an “outrage and sense of student advocacy” that reflects the increased political and ideological clarity they seek for their students to create. (Bartolome, 2004, Assuming a counter hegemonic stance section, para. 3). Bartolome (2004) advances that in addition to the expected technical skills in subject area and educational methodologies, teachers must possess courage in the face of criticism from administrators and parents who oppose the implementation of critical pedagogies and possess conservative or assimilationist political perspectives (Assuming a counter hegemonic stance section, para. 5). Moreover, teachers must denounce injustices that marginalize large portions of their student bodies and create responsive and empowering educational contexts (Assuming a counter hegemonic stance section, para. 5). As stated by Loewen (1995), history is not a study of isolated

facts, but is about determining the results and relevance of past occurrences to the contemporary societal constructs. When history is examined through critical inquiry, issues of social justice and inequity become its central concerns and motivation for societal change (Cervetti, Damico, & Perdles, 2001).

A key to societal reformation is culturally relevant teaching, "a pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural referents to empower knowledge" (Ladson-Billings, 1994, p. 178). Traditional curricula reinforce Eurocentric ideals and encourage students not to question society and instead to simply trust that society is "good." Through textbooks that imply the domestic and foreign policies of the U.S. are always right and socialization that implies the same, students become efficient consumers of American majority ideology (Loewen, 1995, pp. 307-308). The attitudes of members of the majority formed from these textbooks are reflected in their treatment of marginalized people (Swartz, 1993, p. 498). Through overt methods like the manipulation of textbook content to minimize the contributions of people of color and immigrants (Loewen, 1995), and covert methods like the exclusion of critical views of American foreign policy from historical discussions (Giroux, 2000), the marginalization of the "Other" has been sewed into the fabric of traditional social studies curricula.

### Conclusions

As demonstrated by Vavrus (2002) and Banks (1995), incremental approaches to multicultural education and other progressive pedagogies have failed to shift views regarding traditionally marginalized populations and their contributions to U.S. history. Additionally, U.S. social studies curricula has traditionally been constructed under the influence of the dominant class within our society as a means of reinforcing a racist, classist, and sexist social paradigm that has been present since the inception of America and American public education (Banks, 1995; Giroux, 2004; hooks, 1994; Loewen, 1995; Spring, 2005; Swartz, 1993). Critical inquiry pedagogy serves as a method of counteracting this established paradigm through a constructivist approach. It includes the introduction of new perspectives that more accurately portray the history of the nation and eschew herofication and the minimizing of historical injustices (Loewen, 1995). Additionally, instead of approaching the

knowledge construction of students through a top down hierarchical structure, critical inquiry pedagogy places the construction of radical ideals in the hands of the students (Graff, 2000).

Critical pedagogy proposes that education is a form of social and political intervention that is capable of creating the circumstance in which social reformation can flourish (Giroux, 2004). Furthermore, Giroux posits, educators bear a responsibility as public intellectuals to oppose assimilationist pedagogies and conservative messages that propagate the supremacy of Western culture. Educators instead, as Giroux suggests, should support a curriculum that allows students to develop their own views of the world, views that more accurately reflect the historical legacy of American imperialism.

In working towards this goal, an essential aim of social studies curricula should be to expand the awareness of and provide students with a way to develop their own views and perspectives of the formative historical role the U.S. has played in global affairs (Brown, 1999). According to Fecho (2000), this proposed knowledge construction can best be accomplished through critical inquiry pedagogy. An examination of traditional knowledge in social studies education illustrates the failing of curricula as currently constructed to improve the status of democracy within the U.S.:

Democracy is a form of government that recognizes the right of the people to take part in, directly or indirectly, controlling their political institutions.... It also describes practices of society as a whole that enlarge opportunities for people and that place emphasis on the dignity of the individual. (Kohli, 2000, p. 33)

This description of democracy is not reflected in traditional social studies curriculum where issues of racism, sexism, and classism are ignored and marginalized. Understanding the truth of these matters requires a significant undertaking on behalf of the student and teacher. A reflective reexamination by educators would illustrate the obscuring of the political and ideological consequences of current inequitable societal constructs within the U.S. Instead of succumbing to the demands from those in power to obey, social studies teachers should avoid the compulsion to use status quo perspectives and embrace critical inquiry (Ross, 2000). In social studies classrooms, failing to include critiques of these flawed constructs results in disinterested

students who can be apathetic to the direction of their democracy and ultimately contribute to the maintenance of the status quo (Ross, 2000).

### **Recommendations for Practice**

In moving towards the stated goal of counteracting biased traditional pedagogies and facilitating the construction and development of a more democratic public education system and society, a new social studies curriculum based in critical inquiry should be established. This curriculum should involve the full integration of traditionally marginalized populations and historically underrepresented political perspectives into lesson plans. Additionally, this discourse should interrogate why these viewpoints were previously excluded from traditional pedagogies.

In order to foster a more critical citizenry and facilitate the construction of more socially and politically active students, social studies teachers are obligated to integrate discussions of these issues into the classroom. To this end, the following five practices are recommended for the implementation of critical inquiry pedagogy in social studies classrooms:

1. *Facilitate constructivist approaches to knowledge construction.* Independent learners can sift through arguments and construct their own reasoned conclusions on historical events (Loewen, 1995). Through constructivist approaches, students are given an opportunity to decipher for themselves what is at stake in the ideological differences that surround them (Giroux, 2004). Social studies teachers should insist that students ask the question “why?” when they are presented with Eurocentric historical points of view. Instead of preaching progressive ideas to students from a bully pulpit, social studies teachers should create an environment where these ideas are constructed and developed by the students themselves through critical inquiry of established knowledge (Fecho, 2000).

2. *Facilitate safe and co-participatory learning environments.* Social studies teachers should create reciprocal co-participatory learning environments and encourage students to construct their own knowledge, social identities, and philosophies within them (Swartz, 1993). This can be facilitated through peer teaching and the fostering of a safe learning environment for students. A social studies teacher needs to create an environment where students feel comfortable

to express personal beliefs and safely interrogate status quo knowledge. Such a reconceptualization requires new patterns of teaching and learning that involve deliberate power sharing on the part of teachers with students through non-hierarchical classroom discourse.

3. *Embrace democratic citizenship education.* Schools are appropriate places for democratic education because they possess essential aspects of a democratic society: a diverse population and an abundance of fertile minds. However, traditional educational practices usually prevent schools from taking advantage of these ideal settings (Mendel-Reyes, 2001). Social studies teachers should introduce students to models of citizenship and democracy that transcend passive or participatory models. Social studies teachers should embrace democratic citizenship education models that promote social cooperation and democratic participation. Through the implementation of critical inquiry pedagogies, social studies educators can begin to rectify the failing of traditional pedagogies and foster political and social activism among students.

4. *Dialog towards the development of a critical social consciousness.* If social studies teachers desire to move the U.S. towards a more egalitarian and equitable construction of democracy and away from inequitable and Eurocentric paradigms, it is essential that students understand the world more comprehensively than current pedagogies facilitate (Brown, 1999). It is imperative that students as future leaders of a democratic society understand the economic, political, and historical circumstances in which the U.S. has functioned and inequity has thrived (Hursh & Ross, 2000).

5. *Supplement Eurocentric textbooks with more balanced educational resources.* In order to foster critical discourse of societal and historical realities in social studies classrooms, teachers need to include non-traditional sources that contain revisionist historical analyses in social studies curricula. In the absence of inclusive social studies textbooks that reflect the complex and often inequitable history of the U.S., educators should become comfortable with and help students access alternative primary and secondary historical sources (Loewen, 1995).

The current movement of oppositional pedagogies grew from the successes of the civil

rights movements of the 1960s and 1970s and has aided in liberating large numbers of students from many national myths and misconceptions (Banks, 2004). This process must be continued; students must be taught social studies in a manner that helps them come to their own conclusions about the social, political, and historical issues that will either secure or endanger their democratic freedoms (Loewen, 1995). Students of all social, racial, gender, and cultural backgrounds need and deserve a curriculum that cultivates the construction of democratic ideas of equity and social justice.

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## Tracking as a Form of Discriminatory Education: Historic, Legal, and Academic Perspectives

*Tracking is the grouping of students according to their ability. It has been used extensively in public schools in such forms as Advanced Placement classes and vocational education. This paper looks at tracking as a system in which students are routinely segregated by race and social class. The tracking system is examined through court decisions and historic and contemporary literature. Tracking is used to manage the diverse abilities of students. Critics of the practice argue that it is inherently discriminatory, leads to poor self-concept among students, and perpetuates stereotyping. While schools continue to use tracking, this paper concludes that if the goal of education is to provide all students with equal opportunity to learn, tracking should be eliminated from schools.*

Tracking is the practice of assigning students to different classes according to their ability or achievement level within a school. In schools today, several classes cover the same subject matter, but are available to students based on their ability and carry different levels of expectation by the teachers. Teachers have vastly different expectations for highly capable students in Advanced Placement (AP) classes and honors classes than for students taking general education classes and vocational schooling. Selective placement of students in high-ability classes has become common practice in secondary schools, so much that it is taken for granted. At the same time, the lower tracked students may not be receiving an education equal to that of the students in the higher tracks. Ability is used to justify the differing education.

Schools determine ability level by a combination of methods: by looking at grades, by standardized test scores, and by recommendations by teachers and counselors (Ansalone, 2000; Hallinan, 1994). Racial minority and low-income students, on average, score lower than white, upper and middle class students on these measures of achievement. The disparities in achievement cause minority and low-income students to be assigned disproportionately to the lower tracks, causing segregation within schools (Hallinan, 1994).

*Brown v. Board of Education* barred *de jure* segregation but it did not end forms of *de facto* segregation, or segregation in effect. This form of discrimination has continued in schools through tracking. Students are still routinely separated along racial and class lines under the guise of ability level. Both types of segregation compromise the equality of educational opportunities for students (Howe, 1997). The

District Court of Washington, D.C. stated in *Hobson v. Hansen* (1967) that tracking is a denial of students' equal educational opportunity and stigmatizes the students in the lower tracks. The court found that children cannot recognize the difference between *de jure* and *de facto* segregation, and that *de facto* segregation creates the same psychological effects that were found in *Brown*.

Ability has been used "to discriminate among students, the basis of that discrimination being the student's capacity to learn" (*Hobson v. Hansen* 269 F. Supp. at 512, 1967). Children of color and children with low socioeconomic status are placed in the lower tracks more often because they do not do as well as white and middle class children on achievement tests. This fact denies learning opportunities to children of color and students of low-socioeconomic background. Tracking is a system that legitimizes segregation and discrimination (Ansalone, 2000; Banks, 2001). This paper explores the ongoing debate around tracking while examining the possibility that tracking is a discriminatory practice. It discusses the potential stigma and long term educational effects associated with the *de facto* segregation that results from tracking. In this paper I first recount the history of tracking and its development in the United States. The discussion of the history will culminate with an overview of the major legal cases concerning tracking and their rulings. Second, I go through the common perspectives of the rationales of the track system. Finally, I suggest that grouping students according to ability may lead teachers to differential treatments of students in planning, classroom management, and pedagogy. I do not explicitly address here the extensive literature on special



education. While special education in itself constitutes a tracked group, the debates around it are beyond the scope of this paper.

## Literature Review

### History of Tracking

Tracking began in 1867 with the Harris Plan which was adopted in St. Louis, Missouri. This plan began the separation of students based on their ability and provided students with different education according to their ability (Ansalone, 2004). The popularity of this educational differentiation rose to its pinnacle in 1920. During this time, the factory system was being perfected; it was expected that the public schools could operate efficiently and according to the strictures of scientific management. The schools could take natural human resources and turn them into a finished product ready for the labor market (Ansalone, 2000; Oakes, 1985).

Between 1890 and 1920, schools became more diverse because of immigrants from foreign countries and children living in poverty. During this time, there was an influx of Western European immigrants, as well as a mass migration of Southern blacks into Northern cities. With the influx of students from a variety of countries, it was common for many different languages to be spoken in one classroom (Oakes, 1985). In 1916, the Keating-Owen Act was enacted, which made child labor illegal (Dawley, 2003). With children unable to work and compulsory attendance laws being enforced, children who previously were contributing to their family's income were entering schools (Spring, 2005).

Businesses demanded a more productive work force. Labor unions were concerned about who would train laborers (Oakes, 1985). Joel Spring (1989) asserts that "standardized testing, tracking, ability grouping ...all developed to serve the interests of the new corporate America" (p. x). The public schools responded to these concerns with the implementation of a differentiated curriculum for students. This satisfied the working world as well as allowing for the schools to give every child an education. This form of education maintained the status quo, keeping the children who were living in poverty in the lower tracks and the wealthier students in the higher tracks.

The early twentieth century produced much literature on creating a system that would maximize the school's potential and prepare the students for their places in society. In 1909,

Leonard Ayres first published *Laggards in Our Schools* which reported the slow progression of some children through grades. He saw that these students were draining the limited financial resources of the schools, and that special classes and curriculum were needed so those students regarded as "backwards" would have a chance at advancing through school. Tracking was seen as a system that would efficiently manage the mass amounts of students entering the schools with diverse backgrounds and get them ready for their different positions in society. Students were often sorted into these programs by their race, ethnicity, or socioeconomic background (Ansalone, 2000; Oakes, 1985).

A major advancement for tracking came with the popularity of intelligence testing. The test developed by Alfred Binet was used as early as 1910 to identify students with lower ability or "feeble-minded" (Weis & Fine, 1993). Even though the tests showed about 80 percent of immigrants as "feeble-minded," they were thought of as an objective method to identify the level of students' inherent intelligence (Oakes, 1985). Lewis Terman, a supporter of intelligence testing for the purpose of grouping students, proposed a system that split students into five ability groups based on a norm-referenced distribution. The highest track, "gifted," consisted of the top 2.5 percent of students. The next group, designated as "bright" formed the next 15 percent. The group considered average consisted of the middle 65 percent of the students, and the "slow" group was made up of the next 15 percent. The lowest group or "special" group was made up of the bottom 2.5 percent of the students (Weis & Fine, 1993). In 1923, Terman, Dickson, Sutherland, Franzen, Tupper, and Fernald stated that this stratification of students embodied the purpose of an appropriate education for all abilities, and prepared students for what work that best suited them:

At every step in the child's progress the school should take account of his vocational possibilities. Preliminary investigations indicate that an IQ below 70 rarely permits anything better than unskilled labor; that the range from 70 to 80 is preeminently that of semi-skilled labor, from 80 to 100 that of the skilled or ordinary clerical labor, from 100 to 110 or 115 that of the semi-professional pursuits; and that above all these are the grades of intelligence which permit one to enter the professions or the larger fields of

business ... This information will be of great value in planning the education of a particular child and also in planning the differentiated curriculum here recommended. (p. 27-28)

The testing to assign students to different groups was widely used by the 1920s and Terman's five group tracking system can be seen in schools today, sometimes containing three tracks: academic or college bound, general education and business or vocational training. A study of tracking in the 1960s and 1970s found that 30 to 40 percent of students were on an academic track, 35 to 50 percent of students were in the general education track and 14 to 16 percent were in vocational or business high school programs (Weis & Fine, 1993).

*Tracking after Brown v. Board of Education.* There are two types of segregation in schools, *de jure* segregation and *de facto* segregation. *De jure* segregation, or segregation required by law, is typically characterized by separate schools on the basis of race. This practice was ended by *Brown v. Board of Education of Topeka* (1954). The decision in *Brown* declared that separate schooling is inherently unequal. The psychological effect of segregation on black children constituted the main argument against the separation of students along color lines. The feelings of inferiority and humiliation associated with being separated from other children is likely to stay with the child throughout his or her life (Irons, 2002).

In 1954, the Supreme Court decided the *Brown v. Board of Education* case, which put an end to the long held practice of separate but equal. The Court, stating *separate is inherently unequal*, gave heed to the psychological effects of the separation of students and declared the right to equal educational opportunities to all children so they might be allowed to succeed. The Court opinion states:

in these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to *all on equal terms* [emphasis added] (347 U.S. at 493).

Black students were denied the same materials and facilities that were provided to white students. As such, black students did not receive

the same opportunities for success in school and in life. The lack of opportunities provided to black students prompted the court to find that "segregation is a denial of the equal protection of the laws" (347 U.S. at 495).

After *Brown*, the schools began to include black students in the classroom along with white students. As schools were desegregating, the Immigration Act of 1965 ended the quota system from the previous Immigration Act of 1924, allowing many more people to move to the United States (Spring, 2005). This was also a time of migration within the United States. Southern blacks as well as Puerto Ricans and Mexican-Americans moved north into cities. Tracking was implemented as a response to the changing diversity of the schools (Persell, 1979) or as Ansalone (2000) puts it as a means to retain racial segregation within schools.

*Tracking in the Courts.* The tracking system was largely unchallenged until the late 1960s. Intelligence testing for assignment in a track had been used since the early 1900s, but in 1967 that came to an end in the Washington, D.C. schools. Parents and students brought suit against the school district and the superintendent Carl Hansen, stating that the tracking system in the schools assigned a disproportionate number of black students to the lower tracks. The United States District Court ruled in the case *Hobson v. Hansen* (1967) that using an intelligence test to assign placement constituted illegal segregation, and it banned the process within the district (Weis & Fine, 1993). *Hobson* (1967) stated that "the track system amounts to an unlawful discrimination against those students whose educational opportunities are being limited on the erroneous assumption that they are capable of no more." The court went on to say "even in concept the track system is undemocratic and discriminatory" (269 F. Supp. at 515). The decision was based on evidence of discrimination against minorities and low-income children. The tests used to determine track assignments used white, middle class children as the norm. Once the track assignment was in place, it was difficult for the student to move between tracks. A stigma was placed on children in the lower tracks, which caused the children to do worse in school. Regardless of the detrimental effects of tracking on students found in the proceedings, the court allowed for ability grouping to remain in place as long as changes were made to remedy the discrimination cited by the court (269 F. Supp. 401, 1967). Since

*Hobson*, there have been several more cases that have addressed tracking within the schools. Even though these cases have only dealt with race, the conclusions strike a strong blow to the system of tracking. In the *Moses v. Washington Parish School Board* case, the court decided that “homogeneous grouping is educationally detrimental to students assigned to lower sections” (Oakes, 1985, p. 185). None of the cases that followed *Hobson* mentioned that low socioeconomic status students were also discriminated against in the track system.

Despite the conclusions of the courts, most forms of tracking remain legal. The court decided in 1975 in the *McNeal v. Tate County School District* case that ability grouping, like any non-racial grouping, is not forbidden in the constitution (Oakes, 1985). The court went on to state that schools are only “free to use such grouping whenever it does not have a racially discriminatory effect” (p. 185). Throughout the 1980s and 1990s, movements for detracking schools have gone underway. However, with a strong network of people adamantly against the tracking system, there is a counter movement to keep tracking in schools.

### **Rationale for Tracking**

In his study of tracking practices and its effects, George Ansalone (2000) finds that some view tracking as implemented in schools to identify *national human resources* and produce an efficient method of instruction so as to prepare students for their role in the labor market (Ansalone, 2000). Mieke Van Houtte (2004), in his study of academic staff culture and its relationship to tracking and student achievement finds that some believe the purpose of tracking is to provide students with education that will prepare them for their various futures. This perspective stresses the efficiency of teaching to homogenous groups and the assumption that it produces quality education. Tracking is a means to provide an education that is more catered to the needs of students. Schools identify the student’s level and are able to place them in curriculum that is more suited to their ability (Nevi, 1987). One of the problems with this sentiment is that there is no way to produce a truly homogenous group. Ability will inevitably vary within groups (Oakes & Lipton, 1994).

According to Ansalone (2000), another purpose for tracking is students’ own self-development. Tracking is a means to increase achievement in low-ability students since they do not find themselves in competition with students

of higher ability. As such, low-achieving students may be able to maintain higher self confidence. Likewise, Fiedler, Lange, and Winbrenner (2002) state that in mixed ability groups, highly gifted students might feel superior to the other students, promoting arrogance. However, grouping gifted students together may lower their self-esteem by competition between students of similar abilities. Loveless (1999b) also finds that mixed-ability groups decrease the self esteem of low-achieving students. However, this perspective and Loveless’ conclusion is contradicted by other research that has shown students in the lower tracks are stigmatized solely because of their identification in a lower-ability group. Tracking is found to lower self esteem as well as diminish the aspiration of students defined as having low ability (Ansalone, 2000; Oakes & Lipton, 1994).

Critics of tracking argue that the purpose of the system is to maintain the order of society, what Ansalone (2000) calls the conflict perspective and what Banks (2001) calls the radical paradigm. This perspective sees the structure of the school as part of the problem in keeping racial groups oppressed and educates students to accept their status in the hierarchy of society. As such, schools are not able to give students of color or low-income students equal educational opportunities. Rather, tracking ensures that the wealthier, white students get a better education than the students with low socioeconomic backgrounds and students of color (Ansalone, 2004). Loveless (1999a) states that this perspective is contradicted by the fact that low-achieving schools, poor schools, and schools in urban areas are detracking. By keeping tracking in suburban, high-achieving, and wealthy schools, the powerful are hanging onto a destructive policy for their own children. However, Loveless also states that school policies are driven by the local environments, which would explain why urban, low-income, and low academic achieving schools are detracking. The people suffering the most from tracking are taking it out of their schools where as the people who are benefiting from it are keeping the system in their schools.

Students are assigned to tracks based on their previous grades, test scores, completion of prerequisites, and recommendations of teachers (Ansalone, 2000; Hallinan, 1994; Loveless, 1999a). However, this system assumes that children start school on a level playing field, which is simply not the case. Fischer, Hout, Jankowski, Lucas, Swidler, and Voss (1996)

explain that racial minority groups and people in poverty tend to suffer “socioeconomic deprivation,” which is linked to poor health and low parental education and, as a result, influences achievement on tests. They state that students who experience “socioeconomic deprivation” have test scores that are below white and middle class students’ average scores. The reason for this is that the language and content of standardized tests are compatible with the culture of the white, middle class and do not reflect the experiences of students of color or of low socioeconomic status (*Hobson v. Hansen* 269 F. Supp. 401, 1967).

Racial minority students’ and low socioeconomic students’ grades are close to the mean grades of white middle class students, but they are still lower on average (Weis & Fine, 1993). With tests and grades being a measure of ability of a student, children in marginalized groups, racial minorities and low income students, are less likely to be admitted into higher tracks, which guarantees a segregated system. In fact, Mickelson (2001) found, in a study of the Charlotte-Mecklenburg schools, that black students were disproportionately assigned to the lower tracks whereas white students made up the majority of the higher tracks. This segregated system has detrimental effects on students that are both academic and psychological (Smith, 1999; Mickelson, 2001).

However, as Loveless (1999a) states, IQ tests and other tests of achievement are now rarely being used to identify high ability students. Alternatives to these measures of ability are also being used to assign students to tracks. Fiedler et al. (2002) show that some schools are training teachers to identify gifted students by their behavior rather than their grades and test scores. Although, these measures of ability do not take into account the differences in home culture and school culture. The culture of school reflects upper and middle class culture. Many times, this culture is in direct contrast to many racial and ethnic minorities. The connection between the culture of school and the culture of home leaves upper and middle class students at an advantage. These students know the language of school, how to present themselves, the ways of writing, and the ways of interacting with others. Teachers can view students who are not from the upper and middle class culture as behaving poorly due to the clash between home culture and the culture of school and assign them to the lower tracks (Delpit, 1995).

Jeannie Oakes (1994) states that “ability, like race is a social construction that leads schools to define and treat children from powerless groups ...as expendable. Thus, ...tracking carries with it class-based damage that can neither be avoided nor compensated for” (One more thought section, para. 2). The opinion of the United States Supreme Court in *Brown v. Board of Education* in 1954 backs the latter part of this sentiment in stating that separation when sanctioned by law or policy “has a tendency to [retard] the educational and mental development of ...children and to deprive them of some of the benefits they would receive in a[n] ...integrated school system” (347 U.S. at 494).

On the contrary, Loveless (1999b) states that detracking threatens achievement. While detracking increases achievement in lower achieving students, achievement decreases in gifted students. Detracking also increases the chances for “bright flight.” Parents want their children to be in challenging classes and they will not “sacrifice their children’s education for an ideological agenda or an unproven educational theory” (Bright Flight section, para. 1). As such, these parents are likely to take their children out of a detracked school and move to a district that remains tracked. High-achieving students raise the school’s test scores, act as role models to other students, and enhance the school’s reputations. In a subject such as math, that builds on itself and in which the knowledge acquisition is sequential, teachers may be reluctant to dismantle tracking. Loveless (1999b) finds that students who were heterogeneously grouped in algebra classes did not learn as much as students in tracked algebra classes.

However, critics of tracking find that the separation of students by way of tracking discriminates against racially and socioeconomically marginalized students in five ways. First, tracking leads to disparities in achievement because of the varied content of the materials covered in the different tracks. These disparities widen over time. Oakes and Lipton (1992) found that in districts where tracking was used throughout elementary and middle school, the achievement and motivation gap between the high achievers and the lowest achievers had grown very wide. In the higher tracks, students are more likely to be doing work that is cognitively challenging while lower tracks keep to less challenging work. Education for the higher-track students is characterized by an emphasis on critical thinking, problem solving

skills, and the process of learning, as opposed to a fact and basic skills curriculum taught in the lower tracks (Ansalone, 2000; Van Houtte, 2004). Banks (2001) asserts that the higher tracks maintain a better student-teacher ratio and are more intellectually engaging, while the lower tracks are characterized by a low level of instruction and drill exercises. Students cannot reach the achievement level of a higher-track student if they are not given the chance to learn from the same materials and practice the same skills. Van Houtte (2004) sees that the difference of the instruction can explain the difference in the achievement of the students in the tracks.

Second, the lessons in the tracks differ not only in content, but in interest and enthusiasm of the students and the teachers. The teachers in the higher tracks are more likely to have teaching credentials and are more likely to be teaching in their field of expertise, whereas the teachers in the lower tracks are not (Mickelson, 2001). The teachers in the higher tracks tend to spend more time in preparation and, thus, the lessons in the higher tracks are often more engaging for the students due to the teachers' experience, attitude and content knowledge. Teachers feel that the lower-ability classes are so undemanding that they do not require much preparation. This attitude stems from the teachers' lower expectations of the students in the lower tracks (Hallinan, 1994; Persell, 1979), which is felt by the students and has negative consequences on their enthusiasm toward learning and school. In contrast, time spent on preparation and high expectations on the part of the teacher make a difference to the students and help to create an environment that is more conducive to learning (Van Houtte, 2004).

Third, tracking impacts the students' choices in classes. The students in the lower tracks are more likely to take less demanding classes (Weis & Fine, 1993). This is a direct result of the attitudes expressed by the teachers and the schools through the teaching and assigning of tracks. The court in *Hobson v. Hansen* (1967) found that

teachers acting under false assumptions because of low test scores will treat the disadvantaged student in such a way as to make him conform to their low expectation; this acting out process—the self-fulfilling prophecy—makes it appear that the false assumptions were correct, and the student's real talent is wasted. (269 F. Supp. at 514)

Students see their track assignments as a result of how the teachers perceive them. It is no wonder that such students lose confidence in themselves and are discouraged in regard to learning (Hallinan, 1994).

Fourth, tracking leads to disparities in self-esteem among students. Although Loveless (1994b) and Fiedler et al. (2002) state that mixed-ability groups lead to lower self esteem among students in the lower tracks as well as promote arrogance in gifted students, Melser found in her 1999 study that through heterogeneous groups gifted students increased their self esteem. Ansalone (2000) asserts that tracking promotes low self-concept among students in the lower tracks who are labeled under achievers and slow learners, causing them to do worse in school, not better. These labels have a strong impact on student behaviors. Schafer and Olexa (1971) in their study of tracking and the subsequent opportunities that the tracked child faces, interviewed a girl who confessed to carrying her general education books upside-down so that they would be harder to recognize because of the humiliation she felt when other students saw her books. This student knew that her status was observed by other students. The students in the lower tracks are likely to get less respect from the students in the higher tracks, lowering the students' motivation (Hallinan, 1994). It is the separation of the good students versus the bad students that generates a feeling of inferiority, which affects the motivation of the student (Irons, 2002). The court opinion in *Brown v. Board* (1954) states, "To separate ...from other[s] of similar age ...generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone" (347 U.S. at 494).

Fifth, there is a different amount of time spent on instruction between the tracks. In 1971, Schafer and Olexa found that lower track placement leads to a stigma that generates a feeling of frustration and marginality, the results of which are more student misconduct and a higher dropout rate. Students are highly aware of the labels that are placed on them; and a low track label creates a culture that is not conducive to learning and that leads to disruptive behavior (Burris & Welner, 2005). As a consequence, teachers in the lower tracks tend to spend more time disciplining the students than the teachers in the higher tracks (Ansalone, 2000; Hallinan, 1994). The amount of time teachers spend on discipline becomes a never-ending cycle, where

the more time a teacher spends on discipline, the more students conform to what the teacher expects of them and exhibit negative behaviors (Oakes, 1985). Students are more likely to have discipline problems when they are not challenged academically, not motivated by the instruction or the teacher, and possess a feeling of inferiority.

In contrast, Fiedler et al. (2002) indicate that students model their behavior after other students. According to Fiedler et al., tracking needs to remain so that gifted students can model their behavior after other gifted students. However, if gifted students are models of behavior, at least academically, removing them from the classroom is denying every other student a chance for a positive role model.

Persell (1979) found that a common argument for tracking is the flexibility of assignment to an ability level. Children are supposed to be reevaluated regularly to maintain the appropriate track assignment (Hallinan, 1994). However, Persell (1979) finds that in practice, it is quite the opposite. Students are evaluated infrequently. They often remain in the same track, and are placed in the same level across subjects because the students are not given the knowledge or the skills required for the higher tracks. Therefore, it is unlikely for a student to move to a higher track once they are assigned and the system becomes self-perpetuating.

The evidence presented shows that students in the lower tracks do not receive an education equal to the education of students in the higher tracks. There is also evidence that students with low ability do not suffer, but actually benefit in heterogeneous settings due to the more academically challenging resources (Cohen, 1994). The studies conducted by Ansalone (2004) and Van Houtte (2004) have found that although homogeneous grouping did lead to improvement in achievement of students in the higher tracks, the students in the lower tracks suffered academically. However, Cohen (1994) finds that through cooperative groupwork, high ability students in a heterogeneous class can explain concepts to others, which solidifies their learning experience while lower-ability students become active participants in their own learning. Thus, as Melser (1999) discovered, academic achievement increases in both high ability and low ability students as a result of group work. The academic achievement found in the high ability track is due to the rigorous curriculum and expectations which does not go away when

effective heterogeneous grouping takes place in schools (Oakes & Lipton, 1994).

Maureen Hallinan (1994) disagrees, stating that getting rid of tracking altogether might be too hasty. She states that teachers can give more interesting material to the students in the lower tracks without going beyond their level of comprehension. She sees that teachers can also change their attitudes about teaching in the lower tracks as well as their attitudes and expectations toward the students. As a result, low-tracked students' attitudes about their education will become more positive. This sentiment ignores the effects of low social status imparted on students in the lower tracks and the impact of the attitudes of teachers and other students and the students in the lower tracks themselves.

Fiedler et al. (2002) state that mixed ability cooperative learning will not meet the needs of the high achieving or gifted students. Many of the things that these students will be asked to master, they have already learned. Gifted students need to encounter challenging material so as to learn the process of learning and develop study skills. However, all students can benefit from acquiring study skills and learning how to learn. All students can benefit by learning from challenging materials. Each student can read at their own level so as to master specific content that they have little to no knowledge of. In this sense, the gifted students as well as the other students obtain challenging material and master an area that they are unfamiliar with.

Fiedler et al. (2002) argue for tracking stating that the system gives equality of opportunity to all students. Through tracking teachers can take each student as far as their potential. However, they fail to mention the differences in teaching styles. Equality of opportunity does not mean having preconceived notions of students' potentials and teaching accordingly. It means giving every student a chance to develop their potential.

Ansalone (2000) concludes that the major task is not to fix the children, but to change the policies and atmosphere of the schools. This radical transformation would abolish the system of tracking. Separating students along any lines damages students' self-esteem, ultimately affecting their ability to learn.

### **Conclusions**

Regardless of the controversy surrounding tracking, it remains a central practice of schools. Tracking was created to control the diversity by trying to create homogeneous groups of students

along the social construct of ability. The rise in popularity of the system is directly correlated to the rise in diversity in the classroom. At the beginning of the twentieth century, tracking came into schools along with a racially and socioeconomically diverse student population. Schools used intelligence testing to place students into different tracks. Because of these tests, most immigrants were labeled as “feeble-minded,” thus most immigrants were assigned to the lower tracks (Oakes, 1985). With *Brown v. Board of Education* declaring the separation of students by race illegal, tracking was the only means to continue segregation. The court in the case of *Hobson v. Hansen*, found that racially and socially homogenous groupings “damage the minds and the spirit of all children ... the Negro, the white, the poor and the affluent and block the attainment of the broader goals of democratic education, whether the segregation occurs by law or by fact” (269 F. Supp. at 406, 1967). Regardless of this decision, tracking remains, maintaining racial and class discrimination within schools on the basis that certain students are incapable of doing more. Tracking ensures that the children in the lower tracks stay in their social class by providing children from poverty and children of color a lesser education than the students in the higher tracks.

Schools are allowed to separate students as long as race is not specifically the motivation for such separation. The assignment of an ability level has allowed schools to continue with segregation. The methods of assignment into a track have changed in most cases from intelligence testing to teacher recommendations based on the behavior of the student. However, students’ behavior can be misinterpreted by the clash in the students’ home culture and the culture of school (Delpit, 1995). The separation of students based on their ability results in a segregated school with the lower class and racial minorities in the lower tracks and the white, middle class students in the higher tracks.

The racial and class division among the tracks maintain racial and class division in society. The children assigned to the lower tracks receive an education that is inadequate compared to the education provided to the children in the higher tracks. One reason for this is the content and materials in the lower tracks are less cognitively challenging than in the higher tracks. Students in the lower tracks are not able to reach the same level of achievement as the student in the higher tracks if they are not given the same

chances to learn (Ansalone, 2000; Van Houtte, 2004). A second reason is because the teachers in the lower tracks are generally less qualified (Ansalone, 2000; Mickelson, 2001; Van Houtte, 2004). Students in the lower tracks are subjected to a lesser quality of instruction and lower teacher expectations than the student in the higher tracks (Hallinan, 1994; Persell, 1979). Finally, teachers in the lower tracks tend to spend more time on discipline than in the higher tracks (Ansalone, 2000; Oakes, 1985; Van Houtte, 2004).

With these differences in curriculum and pedagogy, there is a stigma that surrounds a placement in the lower track. This stigma causes children in the lower tracks to have a lower self-concept than children in the higher tracks and a feeling of inferiority that inhibits their motivation to learn. Students in the lower tracks are more likely to take classes that are less academically challenging (Weis & Fine, 1993). The stigma is self-perpetuating. The students doubt their ability and will conform to the title of lower ability. Tracking denies lower track students an equal opportunity to learn (Ansalone, 2000) and an equal chance to succeed in life.

### **Recommendations for Practice**

Tracking as a means to structure school curricula should be eliminated because it discriminates along race and class lines. This discrimination creates stigma in the lower tracks, negatively effects student achievement and self concept, and ultimately becomes self-perpetuating (Schafer & Olexa, 1971). Eliminating the tracks erases the stigma of lower achieving students, while the higher achieving students are still challenged through exposure to more variety in perspectives. Detracking, or restructuring schools into heterogeneous groupings, is not to teach to the lowest common denominator or water-down the curriculum, as some suggest, but rather, it is to provide the current high track curriculum to all students (Burris & Welner, 2005). In this sense, all students are eligible for access to the benefits that are currently available to the higher track students.

Heterogeneous groupings allow students to learn the same content. One method for this grouping that has been effective is the implementation of cooperative learning. This is a discovery-based approach with an emphasis on the formation of knowledge. Students master specific content and, in turn, help teach that content to other students (Ansalone, 2004). The

research suggests that although students might be at varying levels of ability, students are able to learn at their level of reading and comprehension, and still able to master content in order to teach to other students without having their ability be in question.

To incorporate cooperative learning into the classroom, the teacher must first decide upon an objective for the unit. The teacher must then decide on an activity that will achieve the objective. Activities that complement cooperative groups include drama, art projects, presentations, group essays or group discussions. These group activities allow for students to practice problem solving, to hypothesize, and to make decisions. Discussions provide students with more chances to practice summarizing and explaining to others, as well as chances to see different perspectives. Groups that are diverse in achievement, sex, race and ethnicity assure these multiple perspectives.

The tasks that teachers assign for cooperative learning should be open enough to allow for multiple right answers and require various skills for completion. Teaching about the various abilities required to complete an assignment successfully will allow students to see that intelligence is made up of several components. Students contribute their various skills or abilities to the different aspects of the assignment, making every student indispensable to the learning experience. Students will excel in some areas but they may not be as competent in others. Thus, students are encouraged to work on a variety of tasks to continuously develop and reinforce their abilities.

One of the benefits of students working in groups is that the teacher has time to move freely between them to assess the learning as well as find places where students are struggling. Teachers will be able to provide more personalized instruction, guidance when necessary, and be able to assess students' understanding and achievement as the assignment progresses.

Assessment for cooperative learning must maintain a focus on the work of individuals. Honest feedback should be offered instead of a grade for group projects. Individual assessment should be based on an assignment that builds on the collective work or on individual responses to prompts that are related to the projects or group discussions. Along with assessing for comprehension, teachers can assess students on progress they have made in their various abilities over time. This form of assessment encourages

students to work on expanding their abilities (Cohen, 1994).

Cooperative learning changes the role of the teacher from that of a dispenser of information to that of a guide (Ansalone, 2004). Because of this shift in the role of teacher, in order to implement the end of tracking, there needs to be training or other support for teachers who may have to revise their methods. Teachers may find support in team teaching. Oakes and Lipton (1992) found that in detracked schools, teachers found it helpful to work together as teams. Teachers do not necessarily need to teach together but may pool their resources to come up with curricula for heterogeneous classes, teach separately, and then evaluate and revise the curricula as a group. Some teachers have worked together in cross-disciplinary teams that work with the same group of students for a year or more. It is apparent for these teachers that the traditional textbook-based curricula are not sufficient for heterogeneous classes. Teachers need to find and incorporate texts of various reading levels so that all students will have access to materials covering the same content.

Cooperative learning, as one method to integrate the high and the low achieving students, can open up many possibilities in the classroom. Eliminating the stigma surrounding lower track students should put to rest the self-fulfilling prophecy that contributes to their lower achievement. Heterogeneous classes will further the goal of equal educational opportunity for all, ensuring that all students regardless of race or class get to learn the same material and ultimately receive an equal chance in life.

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### **Systemic Change for U.S. Monolingualism: A Case for Increasing World Language Study in U.S. Public School Curricula**

*A look at the history of world language study in the United States shows isolationist and hierarchical dispositions creating an environment that is detrimental to the study of world languages. This historical context has left the United States with only the state of Rhode Island and the District of Columbia making reference to world language in their state curricula. Recent research has shown that world language study has high value for humanist reasons, increases cognitive capacities and performances in various fields, and also offers economic advantages. Therefore U.S. public education should increase emphasis on the study of world languages, an emphasis that would be evident in an increase in both class offerings and diversity of languages offered nationwide.*

Many who have gone through the U.S. public education system did so without any language study apart from English, and among those who did have an opportunity for language study, most were limited to the relatively late age of high school. Many had an uninspiring experience due to an atmosphere unfriendly to language study, or were unimpressed with the content knowledge or disposition of the language teacher. These are all common experiences caused by a systemic problem with U.S. public school world language study.

Despite popular belief, the United States is not an inherently monolingual society. When one considers the diversity of immigrants making up U.S. society since its inception and the diversity of languages they brought with them, not to mention the diversity in language exhibited by the Indigenous peoples of this continent and other areas the United States has annexed through its history, a monolingual environment and disposition in education seems especially hypocritical. The comparative lack of world languages in U.S. public school core curriculum must then be viewed as caused by sociological factors, such as a dominant atmosphere unfriendly to linguistic diversity that has imposed monolingualism. This atmosphere is not normal; virtually every other industrialized nation on earth teaches a language apart from the official language as a required subject from the elementary level. In most countries, this other language of study is English. However, it is almost needless to say that this dynamic does not acquit the U.S. of its responsibility in studying other world languages. Linguists studying prehistory and early history hypothesize that upwards of 60,000 languages once existed on

earth. The current number is usually calculated at around 8,000. This phenomenon of lessening linguistic pluralism is often referred to as Linguistic Extinction or even Linguistic Genocide.

It can be easily argued that negative American dispositions on linguistic diversity, coupled with the powerful role of the U.S. in worldwide neoliberal capitalism, have a large causative effect on this process of lessening linguistic pluralism. Therefore, the United States has a unique opportunity to have a powerful, positive effect on linguistic pluralism worldwide. At the very least, U.S. public school educators have an opportunity to enrich the public education system resulting in various changes such as a more humanist atmosphere, advanced cognitive development, as well as economic advantages necessary to an increasingly globalized market.

This paper will show evidence that the historical and current U.S. environment for world language study should be regarded as anti-humanist, and offer humanist arguments for the worth of world language study. It will also offer arguments showing the positive effects of pluralistic language study on students' cognitive and scholastic performance, as well as increasing grey matter in the structure of the brain. Finally, arguments will be offered to show that pluralistic language study is important for an excelling or even merely competitive U.S. economy. These three tiers form a compelling argument for addressing a long-ignored problem in U.S. society: the issue of monolingualism.

## Literature Review

### Historical Context

In Islam's holy book the Qur'an, language diversity is viewed as a blessing from God. However, in the story of the tower of Babel, the Christian Bible shows that it views "the diversity of language as a curse, a punishment for peoples' pride" (Shutnabb-Kangas, 2000, p. 214). In a society dominated by Protestant Christianity since national inception, this biblical disposition on language is helpful in beginning to investigate the history of world language study in the United States.

Deborah Herman (2002) compiles a critical history of world language curricula in the United States as a necessary framework for understanding that which must happen for this field to have a future. First, Herman deconstructs the use of the terminology "foreign language." This historically popular nomenclature for non-English language study in the United States is shown to carry "a history of sociocultural implications rooted in nationalist ideology which defines those who are inside and those who are outside the cultural body of the political nation" (p. 2). The use of this term, as opposed to terminology such as second language, serves as a tool to deny the existence of people in the United States who speak languages other than English. Obvious examples would include the Indigenous tribes of this continent, as well as the huge body of Spanish speakers annexed through wars over the history of the United States. Herman states that the usage of this terminology implicitly assumes that world language students will be "Anglo or White...speak English as their first or primary language, and [will be] middle- or upper-class students with the resources to travel outside the United States" (p. 2). This sentiment is further evidenced "by the philologist Charles Hall Grandgent, [who put forth that] the purpose of education was not to further interaction with 'hyphenated Americans'" (Herman, 2002, p. 8).

Herman's history focuses on the time period between the 1890's and 1920's. In this period, mandatory school attendance laws and popular views of a high school diploma ensuring employment skyrocketed high school enrollment from 8.5% in 1899 to 28.8% in 1921. This was also a time when "the politics of language was especially salient...this was a time when the language one spoke was considered to form the very essence of a person's intellectual thought patterns" (p. 5). This era also saw a shift in curriculum from the classically taught dead

languages of Latin and ancient Greek to so-called modern languages, which Herman states meant "spoken languages of western European nations" (p. 6). The academic environment was one that subscribed to a hierarchical view of languages and cultures, so that only those producing literature and other cultural products considered equal in status to English culture were studied. Also, in a school system that was engineered to create stratification in industry and society, "the foreign language profession associated itself with the college-preparatory track" (p. 8). All of these factors created a manifestation of world language study that is largely unchanged today, with the study of three Western European languages dominant, and this study happening mainly in high school.

In this perinatal period of world language study in the U.S., another sociocultural factor that shaped its current form was the fact that the English language was believed to carry the ideas of democracy and capitalism within it. Therefore those who felt radicalism or Bolshevism was invading America's "true" culture saw the exclusive use of English as a linguistic weapon in the fight against those supposedly invading ideologies (Herman, 2002). Another example of linguistic xenophobia was the anti-German sentiment created by WWI, which saw not only mob violence against people of German descent in the United States, but also plummeting enrollment rates for German language study. Whereas in 1914, 33% of high school students were taking German, that number dropped to 1% in 1921 (Herman, 2002, p. 12). Herman (2002) describes the devastating effect this had on language study:

By 1920 implications of the connection between all modern language teaching or study and the terms *unpatriotic* and *un-American* began to be seen. Rather than replacing German language study with the study of other modern languages, many incoming students were simply not enrolling. (p. 12)

This nationwide air of bigotry also whittled down the goals of world language study to conform to the economic and political goals of American foreign policy. In this environment, any language teacher bringing up political or philosophical ideas considered foreign, or involving cross-cultural analysis, "especially if it would involve a critical view of the United States' actions in the world scene, was open to

accusations of unpatriotic, un-American, and corrupting behavior” (Herman, 2002, p. 15). Herman makes the point that during WWI, language educators were implicitly taught not to espouse German, French, or Spanish ideals, and to at no cost make classrooms “a site of political contention” (p. 17). While this picture in no way resembles an ideal, liberated atmosphere for education, we unfortunately find that it is not merely a description of the past.

Such a history of stifled language study leaves the U.S. with a current environment that is far from ideal. According to nationwide findings by the Education Commission of the States (2002), only the state of Rhode Island and the District of Columbia have explicit world language study requirements for a basic high school diploma written into educational law. Eleven states do not even make mention of world language curriculum in their legally stated educational goals. Myriam Met (1999) suggests that even the educational systems of third-world countries produce better foreign-language students, and that “U.S. schools are barely able to produce students who have enough fluency in a language other than English to be polite tourists” (p. 37). Met goes on to provide statistics showing that across the United States, only about one in three elementary schools offers its students the opportunity for skill in another language, and nearly all of the remaining schools offer their students no world language opportunities at all. Here it is important to keep in mind that Met is referring to students whose first language is English, not to English Language Learners across the country whose second language study is not only enforced, but often developmentally inappropriate. Widening the context, a global perspective is given:

Unlike the United States, most education systems around the globe prepare their students to function in their national language and at least one additional language. A survey of 19 countries found that 16 provide widespread compulsory foreign language instruction to students by the upper elementary grades. (Met, 1999, p. 36)

Met also shows the socioeconomic disparities in U.S. world language study. Highlighting the socioeconomic gap created by the historical trend to stratify education described earlier, Met shows that “about 25% of urban public elementary schools teach a foreign language

compared with 65% of suburban private elementary schools” (p. 39).

These factors of current U.S. world language study do not show much change from the caustic past described by Herman – a mere modernized translation of that environment at best. This lack of reform is evident in the fact that linguistic activists as late as the 1960’s and 1970’s were fighting against an unchanged, xenophobic disposition in language study. Persons of note would be Lorraine Strasheim and F. Andre Paquette, whose platform in the 1960’s and 70’s was that language teachers and aficionados “must take the lead and openly argue that it is not un-American to be bilingual or to learn a second language” (Herman, 2002, p. 18). Considering the multilingual origin and history of this nation, a statement like this should appear obvious. However, this is a disposition that must be fought not only because of its domestic effects, but keeping in mind U.S. cultural and economic hegemony in the world, for its international effects as well.

This is due to the unimpressive state of U.S. world language study, which exists within a global context of, and contributes to, lessening linguistic pluralism. As thousands of languages approach oral extinction worldwide, Shutnabb-Kangas (2000) cites Michael Krauss of the University of Alaska in stating that only 600 languages are assured of being around in the year 2100. This number is less than 10 percent of present oral languages. The global phenomenon of oral linguistic extinction, coupled with the sentiments shown by de facto U.S. policy on world language curricula, points to a worldwide linguistic crisis.

### **The Humanist Argument For World Language Study**

A humanist argument for increasing world language study in the U.S. would be based on the idea that maintaining linguistic pluralism is necessary in respecting, protecting, and celebrating the myriad cultures produced by the human race. Building from the historical context of world language study opportunities being few and basically limited to the three western European languages of French, German, and Spanish, Timothy Reagan (2002) makes a humanist argument for increasing not only world language study in general, but especially that of Less Commonly Taught Languages, or LCTLs. Reagan begins by citing a 1996 study by Draper and Hicks which found that while fewer than half of all secondary students in America study a

foreign language, only 3.5% of those study a language other than German, Spanish, French, or Latin. With the number of native speakers as a definitive criterion, Reagan then lists the ten largest languages in the world, in descending order, as Mandarin, English, Hindi, Spanish, Russian, Arabic, Bengali, Portuguese, Japanese, and French. While Spanish and French are found in this list, German is altogether not, and French is positioned last, far below languages like Hindi or Bengali, which are virtually unrecognized by U.S. curricula. Therefore, the logic in prioritizing the inclusion of these western European languages is difficult to see. Another important point made for the study of an LCTL is that “there can be little doubt that teachers of LCTLs bring with them very different sets of experiences with respect to foreign language pedagogy” (p. 127). This pluralism or diversity in pedagogy, while being valued here solely for its humanist merit, also shows further value as a possible trigger for cognitive variability, the ideas and value of which will be discussed in the cognitive argument for language study.

Some educators have posited that ease of acquisition is a deciding factor as to which languages are taught in schools. However, according to Reagan’s (2002) scale based on five linguistic criteria (phonology, grammar, lexicon, orthography, and spelling) measuring interlingual distances, Italian is found at half the distance from English as French or German. However, class offerings for Italian do not even compare to those of French or German. As a more plausible explanation of what is offered and what is not, Reagan proposes a “social grammar” of languages. This concept describes how the American sociopolitical climate puts languages into a hierarchical model, ranging from the valued to the dismissed. Reagan’s “social grammar” was based in part on the work of Dell Hymes (1996), who proposed some core assumptions Americans have about language in the United States. These included the ideas that everyone should or does speak English in the United States, that bilingualism is inherently unnatural, and that “most everyone else in the world is learning English anyway, and that, together with American military and economic power, makes it unnecessary to worry about knowing the language of a country in which one has business, bases, or hostages” (Hymes, 1996, p. 85). Reagan (2004) believes these assumptions to be an accurate reflection of U.S. sentiment, and adds that “each of these assumptions is in fact fundamentally flawed...” (p. 129). Reagan’s

social grammar, coupled with Hymes’ American assumptions, paints a picture of U.S. societal dispositions on language that ignores the worth of cultural and linguistic pluralism, and thus is anti-humanist.

Another important reason for expanding the scope of languages taught in U.S. schools is its effect of making social studies more holistic and valid for the purpose of global education, an outlook on education which sees individuals not as mere national citizens, but also as citizens of a global community. Reagan (2002) proposes that education about global topics in the U.S. is entirely disconnected with language study, and absolutely monolingual in nature. He then criticizes this reality in the following:

It simply does not make sense to think or talk about global education as a monolingual activity. Further...the idea that a global education curriculum could be developed, or that a global education unit could be taught, in a monolingual fashion (as, indeed, the literature seems not merely to accept but to assume) ought to be viewed by reasonable people in roughly the same way that claims about the world being flat are viewed... (p. 133)

A problem with U.S. attempts at global education taking this monolingual form is that global education needs to acknowledge the worth of worldwide diversity in languages and cultures.

Banks (2001), in creating a typology of cultural identity development, describes different stages of knowledge about and comfort with cultural diversity ranging from the misanthropic to the humanistic. The American dispositions described previously fall under Banks’ stage of “cultural encapsulation.” This stage is viewed as problematic, as the sentiments of separatism and superiority associated with the stage are leading causes of social strife both domestically and internationally. In Banks’ model, the final stage in a positive progression is labeled globalism and global competency, and would be evident if U.S. education acknowledged the diversity of world languages and cultures by engaging in the direct study of not only various cultures, but their languages as well.

Reagan (2002) offers one final humanist argument for the study of language. Thinking about the sociopolitical issues surrounding which languages are taught and which are not will be an exercise in “the empowerment and emancipation of both students and teachers” (p. 134). This is

further emphasized in the realization that American views on language exercise cultural hegemony most powerfully in its transmission through public education.

### **The Cognitive-Educational Argument For World Language Study**

A humanist perspective argues that languages should be taught to further egalitarian thought and our cultural competence in a diverse world. In addition, there is a wealth of evidence that the study of language beyond one's first language has positive *cognitive* effects on learners. Da'ad Naserdeen (2001) states that "research indicates that children who study a foreign language show increased cognitive ability and exceed normal classroom expectations" (p. 21). Naserdeen criticizes the normal absence of language classes before high school, stating that high school is too late to offer enough time for mastery. Naserdeen also quotes biophysicist Michael Phelps, co-inventor of the Positron Emission Tomography scan, as saying "if we teach our children early enough, it will affect the organization, or 'wiring' of their brains" (p. 21). Studies by Mechelli et al. (2004) gave evidence of the phenomenon stated by Phelps. Intrigued by the idea of the human brain's "unique ability to learn more than one language – a skill that is thought to be mediated by functional (rather than structural) plastic changes" (p. 757), these researchers used a process called voxel-based morphometry to show *structural* plasticity in English and Italian bilinguals with monolinguals as a control group. The first study looked at 25 native English speakers who had acquired a second language before 5 years of age and had kept it in practice since, 33 native English speakers whose second language acquisition had begun between the ages of 10 and 15, and finally 25 monolingual English speakers as the control group. Findings were significant at  $p < 0.05$  showing increased grey-matter density in the inferior parietal cortex (associated with second-language acquisition) with bilinguals relative to monolinguals. Furthermore, this effect of increased density was greater in the group of earlier bilinguals. Next, correlations regarding second-language *proficiency* were studied. A group of 22 native Italian speakers who had learned English at an age between 2 and 34 underwent voxel-based morphometry investigation. Afterward, second- language reading, writing, speech comprehension and production proficiency was assessed via a battery

of standardized neuropsychological tests. The findings were that proficiency had a high ( $r = -0.855$ ) negative correlation with age of acquisition, yet it correlated positively with grey-matter density. Furthermore, the researchers ruled out the possibility of a confounding variable of genetic predisposition to high density in this area, as the correlation was found with second-language acquisition, which comes about through social experience, not as a result of genetic predispositions. This research gives powerful evidence that language study has positive effects on the physical makeup of the brain, shows that this physical effect correlates positively with proficiency, and proves that this proficiency needs time to develop.

For the purposes of this body of writing, both Phelps' statement and the research of Mechelli et al. are taken as referring to situations where children are being taught multilingually or with support for their first language, because a simplistic view of these findings may lead to an idea that children can assimilate to new, monolingual situations, leaving first language behind. Ovando, Collier, and Combs (2003) argue that this is not the case, and warn of the detrimental effects of children losing mastery of L1 and consequently impairing crucial cognitive elements and skills such as identity and literacy.

Met (2001) states that "bilingualism enhances cognitive functioning, such as metalinguistic skills and divergent thinking" (p. 38). This enhancement of divergent thinking is even more significant when considered in context with the findings of Robert Siegler (2004) who showed that cognitive variability can lead to cognitive development:

The variability of cognition and action allows us to discover a great deal about the environments toward which the thinking and action are directed. Our difficulty in reproducing the way we pronounced a word in an unfamiliar foreign language may lead to some even less adequate pronunciations in the short run, but in the longer run may lead us to generate and then learn better pronunciations...In general, cognitive variability may lead to performance never incorporating on any one occasion all the best features of previous performance, but may also be critical to our becoming increasingly proficient over time. (p. 211)

Here it can be posited that if, through the study of different languages or through the previously

discussed diversity brought to a learning environment by linguistic pluralism, inroads to cognitive variability can be triggered, this process may also lead to further cognitive development.

Met (2001) offers a correlating factor to the reason for scarcity of world language study offered in the U.S. Because of the sociopolitical climate described by Reagan (2002), world languages are not considered to be “core subjects,” and thus are not considered in high-stakes accountability testing, which causes their neglect in both attention and funds. However, even if the worth of language study is not currently assessed through its own standardized testing, researchers have shown its worth through standardized tests in other subject areas. Thomas Cooper (1987) set out to provide evidence for notions long held by language teachers that world language study has positive effects on a student’s first language in ways such as a better understanding of grammar, improved reading and writing, and adding to one’s knowledge of abstract vocabulary. Curiosity piqued by accrued Scholastic Aptitude Test (SAT) data which showed a positive correlation between SAT scores and world language study, Cooper gathered empirical evidence through a study on a sample of students from a large metropolitan area in the Southeast. Using analysis of covariance, Cooper allowed for a finding that was controlled for possible bias from some students’ natural propensity toward language study. The findings were significant at  $p < .0001$  level showing higher SAT Verbal test scores for students who studied a world language, and the amount of this score increase went up with the amount of time students spent in world language study.

Another study, done by Garfinkel and Tabor (1991), showed the effects of world language study on English reading achievement at the elementary level. Interested by theories such as second-language exposure increasing cognitive levels of students “to the point that they become aware that a word and the thing it represents are independent entities, resulting in an ability to reach new levels of abstraction” (p. 377), they conducted a four-year study on 513 students in grade six. Their findings showed a significant correlation between 1-2 years of Spanish study and improved reading scores on the SAT 6 test among students assessed as being of average or low intelligence based on the School Ability Index of the Otis-Lennon School Ability Test. Possibly the most important conclusion made by

the researchers came as a consequence of connecting the findings with the context of world languages historically serving a high-status demographic. They state that “while some educators have always counted on children of above average intelligence to provide enrollment in foreign language classes, they may have been missing part of another group of potential clients who stand to gain even more from the instruction than their more able classmates” (p. 380).

Yet another study by Armstrong and Rogers (1997) showed the effects of Spanish study on the subject areas of Reading, Math, and Language Arts in 100 Kansas third-graders. The students were pre-tested in these areas, and then an experimental treatment of three half-hour Spanish lessons per week was introduced over one semester. Finally, a post-test was given in the original subject areas. A multivariate analysis of the study showed a significant overall increase with a  $p$  value of .014. A univariate analysis showed no significant increase in reading scores, but math scores increased significantly at  $p=0.046$  and language arts scores increased significantly with  $p=0.034$ . Their findings showed Spanish language study to have a positive effect on both reading and writing scores.

As a whole, these studies comprise a wealth of evidence that world language study has positive effects on cognitive abilities, which can be shown through improvements in standardized test scores. While the true meaning and validity of standardized testing remains in debate, the positive effects of world language study in this context are difficult to ignore.

### **The Economic Argument For World Language Study**

Greene (1988) shows that when education is viewed solely for the sake of modern economics, it becomes dehumanizing by viewing young students as a “human resource,” and that our “technicized, privatized, consumerist time” dramatically cuts down on the fundamental, humanist goal of education – the development of the intellect (p. 12). Unfortunately, many educators and policymakers still insist that education’s purpose is economic, implying that students are human capital and that learning is a commodity. For these educators and policymakers, humanist and cognitive arguments alone will not suffice, and so one is therefore compelled to investigate an economic argument for the study of world languages.



Halliwell (1999) applies the variable of language to the long and well-established gravity equation of trade to quantitatively show that monolingual societies are at a competitive disadvantage to multilingual societies in international trade. Met (1999) gives a concrete example of one such variable by stating that “despite the early dominance of English on the Internet, the majority of electronic communications, such as Web sites and e-mail, are now carried out in languages other than English” (p. 36).

The economic significance of language is furthered by Ould-Abdallah (1992), who stresses the importance of multilingualism in international economics, paraphrasing Nobel laureate in economics Maurice Allais as arguing that global citizens need “a plurilingualism or at least trilingualism.” Ould-Abdallah then states:

In a competitive world such as ours, where it must serve as a vehicle for scientific thought, language must be able to serve as the vector to transmit technological innovation...As with peoples, each language has its own creative genius limited by historical circumstances. (p. 36)

Here, historical circumstances must be read to include the sentiments of monolingual superiority described earlier.

Information on Japanese management techniques, considered by Western capitalists to be extremely innovative and advanced, is the subject of a study done by Sachie Noguchi (1992). It concludes that the exportation of these methodologies and technologies is inhibited mainly by the existing language barrier. Again, an opportunity for the advancement of language study to solve an economic dilemma is brought to light. Both the work of Ould-Abdallah’s and Noguchi show how language can act as either a barrier or bridge, depending on the dispositions of society. While linguistic pluralism can spell economic difficulties for people stubbornly set on monolingualism, if treated as a resource for diversification and expansion, this pluralism can act as a bridge toward economic health and prosperity. Interestingly, Herman (2002) treats an economic argument for world language study with cynicism, stating:

Americans are not fooled by the rhetoric of language study for successful economic

competition: everything around them says that, as the language of a dominant sociopolitical and military force, theirs is the language of power and will be so into the foreseeable future. (p. 21)

While this view has a cornucopia of supporting evidence from recent history, the arguments of Halliwell, Met, and Ould-Abdallah show that use of languages other than English is increasing in international trade. With these arguments in mind, one can see how those espousing a cultural-imperialist view lack perception of the short future in store for their cultural and economic hegemony.

### **Models For Reform**

Focusing on implementation of reform, Herman (2002) emphasizes the idea that all language teachers and scholars need to participate in a movement for extended sequences of language study, and that “*all* children are capable of [language] learning, but performance standards are meaningless without the opportunity to learn over long periods of time” (p. 21). In response to this need, programs stressing longitudinal, holistic world language study have been developed in New Jersey, one of the few states that have developed world language study standards throughout K-12 education (Herman, 2002). The importance of a holistic, longitudinal approach to world language study spanning K-12 is shown through Herman’s (2002) interview with Janis Jensen, World Languages Coordinator for the state of New Jersey. In it Jensen states that:

...it takes a long time to reach proficiency in a language, and...it is simply unrealistic to expect anyone to learn to speak a language after only two years of study. Most parents embrace this idea; it just seems like common sense to them. (Herman, 2002, p. 20)

From this, one can easily see both a need for reform and potential support for it that is only waiting to be tapped.

### **Conclusions**

The sampling of literature has shown historical evidence of negative attitudes toward multilingualism in the United States that has led to a poor environment for world language study. From this standpoint, humanist arguments paint this as problematic, and state that emphasis on world languages should be increased because of

the importance of cultural and linguistic diversity across the globe. Cognitive arguments and studies show that world language study has positive effects on brain structure and academic performance. Economic arguments point to the need for linguistic diversity in an increasingly globalized economy, as well as empirical evidence that multilingual societies have added economic strength. Finally, the literature has shown some hope for, as well as optimistic examples of, reform in U.S. world language study.

Even though negative dispositions on linguistic pluralism are very apparent to many in the U.S., a quantitative representation of these dispositions is very difficult to show. In spite of this difficulty, Herman's (2002) scrutiny of the history of world language study in the U.S. shows a definitive wealth of evidence that pluralistic language study has been viewed with xenophobia and contempt and considered unpatriotic. This history is the background for the current lack of world language pluralism in public schools shown by a survey of all 50 states' state-mandated curricula. This survey found that only the state of Rhode Island and the District of Columbia have explicit mandates for world language study in their respective state law books. In addition to that, prominent language educators such as Met (2001) show that the U.S. is alone in its disdain for world language education in core curricula; other nations' emphasis on second-language study, often English, puts U.S. monolingualism in a global context which calls for critique.

Furthering the conclusion, it is preferable to concisely revisit the major findings or statements of the three arguments discussed. First, the humanist argument states that if the goal of education is the betterment of humankind, the undeniable diversity of humankind must be celebrated. If historical dispositions in the U.S. have not celebrated this cultural and linguistic diversity, then increasing diverse language study is a fundamental part of making holistic change toward a more humanistic society. The educational goal of cognitive enrichment is also supported by language study beyond first language, and this is shown by well-controlled experimental research using both cognitive performance tests and actual scans of the brain's structures. Finally, the economic argument states that while American cultural and economic hegemony worldwide has been powerful, its absoluteness is short-lived. Therefore, there is greater and greater need for linguistic pluralism

if the U.S. is to remain competitive in the globalized, neoliberal Capitalist environment that the U.S. helped to create.

## **Recommendations For Practice**

### **Recommendations for Policy Change**

The research compiled in the literature review points to an initial need for U.S. society to address its unfriendly atmosphere toward pluralistic language study. Herman's (2002) work stressed that changing this must come from a grassroots movement of multilingual educators stressing the importance of language study and linguistic pluralism. A grassroots call for increased emphasis on world language study must be replied to with policy changes made by members of organizations such as the United States Department of Education and individual state legislatures toward inclusion of world languages in official definitions of core curricula or state-mandated compulsory curricula. Policy changes should result in not only an increase in funding for world language curricula and thus increased class offerings, but also an increase in the diversity of languages offered, breaking away from the confines of the "traditional" three – Spanish, German, and French. Also, while most humanist educators do not laud the use of standardized testing, the expanding existence of such standardized tests for world languages would be further evidence of policy change toward a greater emphasis on world language study nationwide. These policy changes should be a natural course after the spread of information contained in this writing – the positive effects of world language study on humanist education, students' cognitive capacities and performances, and U.S. economy at large.

### **Recommendations for Pedagogy**

Upon each small increase in world language offerings in public schools, educators must then criticize the ideological framework of their curricula. The work of Reagan (2002) showed that the minimal language offerings of Western European languages and the hierarchical views of language existing implicitly within these limited offerings do not reflect the linguistic diversity of worldwide language use, and are anti-humanist. Therefore, if educators are to connect both socially and emotionally with students in order to achieve positive language-learning results, a humanist perspective that

applies value to linguistic diversity must be adopted.

However, that is not to say that it must be the only mindset adopted. The economic arguments showing increased reliance on proficiency in linguistic pluralism in the world of international trade give incentive for students who may put more personal value on the economic benefits world language study can offer them. An important note of caution would be to only apply this rationale to students who appear interested in an economic view of language, in order to avoid the alienation referred to by Greene (1988) that students may experience in a “technicized, privatized, consumerist” education (p. 12).

Seeing the positive effects of world language study on other content areas, it becomes apparent that co-educators from other fields represent an untapped source of both support and curriculum development. First, emotional and professional support for world language educators is inevitable if co-educators are shown the research findings that world language study improves performance on tests in other content areas. Also, curriculum development may be enriched by integrating aspects of world languages into thematic units that involve multiple, if not all, content areas in the school.

The work of Shrum and Glisan (2005) shows that a language study pedagogy that emphasizes top-down views of the material is most effective. A top-down approach would be described as synonymous with a whole-language approach to English language-arts study; it emphasizes introducing materials for instruction in contextualized, meaningful formats, allows for guessing and linkage of new language material to first language, and fosters higher-level cognitive functions in the classroom. Looking at the historical methods of emphasizing rote practice of grammar without holistic meaning, one can see how a student might often be confused and see the language as nonsensical. From this the importance of a holistic, top-down approach becomes apparent.

Finally, a study by Aplin (1991) investigated what turns students on to or off of world language courses in British public schools, where world language study is compulsory until the age of 14. Aplin’s major findings were that the most popular activities in world language classrooms were ones that elicited an positive emotional response, such as conversation, games, quizzes, and listening, whereas the most prominent reason for students discontinuing their

language study was a lack of opportunities for contact with the target country” (Aplin, 1991, p. 3). This shows the detrimental effects of a decontextualized world language pedagogy that offers no connections to where the language is being used pragmatically. From this, educators should put emphasis on offering any and all possible opportunities to connect the language study with real life.

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## Instructional Technology in the Secondary Mathematics Classroom

*This paper discusses the importance of using instructional technology (IT) in a mathematics classroom. IT is defined as any form of technology that can be used in conjunction with teacher curricula. Examining the use of IT is important because there is a divide between teachers who believe that technology is the answer to many educational problems and those who believe that technology hinders students' learning. Numerous case studies and statistical surveys were analyzed, and fell into four categories of IT: computers, the Internet, integrated learning systems, and calculators. These studies suggest that using technology in the classroom can enhance student learning. The overall conclusion is that IT is underutilized in the classroom.*

Instructional technology (IT) is available to nearly every teacher in the U.S. (Ely, 1999). Ely (1999) explains that IT is "the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning" (p. 305). IT includes any type of technology or device used in the classroom to support learning. IT can be used in many different ways, but is mainly used by students to enhance their learning, or by teachers to strengthen their curriculum. It was reported that 100% of schools in the country have access to the Internet (NCES, 2003). The National Council for Teachers in Mathematics (NCTM) has mandated "that at a high school level, graphing calculators must be available to all students at all times" (Simonsen & Dick 1997, p. 239). In 1995, 95% of students reported having access to some kind of calculator (NCES, 1998). Integrated learning systems (ILSs), software or hardware that many believe can replace teachers and provide learning material for students, are used in approximately 25% of schools in the U.S. (Mazyck, 2002). Examining the use of IT is important because there is a divide between teachers who believe that technology is the answer to many educational problems and those who believe that technology hinders students' learning.

IT has proven in many studies to be beneficial to student learning. IT, mainly in the form of computers, is proliferating throughout public schools in the U.S. For this reason is important to investigate the effectiveness of IT. Research has shown that some computer use boosts not only students' competence with computers (Mittra & Steffensmeier, 2000), but also achievement (Mann, Sakeshaft, Becker, & Kottkamp, 1999) and in some cases students' self

esteem (Page, 2000). Technology can also bring about pedagogical change toward constructivism, a form of teaching that some educators believe enhance student learning by incorporating interactive, inquiry based teaching (Becker & Ravitz, 1999; Dexter, Anderson, & Becker, 1999; Manoucherhri, 1999). Overall technology can be a useful aid to teachers who choose to integrate it into their curriculum.

Technology is present in the classroom and the demand is growing, yet many teachers are still hesitant to integrate technology into their lesson plans (NCES, 2000). Over the last two decades, computer use by students has increased significantly (NCES, 1999). Teachers' personal computer use has increased, but computer use as a method for teaching has declined (NCES, 2000). Teachers who do not use IT in the classroom have cited reasons from interference with the curriculum (Norton, McRobbie, & Cooper, 2000) to student dependency. An example of student dependency is that some teachers have discussed fears regarding high school students who use calculators to solve problems as simple as  $2+2$  (Simonsen & Dick, 1997). Some studies have shown that the use of ILSs can hinder educational development by increasing the time it takes for students to learn the material (Norton & Sprague, 2001). The validity of these concerns about IT are discussed in the body of this paper.

This paper highlights the research involved with IT in the mathematics classroom. It focuses on four types of IT: computers, the Internet, ILSs, and calculators. This paper reveals that computer use in the classroom can improve achievement, while many teachers only use computers for drill and practice. Despite almost every school in the country having access to the

Internet, only a limited number of teachers use it to develop instructional materials. The advantages of ILSs are presented, as well as the inconclusive testing of their usefulness in the classroom. Most educators feel that calculators are useful to every student in the mathematics classroom. However, some dissent regarding their use is discussed. Finally, I present my recommendations for use of IT in the mathematics classroom.

### **A Brief History of Instructional Technology**

IT was developed for classrooms long before the age of computers. As early as the late 1910s, the technological side of IT included classroom globes, world maps, and chalkboards (Betrus & Molenda, 2002). The first college credit in IT, offered as a part of a preservice teaching curriculum, was in 1918 at the University of Minnesota. Sidney L. Pressy invented one of the major contributing devices to the field of IT in 1925. It was called a "Teaching Machine" (Shrock, 1991; Skinner, 1958/1996). Pressy's technology was later adapted by Skinner (1958/1996) who described it in detail in 1958:

In using the device the student refers to a numbered item in the multiple-choice test. He presses the button corresponding to his first choice of answer. If he is right the device moves on to the next item; if he is wrong, the error is tallied, and he must continue to make choices until he is right. (p. 211)

Teaching machines were the earliest form of the ILS. In essence, the teaching machine was invented to administer individualized instruction. The use of this device was strongly supported in the 1960s by public schools, colleges, and the military (Mazyck, 2002).

In 1957 the Soviet Union inadvertently helped expand the field of IT in the United States by launching Sputnik, the first satellite, into space. In response, the United States Congress passed the National Defense Education Act (NDEA) in 1958. Betrus and Molenda (2002) argue that these events led to a massive increase in funding for IT because "the NDEA spurred momentum for teaching technology, with a primary focus on winning the 'space race' with the Soviet Union" (p. 19). Increased funding led to further development in electronics that would eventually lead to the creation of the microprocessor and the microcomputer.

Technology advancements in the 1960s and 1970s led to the development of an "instruction-

oriented computer-based lesson and practice system called PLATO" (Mazyck, 2002, p. 33). PLATO stands for Programmed Logic for Automatic Teaching Operation. PLATO was an early version of the Internet. It was a system that worked with large information databases similar to the modern day Internet. It consisted of a workstation connected to a phone line so that teachers could remotely access school information (McNeil, 2001). Even though great advances were being made technologically, IT funding and interest started to decline in the latter half of the 1970s (Betrus & Molenda, 2002).

Despite the decreased funding, the development of new technology continued during the late 1970s. Saettler (as cited in Mazyck, 2000) describes the era of microcomputers from the 1970s and 1980s:

A new hope for the use of computers in education arose in the late 1970s when the first microcomputer became available to a growing market. By the early 1980s, school systems began to invest heavily in microcomputers for classroom use, and, by 1985, it was reported that there were at least one million microcomputers in America elementary and secondary schools. By 1988, the estimate was as high as three million! (p. 20)

Personal micro-computers became widespread as soon as they came in the market for public use. In the late 1980s and early 1990s computers continued to expand throughout the public school system.

The Apple Computer company, which was founded in the early 1980s, helped to enhance the quality and quantity of computers in public schools. In 1985, Apple Computers created a project called Apple Classrooms of Tomorrow (ACOT) (Baker, Gearhart, & Herman, 1993). The ACOT project placed a computer in every classroom and in the home of every student in 5 pilot schools. Baker et al. (1993) conducted a study through UCLA that analyzed the effectiveness of the ACOT program. They determined that both students who worked with the computers on a regular basis and students who did not averaged similar test scores in all areas. However, the students who worked with computers *and* received extra tutoring performed better than students who did not work with computer and received outside tutoring. Computers coupled with outside learning sources

Table 1: Percentage of Students Who Used a Computer at Home or at School, by Grade and Reason for Use 1984-1996

Activity	Year and Grade Level					
	1984		1990		1996	
	8th	11th	8th	11th	8th	11th
Learning	58.2%	54.6%	70.5%	64.5%	82.6%	80.2%
Writing Papers	15.0%	18.8%	61.3%	68.9%	91.2%	95.7%

Note: Adapted from "Student Computer Use" by National Center for Educational Statistics, 1999, p. 1.

helped students to outscore their peers during testing. Baker et al. stated, however, that due to ACOT procedures and teachers' unwillingness to participate, the data they collected on the ACOT project produced minimal results. Baker et al. also claimed that the teachers they observed in this program were not focusing on "technology-supported instruction" (p. 10).

During the 1970s and 1980s, while micro-computers were in the process of development, calculators were beginning to emerge. The first handheld calculator was invented in 1970 in Japan. Hewlett-Packard developed the first calculator for the U.S., which was released in 1972. It was also the first scientific calculator, meaning that it was capable of processing logarithmic and sine functions. The last slide rule was sold in 1975 (Waits & Demana, 2001). Calculators were enhanced significantly in the 1980s and 1990s. The first graphing calculator was developed in 1986 in Japan, with the ability to graph functions using coordinates on a little screen. A decade later in 1996, Texas-Instruments developed the TI-92, which was the first graphing calculator that came pre-programmed with an "easy-to-use computer algebra system" (Waits & Demana, 2001, p. 51).

### Computers in the Classroom

In a 1999 study conducted by the National Center for Education Statistics (NCES) (1999), it was determined that computer use dramatically increased in U.S. public schools between 1984 and 1996. The study analyzed survey results taken every 2 years from 1984 to 1996. In 1984, 16% of 8<sup>th</sup> graders reported using computers more than once a week at school. In 1996 that statistic nearly tripled to 47%. Eleventh graders reported 24% of computer use once a week in 1984, and 50% in 1996 (NCES, 1999).

More statistics came from the same study by the NCES (1999) that examined computer use at home for 8<sup>th</sup> and 11<sup>th</sup> graders. The statistics are summarized in Table 1. These results show that

computer use in the home had also significantly increased since 1984. Nearly all of the surveyed students reported using computers to write papers or stories at home. This report also noted that high-income families were more likely to report using computers in the home or at school than low-income families (NCES, 1999). The NCES statistics showed that computer use had increased at home and in schools.

### Underutilization of Computers

How do these statistics relate to math classes, and to what extent do math teachers incorporate computers into their classrooms? A survey by Manoucherhri (1999) gathered data from 116 high school math teachers in 63 school districts in Missouri. All of the teachers reported having access to a computer lab, while 84% of the teachers reported having access to only one computer in their classroom. Forty-six percent of the teachers used computers for individual instruction. The main reason cited by teachers for using a computer in the classroom was for simple calculations. Only 13% of the math teachers in this study used computers at least once a week for classroom instruction. Ten of the teachers from this group reported using computers for instruction on a regular basis, but solely in their Advanced Placement classes. Based on her study, Manoucherhri concluded that in most Missouri mathematics classrooms, computers were primarily used for drill and practice and not for deeper understanding of the material.

Norton, McRobbie, and Cooper (2000) observed and interviewed five teachers at an all-girls private high school. The school was chosen because it had a 4:1 student to computer ratio. All the teachers and students at this school had computer access. All 5 teachers surveyed in this study stated that they did not use computers in their classroom. Only one of these teachers considered incorporating computers into her classroom, but lacked the proper training to

implement it effectively. The other 4 teachers claimed that their own teaching styles were more efficient for teaching the material and that computers in the classroom only wasted the teachers' time. Teaching students how to use a computer was perceived as cutting into the regular class time. None of the teachers were willing to put in the necessary effort to train students to use computers effectively to improve their learning. These teachers declared that "the students' use of computers could deprive students of the opportunity to practice basic skills and procedures" (p. 104).

Another component of this study was to analyze the various teaching styles used by these teachers. The four teachers who refused to work with computers in their lesson plans had content-focused teaching styles. These teachers preferred to lecture in front of the class, the traditional style of teaching. The teacher willing to use computers had a more learner-focused teaching style (Norton et al., 2000). Norton et al. (2000) concluded from their research that the mere presence of computers in a school does not necessarily lead to mathematics teachers using them in their curriculum. They state, "Despite the availability of computers for the mathematics staff, computer use in mathematics teaching...was almost nonexistent" (p. 104). Because this study only interviewed five teachers, generalizations about the attitudes of teachers toward IT cannot be made from this study alone.

### **Social and Academic Gains Using Computers**

Mitra and Steffensmeier (2000) conducted a 5-year longitudinal study on students at Wake Forest University. This school was chosen because the college provided one computer for every student. Surveys that inquired about the comfort level of computer use were given to students in their 1<sup>st</sup> and 3<sup>rd</sup> years of school. Ninety percent of the students felt comfortable using computers at the start of their 1<sup>st</sup> year of college. When the students were tested again in their 3<sup>rd</sup> year all of them (100%) said that they were comfortable with computers. Upon entering school 80% of these students felt that computers made learning impersonal. Two years later, only 66% still believed that. Initially, 75% felt that computers enabled them to interact more with their professors. All of the students agreed with this statement 2 years later. All of this data was statistically significant ( $p < 0.05$ ) (Mitra & Steffensmeier, 2000). This study demonstrates

how positive gains in attitude toward technology can be made through using IT in the classroom.

Other studies show how computers and technology do more than just boost students' attitudes toward computers. Page (2000) found a connection between academic gains and enhanced self-esteem for children from low socioeconomic (SES) backgrounds. Data was drawn from 5 classrooms that used technology on a regular basis, and 5 classrooms without any technology. Many different kinds of ITs were provided to the technology-rich classrooms for this study: five computers, two printers, one large screen TV, one digital camera, one scanner, one VCR, a set of classroom calculators, and a mini digital camera used for videoconferencing. The data from these tests showed a statistically significant ( $p < 0.05$ ) gain in test scores for students of low SES background in the areas of math concepts, math application, and analytical math. This data produced stronger results regarding these students' classroom self-esteem. The students involved in the technology surveyed demonstrated that their general self-esteem was raised. These results were statistically significant ( $p < 0.001$ ). To summarize, this study found that students of low SES backgrounds had an increase in both math scores and self-esteem through the use of these technologies in the classroom.

Another study of significance, regarding computers, occurred in West Virginia. This study took place over an 8-year period in every 5<sup>th</sup> grade mathematics classroom in 18 different school districts. The results of extensive use of computers in these classrooms showed that the students made an 11% gain in the state's standardized math tests. These results are also statistically significant ( $p < 0.001$ ) (Mann et al., 1999). Most of this research reports the gains of 5th grade math students, but the results appear to generalize beyond elementary school and into the upper grades. The key conclusion of this research was that the use of computers once or twice a week produces negligible results. The researchers concluded that students need to have full access to computers in their classrooms for significant achievement gains (Mann et al., 1999).

### **Computers and the Constructivist Classroom**

Computers in the classroom can also lead to positive pedagogical changes among teachers (Dexter et al., 1999). In 1938 Dewey helped lay the groundwork for the definition of a constructivist classroom. First, Dewey



(1938/1997) stated, "He [the educator] must...have that sympathetic understanding of individuals as individuals which gives him an idea of what is actually going on in the minds of those who are learning" (p. 35). Thus a teacher needs to know where every student stands on a subject. They need to be aware of each student's level of knowledge. Second, the constructivist teacher is aware that his or her suggestion is "a starting point to be developed into a plan through contributions from the experience of all engaged in the learning process" (p. 72). The constructivist teacher needs to be capable of building off of the students' current knowledge regarding a subject. Traditional teachers, as defined by Dexter et al. (1999), are the teachers who prefer instead the stand and deliver method for instruction. This style consists of a teacher lecturing while the students take notes with little regard for the students' different levels of understanding.

Dexter et al. (1999) surveyed 47 teachers from 20 different K–12 classrooms in California, Minnesota, and New York. Thirty-two of the 47 teachers surveyed were considered by the researchers to be constructivists. All 32 of these teachers incorporated computers for their own use. They cited using computers mainly for grading and word processing. Thirty-one of these teachers also used computers to help enact learning among their students. This subset of teachers claimed that the computer served as a catalyst to help them change their attitudes about teaching and create a more efficient classroom. The changes cannot be attributed to computers alone. Dexter et al. concluded that these teachers changed their conceptions about teaching from their school's environment and through years of classroom experience, but that the computers helped bring about change. All of the 32 constructivist teachers claimed that computers helped to bring about a pedagogical constructivist change.

The findings from these studies have shown that computer usage has been rising since computers have been incorporated into the public school (NCES, 1999). Mitra and Steffensmeier (2000) showed that the more students work with computers, the more accepting they become of the technology. Studies have shown that computer use can increase math test scores (Mann et al., 1999; Page, 2000). Teachers, however, have shown that they are less inclined to work with technology. Teachers who prefer a traditional style of teaching are even less likely to use computers in their classrooms (Norton et

al., 2000). Computers have been shown to help bring about pedagogical change. As long as computers are continually incorporated in the classroom, students can enhance their learning and teachers can experience pedagogical improvement.

### **Internet Access**

In the early 1990s, the Internet had begun to be incorporated into public schools around the country. In 1998, the ratio of students to computers with Internet access was 12.1:1. This ratio nearly halved by 2000 to 6.6:1. Finally in 2002, the ratio lowered to 4.8:1 (NCES, 2003). The NCES (2003) compiled statistics from every school district in the nation from 1994–2002. They determined that in 1994, 49% of all public high schools had access to the Internet. This is contrasted with their results from 2000, 2001, and 2002 where the statistics show that 100% of public high schools had access to the Internet. These statistics mean that almost every school in the country has access to the resources of the Internet. The concern for these statistics comes from the amount of actual usage in schools.

A different study conducted by the NCES (2000) gathered data on the use of the Internet by teachers in schools. It reports that 99% of all teachers had access to the Internet in 1999. Of the teachers who claimed to use the Internet on a regular basis, only 39% said that they used it to create instructional material. Thirty-four percent said that they used it for administrative purposes, while 23% used it for communication with colleagues. Even though almost every school has access to the Internet, teachers generally did not use this resource to any great extent. Most of the teachers from this study, 65%, claimed that they were moderately to not at all prepared to use the Internet.

Looking at the individual school characteristics, a study by the NCES (2003) found that the Internet is more common in wealthier classrooms than in poorer classrooms. In 2001, 99% of schools with less than 6 percent minority enrollment had Internet access. All other schools reported between 98% and 100% Internet access. The schools with a majority of low SES students reported 97% of Internet access. Schools with a minority of low SES students reported 99% to 100% of Internet access. These statistics vary, but not enough to be considered statistically significant. This data shows that nearly every school in the nation has equal access to the Internet, when taking into consideration a relatively small margin of error.

Table 2: Percentage of Internet Usage by Household Income 2003

Annual Average Household Income	Percent of Internet Usage
Less than \$5,000	78.8%
\$15,000 to \$19,999	83.5%
\$25,000 to \$29,999	86.6%
\$35,000 to \$39,999	87.3%
More than \$75,000	89.3%

Note: Adapted from "Digest of Educational Statistics 2003" by National Center for Educational Statistics, 2004, p. 513.

The data from the NCES (2003) study can be compared to the data taken from another study by NCES (2004), both which report data from 2001. The NCES (2004) study's data depicted the percentage of actual Internet usage by student characteristics. They found that 88% of all students were using the Internet on a regular basis. Among high school students, whites had 89.2% Internet usage, Blacks usage was 89%, and Hispanics usage was 82.5%. The Internet usage for students of varying incomes is represented in Table 2. This table illustrates that students from lower SES background were less likely to use the Internet in their schools, whereas children from higher income families were more likely to use the Internet.

### Internet and the Constructivist Classroom

Like computers, the Internet can help to bring about pedagogical changes in the classroom. In a study conducted by Becker and Ravitz (1999), teachers were surveyed about the use of the Internet within their classrooms. The data were drawn from 441 teachers in 151 different schools throughout the U.S. Becker and Ravitz determined that there was a correlation between teachers assigning projects for students involving the Internet and teachers changing their teaching ideology to a more constructivist attitude ( $r = 0.50$ ). The correlation for social studies teachers was the strongest correlation ( $r = 0.52$ ). Science teachers had a weaker correlation toward Internet and pedagogical change ( $r = 0.43$ ). Math teachers had the lowest correlation for pedagogical change ( $r = 0.25$ ). These results suggest that math teachers are less likely to make pedagogical changes when they use the Internet in their classrooms.

Almost every school around the country has access to the Internet (NCES, 2003). The

Internet provides a wealth of information that can be used as an infinite resource for both teacher and student. Use of the Internet can even bring out a constructivist pedagogical change that many argue is also useful for enhancing student learning (Becker & Ravitz, 1999; Dewey, 1938/1997). Teachers need to find ways to incorporate the Internet into their curriculum; otherwise it will become an expensive, underutilized tool in the classroom.

### Integrated Learning Systems

Integrated Learning Systems (ILSs) consist either of computer software that can run on pre-existing computers or computers themselves that contain only the ILS software. These systems provide instruction for students and can be used to produce student progress reports (Norton & Sprague, 2001). ILSs have also been said to be the "most successfully marketed types of software among all types of educational software used in schools around the world" (Mazyck, 2002, p. 34). Mazyck (2002) also reports that anywhere between 11-25% of schools in the U.S. own ILSs.

According to Mazyck (2002), the Educational Products Information Exchange Institute conducted the most complete evaluation of ILSs. Their findings showed that incorporating ILSs in a school can cost anywhere between \$25,000 and \$250,000. Also, additional funding must be provided annually for maintenance, license fees, and software upgrades (Mazyck, 2002).

ILSs come with prepackaged curricula and test questions. For this reason, some educators have expressed complaints regarding ILSs. They have reported a high failure rate of their students because the teacher's curriculum does not match the system's curriculum. The developers of ILS attempt to strictly follow benchmarks provided by federal education standards. Teachers who want their students to achieve high scores by using an ILS would need to follow the ILSs accompanying curriculum (Norton & Sprague, 2001).

Mazyck (2002) argues that the development of ILSs based on national benchmarks is problematic for children of color. All children come from diverse backgrounds, but many of the ILSs implemented today incorporate a mainstream cultural bias. Mazyck's research indicates that "culture as a variable in the design and implementation of interactive multimedia receives little or no attention" (p. 35). Since culture plays such a major role in education, it

seems increasingly important for it to be taken into account in the planning of ILSs.

ILS research has produced limited achievement results. In one study, the students in a class were classified into high, medium, and low academic groups. The students worked with the ILS and their test scores were analyzed. The researchers found that the students who benefited the most were already in the high academic category. Students in the low academic category made minimal improvement, and the students in the medium academic category made the least academic improvement (Norton & Sprague, 2001). Becker claimed (in Mazyck's (2002) article) that ILSs would be more effective if developers simply abandoned the "mindless adherence of the principle of individualized instruction" (p. 36). This means that developers need to make ILSs more accessible to all styles of learning, not just individualized learning.

Mazyck (2002) offered a solution for solving many of the problems regarding ILSs through cooperative learning. He argued that if software were developed that was intended for students to work together in groups, then students would benefit more from ILSs. Mazyck speculated that "cooperative learning produced more willingness to take on difficult tasks and persist, long term retention of what is learned...positive attitudes towards the task, and greater time on task" (p. 36). Although no current research exists that incorporates cooperative learning with ILSs, it is useful to consider it an option. Mazyck declared that ILSs will continue to be developed and implemented; therefore, developers need to find better ways to incorporate them into the classroom.

### **Calculators**

The use of graphing calculators has become more common in high school math classes. The NCES (1998) reported that 95% of 12<sup>th</sup> graders in math classes had access to calculators. The 95% that had access to calculators were reported to have outperformed students that did not have access to calculators on a National Assessment of Educational Progress test by an average of 30 points. Graphing calculators are more complex than a basic calculator and can provide students with many more opportunities for exploration in mathematics (Tharp, Fitzsimmons, & Ayers, 1997).

### **Fear of Dependence on Calculators**

One argument against the use of calculators in the classroom is that students may grow

dependent on them. A study conducted by Simonsen and Dick (1997) surveyed 27 teachers regarding calculator use. These teachers were each given a 1 day in-service on the effectiveness of a graphing calculator. The results of the survey show an inverse correlation between calculator use and calculator dependency. When the teachers were asked about the disadvantages of calculators, they all gave two main responses. Teachers had logistical problems with calculator sharing due to calculator shortages. This issue was reported by 59% of the teachers that were surveyed ( $p < 0.05$ ). Calculator theft was also a major concern for 52% of the teachers ( $p < 0.05$ ) (Simonsen & Dick, 1997).

Only a few teachers reported that they feared their students becoming dependent on their calculators. Of the 27 teachers surveyed 10 or 37%, ( $p < 0.05$ ) reported a fear of calculator dependency. Their fears were not unfounded: "Basically kids get into the habit of wanting to use the calculator to multiply  $2 \cdot 3$  or what's the sine of zero, and they have to have a calculator to do that and I think that that is ridiculous" (Simonsen & Dick, 1997, p. 8). This argument is valid. However, the researchers noted that these teachers' fear of calculator dependence correlated with the amount of calculator use. These same teachers reported using the calculator less than three times a week. In this study the fear of student dependency on calculators correlates to poor utilization and not on actual student dependency (Simonsen & Dick, 1997).

A study conducted by Simmt (1997) surveyed and analyzed the teaching styles of 6 math teachers who used graphing calculators in their classrooms. None of the 6 teachers felt that it made any improvement on their students learning. These teachers considered the graphing calculator a hindrance for their students. Simmt noted that these teachers wanted to simply continue using the graphing calculator "as an extension to the way they always taught the course" (p. 289). Without using any new approaches, these teachers were unable to utilize the full capacity of the graphing calculator. The results of this study were reinforced by a similar study conducted by Tharp et al. (1997).

### **Calculators and the Constructivist Classroom**

Tharp et al. (1997) conducted a study on 216 math and science teachers who used graphing calculators in their classrooms for a 4-month period. The study separated the teachers into two

different categories: the traditional or rule based teaching category, and a conceptual or constructivist category. The correlation of the traditional teacher category to attitudes of calculators as a positive influence in the classroom was  $r = -0.43$  ( $p < 0.05$ ). These results mean that the traditional teachers found the graphing calculator to hinder their instruction in the classroom. Constructivist teachers had a more positive attitude toward the calculators and preferred to use them with an inquiry-based approach. These teachers felt that the graphing calculators had a positive influence on the students' cognitive mathematic abilities.

Choi-Koh (2000) conducted research on a 10<sup>th</sup> grade trigonometry student who worked with a graphing calculator. This study compared the use of the graphing calculator to the stages of Bloom's Taxonomy. He found that the student progressed when using a graphing calculator to Bloom's synthesis level. As this student moved onto the application phase, he started used the calculator less and less. By the time he reached the synthesis phase, he was only using his calculator to check his work. Choi-Koh concluded,

Dynamic and visual tools like graphing calculators reinforce students' intuitive and concrete experiences. Therefore, if students use tools early in the learning environment to acquire a broader picture of the ways in which concepts may be realized, they might progress cognitively. (p. 367)

This study only followed the experiences of one child, and therefore, generalizations cannot be made. However, the results of this study are an example for the kind of progression that other students might experience while using a graphing calculator.

### Conclusions

Instructional technology has been used in classrooms around the country for almost a century. Within the last 30 years IT in the form of computers has become fully integrated into classrooms. Technology has been shown to positively influence standardized mathematics test scores (Mann et al., 1999; Page, 2000). The use of technology has also helped evolve teachers' pedagogical practices toward more constructivist methods (Becker & Ravitz 1999; Dexter et al., 1999). Computers can be useful tools for any classroom, and IT is likely to continue to be available in all schools in the U.S.

For this reason, it is important for teachers to learn to use the technology in a way that is effective for their students.

This paper looked at four different types of IT: computers, Internet, integrated learning systems, and calculators. All four are particularly important for different reasons. Computers and the Internet are present in nearly every classroom in the country (Ely, 1999; NCES, 1999, 2003). ILSs are expanding throughout schools with the rise in population and shortage of teachers (Mazyck, 2002; Norton & Sprague, 2001). Scientific calculators and graphing calculators are extremely useful in the field of mathematics (Simmt, 1999; Tharp et al., 1997; Waits & Demana, 2000). Using calculators is so important that the National Council of Teaches in Mathematics has mandated that every student in the country needs to have access to them (Simonsen & Dick, 1997). For all of these reasons, IT is an important pedagogical resource for all educators.

In nearly a decade IT has expanded from such a small concept as using a globe in the early 1900s to being an advanced technology that can communicate with people around the world in the early 2000s (Betrus & Molenda, 2002). Each consecutive improvement in IT has lead to further implications for use in the classroom. For example, when calculators were first invented, they were no more than simple adding machines. Now, graphing calculators can interpolate graphs and solve functions that could not be performed by computers 20 years ago (Waits & Demana, 2000). Yet in some cases teachers still stress that calculators should not be used for fear of overdependence. Overdependence can occur with any new tool or device that can possibly improve classroom learning (Tharp et al., 1997). That is why it is important for teachers to learn to use IT effectively so that students do not become dependent on it.

Some problems regarding the research on IT still remain. First, extensive research on ILSs has not been investigated. ILSs were initially developed in the early 1920s and further enhanced in the later years of the 20<sup>th</sup> century. To this day extensive research on ILSs has not been investigated. The debate over whether or not these systems improve or hinder learning is still debated by researchers (Mazyck, 2002; Norton & Sprague, 2001). Yet, many educators and researchers alike are still optimistic regarding this technology because it is used throughout so many schools in the country (Mazyck, 2002). Second, computer and Internet use is also still

debated. School districts spend more money each year to further incorporate computers and the Internet in classrooms (NCES, 2000). Although money is continually spent, many teachers either refuse to use computers (Norton et al., 2000) or are unable to use them competently in their classes (NCES, 2000). Lastly, as already discussed, teachers are still hesitant to use calculators in their classes for fear of overdependence.

Instructional technology has been used in U.S. classrooms for almost a century. Within the last 30 years IT in the form of computers has become fully integrated into classrooms. Researchers have shown that IT in the classroom can positively influence standardized mathematics test scores (Mann et al., 1999; Page, 2000). The use of technology has also helped evolve teachers' pedagogical practices toward more constructivist methods (Becker & Ravitz 1999; Dexter et al., 1999). IT is a useful tool for any classroom, and it is likely to continue to be available in all schools in the U.S. For this reason, it is important for teachers to learn to use the technology in a way that is effective for their students. The overall conclusion is that IT is underutilized in the classroom despite research suggesting its usefulness.

### **Recommendations for Practice**

The issue involved in bringing a new technology into the classroom is summarized by Simonsen and Dick (1997): "The use of technology in mathematics classrooms raises several areas of concern for teachers: curriculum issues, classroom dynamics, training and support, and technological accessibility" (p. 240). The forms of IT discussed in this paper, with the exception of ILSs, are all available in every school. Thus, teachers should not worry about technological accessibility. In the case of calculators, however, many teachers report not having enough calculators to be used by every student (Simonsen & Dick, 1997). Training and support can also be provided by the educator's school district. The most difficult of the aspects listed by Simonsen and Dick (1997) are the issues of classroom dynamics and use for developing curriculum when a new form of IT has been implemented.

The Internet is a powerful tool connected to almost every school in the country (NCES, 2000). The Internet has a minor affect on classroom dynamics, but a major impact on building a teacher's curriculum. Many teachers do not use the Internet effectively. Most

educators have reported to only use the Internet to send e-mail to fellow teachers (NCES, 2000). It was reported by Becker and Ravitz (1999) that the teachers who use the Internet on a regular basis teach honors or advanced placement classes. The biggest problem with Internet use in the classroom is that most teachers do not have the proper training and support to use it effectively. The Internet is a useful tool for every teacher because it can be used effectively without taking up class time. The Internet provides educators with an endless array of information that can be used to help develop multi-disciplinary curricula in any class. Students can also construct math "word problems" using information that they find on the Internet (Becker & Ravitz, 1999). Becker and Ravitz (1999) have also noted that an effective method for working with the Internet involves teacher-developed class web pages. Students can access these web pages as a resource from anywhere and they can contain information that is useful to the students' assignments.

ILSs may not be present in every classroom in the country, but they are still used widely enough to be examined for teaching practices. A major problem with the use of ILSs is that developers for ILSs have been known to create culturally-biased software programs (Mazyck, 2002). This problem can affect the learning of children of different ethnic groups. Mazyck's (2002) recommendation is for software developers to change their method for putting these systems together to create a multiculturally inclusive ILS. In the opinion of Norton and Sprague (2001), teachers who want their children to succeed at using ILSs need to follow the curriculum that accompanies the specific ILS. Research has shown that if educators teaching the subject matter before the students work with the ILS in that subject, then they are more likely to succeed. This is contrary to the practice by most teachers who simply use the ILS as a time saver and allow the software to teach the subject material in place of the teacher (Norton & Sprague, 2001).

Another untested method for working with ILSs is in the form of groupwork. Mazyck (2002) advocates for allowing students to work in groups when working with an ILS. No rigorous research exists supporting this teaching method, but through qualitative observations Mazyck points out that jointly working with ILSs decreases boredom among students and allows for sharing of information. In essence, the

students help to teach each other the material so that they can all succeed.

Simonsen and Dick (1997) conducted a study that worked with a number of math teachers and calculator use. These teachers all went through an inservice which taught them methods and procedures for using calculators in the classroom. After allowing the teachers to use these methods in their own class, the teachers were surveyed. Simonsen and Dick (1997) found that most of these teachers felt successful at using calculators in their own classrooms after the training. Teachers interested in using a form of IT in the classroom should consider going through some kind of training or inservice to familiarize themselves with the technology.

Many teachers have reported shortages of graphing calculators in their classrooms. This is a difficult issue to address because graphing calculators are somewhat ineffective when they are shared among students (Simonsen & Dick, 1997). A maximum of two students can work with calculators at a time, but even two students per calculator can reduce the level of involvement. The issue of calculator shortages can only be resolved through more district funding.

Choi-Koh (2000) successfully used a graphing calculator to work with a trigonometry student. Graphing calculators are useful because they can be accompanied by software programs that enhance the calculator's features. Two such programs are Cabri and Geometer's Sketchpad. Both of these programs utilize the graphing screen to project equations and figures.

Geometer's Sketchpad, for instance, allows students to work with circles and squares and investigate functions like area, perimeter, and degrees of angles. Researchers have stated that graphing calculators are most useful because they provide immediate feedback when graphing mathematical equations (Choi-Koh, 2000; Simonsen & Dick, 1997). These calculators lend themselves well to exploration by students.

The major concern cited by Simonsen and Dick (1997) is that teachers were afraid of students growing dependent on the calculator for solving simple functions. This issue can only be resolved through classroom use. Teachers who use calculators on a regular basis do not report this problem in their classrooms. Simonsen and Dick have argued that educators who use calculators on a regular basis learn how to prevent student dependency. The recommendation, in this case, is for teachers to develop lesson plans that use calculators to help give them a better understanding for how calculators can be incorporated.

IT is simply a valuable addition to any classroom. IT can be utilized in many different ways that can enhance student learning. The best practices for the specific technologies discussed in this paper are summarized in Table 3. Technology was invented to help with the simplification of teacher's lesson planning and student learning. Teachers should be encouraged to explore more than just the specific forms of IT discussing in this paper and find the right use for their style of teaching.

Table 3: Summary of Recommendations for Best Practice

Instructional Technology	Practice	Rationale
Internet	<ul style="list-style-type: none"> <li>Enhance curricula</li> <li>Class webpages</li> <li>Helps students create, and respond to, "word problems"</li> </ul>	<ul style="list-style-type: none"> <li>Resource for drawing out multidisciplinary information</li> <li>Keeps students connected to class</li> </ul>
Integrated Learning Systems	<ul style="list-style-type: none"> <li>Examine material to ensure culturally appropriate</li> <li>Allow students to work in groups</li> </ul>	<ul style="list-style-type: none"> <li>Can be unsuitable for a culturally diverse classrooms</li> <li>Helps get through material and decreases boredom</li> </ul>
Graphing Calculators	<ul style="list-style-type: none"> <li>Use for any visual representation of a function</li> </ul>	<ul style="list-style-type: none"> <li>Provides immediate feedback</li> </ul>

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## **Facilitated Communication in the K-12 Classroom for Students with Communication Impairments**

*Facilitated communication (FC) is a process allowing people with speech impairments to communicate with a facilitator, who provides emotional support and physical support to the arm or hand assisting the facilitated to point to a communication board. This process can enable nonverbal students active participation into the general classroom and expand their academic abilities. FC was introduced by Rosemary Crossley in the 1980s, and started the controversy. Some researchers consider it a hoax with unexplained jumps in cognitive ability and others argue that the process has proven itself through those who have moved to independent typing. The controversy caused some to discontinue the use of FC, sending them back into silence; others who continued FC have shown social and academic gains.*

Facilitated communication (FC) is an augmentative and alternative communication (AAC) method that has been surrounded by controversy over whether or not it is a valid form of communication. FC requires a facilitator to provide physical support to help overcome motor or emotional problems to individuals with speech impairments not caused by deafness. The initiation of the movement and the completion of the movement are performed solely by the message sender. The message sender can use an array of different devices to use FC, such as an alphabet board, picture board, or a cannon communicator. This controversy has produced many conflicting definitions and varying debates over the research methods used. Many who believe that FC gives voice to those not heard also believe that those individuals should be able to use this communication method in an academic setting (Biklen, 1993; Crossley, 1994). Although some are beginning to use FC for academics to allow children with speech impairments to be integrated into the general classroom, the controversy has slowed access for students. Many people with speech impairments are still considered to have a lower cognitive ability because of low IQ scores; skeptics of FC do not find it beneficial to students with speech impairments (Myles & Simpson, 1995; Shane 1994).

Steven McCook (2004) is a student at The Evergreen State College with autism who has few verbalizations and uses FC to correspond with the world and his classmates. In his essay for a local paper, Steven describes his autism in relation to his physical and verbal movements, which are affected by his autism. Steven explains, "Facilitated communication is the most powerful of all my body movements, but it is

also different in one dramatic way. I cannot do it alone" (McCook, 2004, p. 5). An important aspect of Steven's writing is that without facilitated communication he would not be able to communicate this essay or contribute to class discussions. For Steven "Writing is also a form of body language...I am able to remove myself most wholly from my autism through facilitated communication and writing. Writing achieves what so many of my other body movements strive for, namely: space" (p. 4).

This paper will discuss the history and discovery of facilitated communication by Rosemary Crossley (1994) in Australia and how the phenomenon was brought to the United States by Douglas Biklen (1993a). Biklen went to Australia to discount the rumors of this method. The controversy over facilitated communication began as soon as Crossley made her findings public and has continued for nearly twenty years. FC has successfully been implemented in some schools; however, it is usually by one teacher taking a chance (Brandl, 2001). In the past ten years the validation research has slowed down. Since the height of the controversy in the 1990s there has not been much new information readily available to educators, or people with speech impairments.

Augmentative and alternative communication aids are used when speech is absent or unintelligible, or to augment speech (Crossley, 1997). There are multiple augmentative and alternative communication approaches available for use in an educational setting as well as in the social realm, including; central auditory processing disorders, auditory integration therapy, FastForWord training, and facilitated communication (Duchan, Calculator, Sonnenmeier, Diehl, & Cumley, 2001).

Definitions of FC vary depending on which side of the controversy is making the description. Those who find it a valid form of communication have described it as a method of augmentative and alternative communication, which aids people with little to no speech, and have a movement difference. This could affect their ability to point on their own. A movement difference is a term used to describe the differently able (Biklen, 1993a). Biklen (1993b) and Crossley (1994) define facilitated communication as a technique involving a facilitator who assists with physical and emotional support for the person with a speech impairment by encouraging them and helping them maintain focus. The physical support is to help control difficulties, such as, motor issues, inability to initiate movement, index finger isolation, tremors or lack of self-confidence. All of these difficulties could impair the message sender from hitting the intended target. Crossley (1994) also addresses the source of the controversy in her definition, explaining that FC “differs from coactive movement in that direction of movement and intention to complete an action are solely the responsibility of the message sender. Facilitation is mainly used when training people to use communication aids” (p. 131). There are many technical aspects to facilitated communication, such as the level of physical support which may include: backward resistance on the arm to slow the pace of pointing, or to overcome impulsiveness; and a touch of the forearm, elbow, or shoulder to help the person not strike a target repetitively (Crossley, 1994). Emotional support provides encouragement for the message sender but not direction (Biklen, 1993c). A large part of FC is about building trust between the facilitator and the person using the aid. Which allows for a quicker move towards fluency with the aid and the move towards independence. One of the goals of FC is to assist the message sender to reach independent typing, however those with a movement difference may not be able to isolate their muscle control in order to achieve this. The first concern of FC is to give the person with a speech impairment a means of communication, which was previously thought as impossible (Crossley, 1994).

Some critics of FC Question the validity of the process and believe that the facilitator influences what is being typed, whether consciously or unconsciously. Others simply feel that it has gone too far in calling it a form of communication. Howard Shane (1994) believes

that FC would more properly be defined as teaching someone how to point more accurately. Shane goes on to say that in the development of facilitated communication, the process was confused with the activity of communication, when it should be considered a motor response. Myles and Simpson (1995) found it to be a novel approach for people with severe disabilities to use as an augmentative communication device. However, Crossley (1994) explains that “not all users of facilitation have literacy skills; facilitation is also used when necessary to assist individuals accessing symbol and picture boards, or choosing from real objects, such as toys” (p. 6).

Facilitated communication advocates have not claimed that all people with speech impairments have a higher cognitive ability than what they have tested at. Advocates have claimed that in some cases a person may be able to say more through FC than they can convey through other forms of communication (Biklen, 1993a; Crossley, 1997). The approach is not novel, but rather another means of alternative communication to investigate. Crossley (1994) goes on to say that although a large number of individuals have benefited from the use of facilitated communication training, “it is not an ideal strategy—it is the strategy you use when you don’t have a better one” (p. 7). Although the goal of FC is for the person to gradually attain independence with a communication device, some individuals may continue to need physical support or other devices to assist in their communication. FC is a starting point that can lead the individual to discovering their best means of communication.

It is important to look at the starting point of augmentative and alternative communication to fully understand where FC originated. Before the 1970s there was very little interest in finding alternatives to speech. Those considered nonverbal or with incomprehensible speech were thought to be incapable of communication. There was also a strong belief that if a child was encouraged to use an alternative to speech then they would become unable to develop or dissuaded from developing speech (Attermeier, 1987). Attermeier also argues that communication is an essential part of being human and different ways of communicating should not be denied to any human. When they are not provided an assessment or a communication aid that suits their needs, individuals with a speech impairment are not given an alternative way to communicate and it

is assumed that their lack of voice equals their lack of intelligence.

Crossley (1994) came upon facilitated communication while she was looking for a communication aid for a young woman with cerebral palsy. Crossley traces the first recorded instance of a communication system that is unrelated to hearing loss to the character of the king in *The Count of Monte Cristo*, by Alexander Dumas. The king had suffered from a stroke and used the blinking of his eyes to communicate with his granddaughter (Crossley, 1994, 1997). In 1977 Crossley began working with Anne MacDonald, a 16-year-old girl with athetoid cerebral palsy. Anne's disability made it impossible for her to point or even sit up without physical support from someone else, yet Crossley had a feeling that Anne could communicate by using her tongue. Crossley (1997) explained to Anne that sticking her tongue out would indicate *yes*, and holding it back was *no*. When Crossley asked Anne if she understood, "Anne held her tongue out with a tremendous grin" (p. 5). Eventually with the physical and emotional support from Crossley, Anne pointed at objects correctly and went onto read and spell. Anne eventually fought for her rights to live outside of the institution and attend school. She has since gone on to university, coauthored a book with Crossley, and has become an advocate for people with communication difficulties. In 1992 Anne, as quoted in Crossley (1994), explained her thoughts on living without speech:

For people without speech, talking is often dependent on the generosity of others, either in providing interpretation or facilitation or in giving up time to listen. While this is inevitable there needs to be an irreducible right to make your opinions known on issues concerning your future well-being. At the moment social conversation and medical consent are equal in sight of the law, both depending on the accidental availability of communication partners with the necessary skills and commitment. There is no right to be heard. There is no right to an interpreter. There is no obligation to listen. Communication falls into the same category as food, drink and shelter—it is essential for life. Without communication life becomes worthless. (p. 7)

Crossley went on to work with many other individuals with different disabilities. Crossley

worked with a person with autism and discovered similar results to Anne. As a result people began to show a deep interest in the validity of facilitated communication.

Douglas Biklen (1993a), a professor at Syracuse University, heard about the discoveries and went to Australia to observe Rosemary Crossley and the work she was doing at the Dignity through Education and Language (DEAL) Communication Center, an organization set up by Crossley and her colleagues to assist people with speech impairments. Like many others, Biklen (1993a) was wary of the effectiveness of facilitated communication working for individuals previously thought of as severely intellectually disabled. While he was in Australia he witnessed two young men communicate with minimal physical support of the shoulder, on a cannon communicator, a small typewriter with a tape printout. Both men had been diagnosed with low-functioning autism with little to no speech. Through their typing they displayed irony, humor, and abstract concepts, which made Biklen consider the possibilities of this work. He was determined to bring this information back to Syracuse (Biklen, 1993a). When Biklen (1993a) returned he set up an experiment in Syracuse to see if he could duplicate Crossley's results (1997). The experiment included 32 students, ages 5-25 years old, with little to no speech abilities. After being introduced to facilitated communication, 26 of the students could produce sentences and the others could communicate with words, yes/no, or pictures (Biklen, 1993a). Although Biklen and his colleagues could validate communication through the expressive content of the messages being passed it still came across scrutiny from people such as Howard Shane.

Shane (1994) believed that facilitated communication was based on weak sets of evidence that did not undergo the same type of scrutiny that is applied to scientific validation procedures. He went on to relate FC to a hypothetical healing lotion that will cure something only when rubbed the proper way, essentially saying that the lotion only works when applied in a specific way and that the lotion cannot work alone and a class is required to learn how to apply the lotion accurately. Shane's (1994) analogy implies that FC is a cure for something; however, Shane is ignoring the research that explicitly says that FC is not a cure for autism but a means of communication (Biklen, 1993c). There have been instances of independent typing which show that FC can

eventually move to an independent act. Shane (1994) also suggests that if FC is such an arduous process then anyone using it should expect it to be thoroughly researched and validated before attempting to communicate with it. However, Shane disregards the types of studies that have validated the FC process that have been performed by Biklen (1993a; Biklen, Saha, & Kliever, 1997) and Crossley (1994, 1997).

Another issue connected to the controversy of FC is that the testing and diagnosis of intellectual ability/disability are not appropriate for people with a speech impairment as they are being tested for intellectual disabilities without a form of communication. The Diagnostic and Statistical Manual of Mental Disorders bases intellectual impairments of an individual's expressive language. Therefore if an individual has no verbal communication they are often inaccurately diagnosed as being severely intellectually impaired (Crossley, 1994). The achievement target given to the individual is speech; if they cannot reach it then they are considered to be intellectually impaired. Crossley (1994) believes the communication impairments of an individual must be addressed before their intellectual abilities can be assessed in a fair manner (Crossley, 1994). Biklen (1993a) states that "the question of whether or not people will prove able to communicate with facilitation or other methods recalls the perennial debate over educability" (p. 47). He goes on to explain that the goal of the educator should not be to decide who can or cannot communicate, but rather to try and make communication available to as many people as possible through education. This was seen by some researchers as Biklen's reluctance to validate FC. Weiss and Wagner (1997) believed that FC was a farce and that Biklen's reluctance to formally test the students was proof that it was not a valid form of communication.

Merely being diagnosed as autistic does not mean that individuals communication needs will be met by the tasks put forth in the study. Michael Weiss and Sheldon Wagoner (1997) were reluctant to believe that facilitated communication was valid. They decided to conduct a study to prove that FC was invalid (1997). Weiss was quoted in the media, pronouncing FC to be a hoax. However, after repeated reports from parents and teachers they had worked with who said that FC was working for their child, Weiss and Wagner decided to conduct a study. After looking at the studies that

had been done, they found that the majority of the validation methods that had been used did not seem to be appropriate from an experimental point of view because they hindered or restrained the given accounts of the phenomenon (1997). After conducting two observational case studies where the students facilitated with teachers whom they had been working with for an extended time, Weiss and Wagner concluded that facilitated communication is a valid technique, which works for at least some persons with significant disabilities (1997). There are still many holes in the research methods used to validate FC, but the efforts need to be continued.

The main source of controversy surrounding FC is the question of who is doing the typing, the message sender or the facilitator. Some researchers suspect that a facilitator is consciously or unconsciously influencing the movement of the hand of the message sender. Therefore influencing the communication that is perceived to be the message sender, which would explain the jump in cognitive ability. Facilitated communication can help an individual overcome neuromotor difficulty and apraxia, a neurological condition that prevents a person from reproducing voluntary muscle movement. For some individuals it is easier to point when their index finger is isolated than it is to produce a spoken word. In addition the facilitator can assist with slowing down the movement of the person communicating. Therefore, apraxia does not imply a cognitive deficit. When an individual is able to conquer their movement difference with the support of the facilitator, they have more ability to convey their thoughts. This reveals more of their cognitive ability than motioning or limited vocalizations (Biklen, 1993a).

Biklen (1993a) also explains that although a student can be fluent with more than one facilitator, lack of confidence and trust can inhibit them from being able to facilitate with new facilitators; as well as being unfamiliar with the physical support of a new facilitator. Further, Biklen and other colleagues (1993c) suggest that a student's miscues on naming tests or any evidence of facilitator cuing does not automatically rule out that the person is able to communicate with facilitation. Many individuals have proven validity by typing independently or with minimal support of the shoulder (Biklen, 1993c; Biklen et al., 1997). This should be carefully considered when trying to invalidate the use of FC.

The tests that were administered to validate FC were very similar to the IQ testing situation,

where a person is assessed based on a set of questions used to determine their overall ability (Crossley, 1997). Usually the studies that have negative outcomes are conducted with facilitators and students who have had no prior experience with FC. FC does not fit every speech impaired person's need it is not a reliable study method to try and validate FC with students who have never tried FC before. Nonetheless, in a study by Simpson and Myles (1993) the students and the teachers were new to facilitated communication. This is problematic since not all students have had access to the technology being presented, and there is not enough time to determine which type of physical support each individual needs or if facilitated communication will work for them. The teachers were provided with a two-day training session and the students were involved in the second day of training, but were not given their own training session.

The teachers were instructed to use a standardized hold for all FC tasks and individuals (Simpson & Myles, 1993). This is problematic because a standard hold does not work for all people with speech impairments; movement differences also have to be considered in what type of physical support an individual may need. Crossley (1994) explains that anyone who is beginning to use facilitated communication training will require a different level of support. Therefore, it is important that anyone working with an individual is aware of his or her particular support needs. It also must be understood that FC may not work well for all persons attempting it, and success will vary person to person. The success of the individual can be attributed to movement differences and the level of educational experiences and practice with the technique (Biklen, 1993c). Crossley (1994) notes that although there are many different augmentative and alternative communication developments, they still do not reach all individuals needs, and some people may benefit from the use of facilitated communication. However, many of the studies that do not validate facilitated communication do not first figure out if FC is appropriate for the subjects in the study. Instead they work under the assumption that what should work for one should work for all. The phenomenon in the U.S. caused complications due to the lack of information. Many uninformed parents and professionals believed that FC was the only way for people without speech to communicate. This led to a series of myths about FC. One myth that followed the phenomenon was the belief that

individuals without speech had innate literacy skills. Although parts of literacy are innate, the assumption disregarded the exposure to language and the written word in a person with disabilities daily life (Crossley, 1997). The media in the U.S. also caught onto the phenomenon quickly, reporting all accounts of FC that were called in. In October of 1993, *Frontline* premiered "Prisoners of Silence." The message of the show was that FC had been scientifically proven to be invalid. However the studies that had been conducted had various outcomes, some showed facilitator influence, others showed valid communication, and studies were still being conducted which examined students who were typing independently (Crossley, 1997).

In another study conducted by Myles and Quinn in 1994, the researchers used a teacher who had been used in a previous FC validation study; between the two studies the teacher received a total of 2 1/2 days of FC training. However, there is no indication that the three subjects had any experience in FC prior to the study. The study lasted for eight weeks, which is a very short time to acquire a new method of communication. The students were not allowed to use FC with anyone but the teacher, therefore limiting their exposure, and they were encouraged to maintain use of their other communication devices. Furthermore, the teacher had to use the same standardized hold throughout the study (Myles & Quinn, 1994), which could lead to some of the recorded mistakes made by those being facilitated. They concluded their study by stating that they were convinced that claims of individuals with severe intellectual disabilities that displayed normal intelligence and growth in other areas, such as social interaction, through facilitated communication are blown out of proportion. However they still wonder if FC might have some educational utility, as long as it is used appropriately.

In a study by Kerrin, Murdock, Sharpton, and Jones (1998) the facilitator had sunglasses on throughout the investigation, which had cardboard cutout, inserted for the blind condition. The blind condition is problematic; the facilitator is there to give physical support. Which includes applying backward pressure until the person typing applies pressure in return. However, if the facilitator cannot see the communication device then the facilitator might make physical corrections to where they think the device is located. Many people who do not have a movement difference or speech

impairment would have difficulty writing or typing with their eyes closed. The researchers explain in their discussion that they did not use the formal testing procedures in their study that had been used in previous studies, which Crossley (1994) has said could interfere with the individuals ability to respond affectively in the research (Kerrin et al., 1998). However, the facilitator had not previously worked with either student in the study, even though the message sender has to build confidence with the facilitator and the facilitator must know the physical support requirements. Therefore, the students were working with a stranger, which could interfere or influence the students' responses.

Although Myles and Quinn (1994) do not believe that FC reveals an intelligence that exceeds what was previously known, they found that the children in the study performed the best when they were using facilitated communication. Yet, they conclude that they still believed that this did not prove that FC allowed the students to perform at a higher cognitive level than their previously estimated ability (Myles & Quinn, 1994). Advocates who are fighting for FC to be recognized as a valid form of communication are not implying that it is a miracle, but that there is evidence to more cognition in some people with autism than had previously been believed. Further, Myles and Quinn (1994) add that from their study it could not be denied that the traditional methods did not work as well as when the students performed the tasks using FC. They also discuss multiple reasons why the students did better when using FC versus no facilitation, such as the attention they received, the enthusiasm of their teacher, and the structure it provided. The authors maintain that they do not believe FC gives a nonverbal person the ability to express more, but that it does have instructional utility. Therefore, they concluded that there is still a need to continue with scientific evaluations of facilitated communication (Myles & Quinn, 1994).

Crossley (1994) disagrees with the validation techniques conducted in most studies. She believes that testing should be confined to appropriate situations such as the classroom, and argues that those with speech ability are not asked to validate their communication every time they speak. Furthermore she believes that the most important goal of any communication intervention should be free speech. People who have speech impairments should be given the ability to share their thoughts in their own words instead of family and staff guessing at what their

echolalic words, the involuntary repetition of the last word of another person, or gestures may imply. There are three basic requirements for successful communication: (a) the sender of the message must have the necessary skills, (b) the receiver of the message must have a matching set of skills, and (c) the total interaction must facilitate the passage of information (Crossley, 1994). If the person being facilitated has never used FC and the facilitator has then they are not meeting the requirements of basic communication. Also certain conditions could cause added pressure to the student being facilitated, such as in the Simpson and Myles (1993) study where if students did not respond within a one-minute time limit they were marked incorrect. This does not allow for processing time that could be affected by movement difference (Simpson & Myles, 1993). The researchers also found that when the facilitator was unaware of the answer to the question being asked, the message sender could not facilitate independently (Simpson & Myles, 1993). Furthermore they suggest other reports that validate the effectiveness FC have not been based on the strongest research methods. Instead the studies of successful students were through informal case studies where various unique traits of the person being facilitated have been monitored (Simpson & Myles, 1993). Weiss and Wagner's (1997) study offers evidence that valid facilitation has been seen when the facilitator does not know the information given to the message sender. Duchan et al. (2001), have looked into the controversial methods of communication and suggested that when making decisions on what type of alternative communication a student might use a teacher should carefully consider controversial methods from different points of view. Facilitated communication, when considered as a part of augmentative and alternative communication loses some of its controversial stigma and is considered another aid to allow non-verbal people a chance to express themselves. Duchan et al. (2001), Crossley (1994), and Biklen et al. (1997) agree that FC is not for everyone with a speech impairment, but it should not be denied to anybody who could benefit from it. Duchan et al. (2001) suggest that when attempting FC there has to be a trained speech pathologist on the team. This will work if the person being facilitated is comfortable with the facilitator. This is where use of facilitated communication in the schools could dramatically affect the outcome of academic communication for

students who are only partially integrated or not integrated at all into the general classrooms.

The historical background of schooling for people with disabilities explains many of the difficulties society has with integrating them into a general population classroom. Before the 1800s very little was available for people with disabilities by way of education or health care. In the early 20<sup>th</sup> century, Dorothea Dix fought for education reform that included schooling for people with disabilities (Kellebrew, 1995). These schools were originally established to provide an education and positive interventions for students with disabilities. But by the 1900s the schools became more based in custodial care and formed large public institutions (Kellebrew, 1995). The civil rights movement brought the issue of integrated education for people with disabilities back to the forefront. The Vocational Rehabilitation Act of 1973 prevented discrimination from federal and state funded institutions and to provide an appropriate public education (Mastropieri & Scruggs, 2004). This led to the 1975 Education for All Handicapped Children Act (PL 94-142), which went through many amendments and was renamed the Individuals with Disabilities Education Act (IDEA) in 1990. IDEA specified a zero rejection policy that insured that no child with disabilities could be denied a public education. It also developed the Individual Education Program (IEP), which develops an academic plan for the student with short and long-term goals. The Americans with Disabilities Act, (ADA) established in 1990 is an expansion to IDEA because it makes provisions for nondiscrimination against people with disabilities past primary and secondary education, and expands into the university and workplace (Mastropieri & Scruggs, 2004). One of the amendments made in 1997 was the Least Restrictive Environment (LRE) a provision through IDEA, which incorporates students into the general classroom. One of the ideas behind LRE was that it would allow people with disabilities to participate and be visible in mainstream society and it could help do away with the stigma and discrimination they often faced (Kellebrew, 1995).

Although Myles, Simpson and Smith (1996) claim that no controlled studies have measured the effect of FC on behavioral and social interactions with those who use facilitated communication, there is evidence to the contrary. In Biklen's (1993a) group of students two thirds of them were integrated into regular academic

classrooms for part or all of the day. Facilitation gives them the means to communicate answers to open-ended questions, participate in games, and work on their social skills. It is still difficult for nonverbal students who use FC to initiate conversations on their own, primarily because they were not previously able to. Biklen (1993a) describes how teachers, speech therapists and teaching assistants have tackled this issue with their students including many approaches in the general classroom such as; group learning, circle and sharing time, working in pairs, word and number team games and writing letters with peers. These are the same techniques that teachers can use with non-disabled students; therefore it is not changing the curriculum to incorporate the students with disabilities. Rather, these techniques promote a learning community for all students. Also, nondisabled peers can learn to facilitate, enabling a deeper understanding and comfort level between the verbal and nonverbal students and strengthening their community. The need for community and communication is great in the world of autism, especially when considering that around 50% of children diagnosed with autism do not develop comprehensive speech for communication. This could be a form of movement difference rather than a cognitive impairment. Therefore, the need to provide these children with alternative means of communication is vital (Potter & Whittaker, 2001). Furthermore, when and if language ability appears it usually manifests in requests for needs and not social interaction or support (Koegel, Koegel, Frey, & Smith, 1995).

Biklen (1993a) and his colleagues conducted a study of their own. In this study they used the students current teachers. Both the students and the teachers had been using FC for at least a year. Some differences the teachers noticed were varying levels of support needed while typing, the ability to type independently, spelling errors, and vocalizations not matching what is typed. If the teacher/facilitator influenced the person typing, then there would be more similarities than differences (Biklen et al., 1997). The teachers also believed that independently typing should be considered validation in itself. The teachers in the study were a better judge of the validation of typing because they had already developed the confidence of their students and were aware of the support each individual required. Also the students were not being tested, they were being observed while doing their regular work in their classroom (Biklen et al., 1997).

For a more intimate look at facilitated communication Brandl (2001) describes how the introduction of FC in the classroom has changed her students lives. Brandl, who began her special education career in the 1960s, reflects on her experiences with the administration and the lack of curriculum. She began to look for ways to incorporate basic academics and meaningful activities for her students with varying abilities. After hearing about FC from a television show, Brandl decided to try it with a six year-old girl named Amie who never talked. She had not been schooled and had no academic skills. Amie was not connected to the world around her. Brandl felt that Amie had some innate intelligence and wanted to find a way to tap into it. After a very difficult session attempting FC, Brandl found that Amie could type. After further sessions Brandl explains that she discovered Amie did have academic skills. She could do various levels of math and she knew current events, history, geography, science, and sports. Yet it was difficult for Amie to communicate with people around her. Brandl began to FC with her elementary classroom composed of kids with varying abilities, including those who could talk, but had very limited academic language ability. All of the students used FC devices that suited their own needs and wanted to show that they could communicate what they knew and to share their feelings and opinions. Through these experiences Brandl began to reflect on her past students who had difficulties communicating and had spent much of their day in time out due to their behavior. The students that Brandl was working with were moving on, into integrated classrooms. One of Brandl's students, Lesley, with the use of FC was able to skip the fifth grade and was placed in an appropriate educational placement for the first time in her life with students of the same age. Lesley was an inspiration to the other students using FC. However, these students still faced a struggle. Many times the students who were integrated into the general classrooms would return to Brandl, frustrated that regardless of their new means of communication, people still thought they were retarded. Through this experience Brandl developed a new way of approaching her students, assuming that all of them are intelligent and aware individuals who try their best to live in uncooperative bodies.

### Conclusions

The public perception of people with disabilities throughout history has led to the

assumption that people without speech, limited speech, or movement differences were unable to possess cognitive abilities. Much of this was due to the fact that their communication skills were limited or nonexistent. Although society has learned that deaf people can communicate through sign and that people with cerebral palsy who are nonverbal have cognitive ability; it is still hard for some to accept that other individuals with lack of speech that is not caused by deafness may also have cognitive ability. History has taught us that communication devices have been found for those previously thought to not possess intelligence because of their disability, such as sign language (Crossley, 1997). Crossley criticizes the diagnosis of mental disabilities as the belief that behavior reflects internal cognitive ability. With the prevalence of this belief, validation of cognitive ability through the use of a communication device is hard to imagine. Furthermore, when students are able to type independently after practicing with a facilitator and decreasing the amount of physical support, validation of FC has to be considered.

Facilitated communication has opened the door to a world of communication for people whose thoughts have been trapped inside. The controversy and the rush to prove it valid or invalid did not give enough time to allow the message senders or the facilitators to become fluent in a new type of communication. The *Frontline* piece is still used today in colleges to discount FC even though after it's broadcast studies have validated the use of FC. Weiss and Wagner's (1997) study concluded that those being facilitated were successfully passing messages to their facilitator who had no previous knowledge of what was being passed. Regardless of the positive outcomes of facilitated communication the controversy convinced enough people to take away communication devices, sending many people back into silence (Crossley, 1997). The research has slowed almost to a halt in many areas. However, with the proper training for facilitators and message senders the silence can be broken in the general classroom. In Steven McCook's (2004) poem *Best Minds of My Generation* his powerful words leap off the page with the words he could never verbalize, "nursed on the breast of television/ our minds might never awake/ I imagine the best minds of my generation/ absolving, dissolving, dissenting/ we learn to live, life unadorned/ and exposed/ we fight/ by writing" (p. 3). This poem expresses his knowledge of current events and how his fight is



won through writing, and that all of our fights are won through communication. Although, there have been many studies that validate FC, there is still not enough research validation for it to be recognized as a form of communication. Future research in longitudinal studies could provide a more complete picture, as long as researchers provide the message sender with a facilitator they are familiar with and can trust.

### **Recommendations for Practice**

Douglas Biklen (1993a) and Rosemary Crossley (1994, 1997) have attempted to make the evaluation and training process for facilitation accessible to all. The recommendations for practice are based on the exercises and philosophies put forth by Crossley (1994) and Biklen (1993a). Even though FC is not for every person with a speech impairment it should at least be available for individuals to try and see if it works for them. Those who may benefit from FC are individuals who lack or have limited speech with autism, individuals who are assumed to be severely intellectually disabled, individuals with no evidence of literacy skills, and individuals who may have a movement difference.

Facilitated communication is based upon a few basic concepts, physical support, initial training/introduction, focus, encouragement, and fading physical support. The physical support can be provided at the hand or forearm to assist the person in isolating their finger to point at a communication board (see Appendix) and/or apply backward pressure to slow the movement enabling a more precise selection. The communication board can be the alphabet, a yes/no board, pictures, or phrases from which the message sender selects. Physical support is also important for helping the message sender to get started, however the facilitator never assists in making a selection for the message sender. The introduction to FC should be an encouraging process, like many new things it is a frustrating and arduous task. The student is supported to select from a series of activities or choices successfully. Their hand is pulled back from incorrect selection, much like a miscue in reading. Activities include pointing to pictures and including letters and words as appropriate. Set work is a practice session that is comprised of questions and answers that are predictable and yes/no questions. The point of this exercise is for the message sender and the facilitator to get a feel for each other and to build the trust between them. Once the message sender and facilitator

become more fluent then open-ended questions can be introduced. It is important for the facilitator to remind the message sender to maintain focus, such as, keeping their eyes on the board or to redirect them when they push the board away. It is common for the message sender to become frustrated and/or distracted with facilitating; this can be a part of their disability or the particular mood the message sender is in. The facilitator is there for the physical and emotional support, yet it is still important for the facilitator to encourage the message sender to finish their communication before the session ends. This is particularly important in the beginning stages. The facilitator should ignore the physical behaviors and redirect them to pointing or typing. This is especially true with echolalic speech, the involuntary repetition of the last word of another person; it is often a symptom of word finding problems (Crossley, 1997). The facilitator should ask the student if their verbalizations are reflecting their thoughts and to type what they want to say. Finally, fading physical support may take time, however facilitators can try different support during a single session. If fading is done too quickly the message sender may regress in their fluency (Biklen, 1993a; Crossley 1994).

When first introducing FC, the facilitator should explain what they are doing and the intention of showing the message sender a device that has been useful for others with little to no speech. The facilitator should treat the student as a competent individual by talking to them in a supportive, normal manner. The facilitator should be aware that the set work might be simplistic for some of the message sender, but also understand that it is a necessary step to move towards fluency. The student should be in a comfortable seating situation. The facilitator can identify the hand that the student is comfortable pointing with by handing them something and using the hand that they use to reach for the object. Then the facilitator can assess the level of support that the student requires by observing their movements, muscle tone, and eye gaze. If the student is repeatedly hitting a target pull the arm back for each choice. It is important to not overly support the student because it could affect their movements. The activities should be varied and paced; the student should not repeat an activity over and over again in a session. Because set work is structured and predictable, it is a good idea to incorporate set work that is related to the student's life. This way the student will become more interested in

the practice sessions and will be able to make connections with the FC process as a real way to interact with the world. Encourage the student to complete what they have started, even if they get up in the middle of a session. Let the student know that it is up to them what is shared and what is confidential. The student learning FC should have access to communication devices at all times and facilitators should encourage them to use them for simple yes/no selections and limited choices. It is also beneficial to tape the first session in order to evaluate the techniques of the facilitator and the student's unique style (Biklen, 1993a).

When the student has obtained fluency and is incorporated into a general classroom, all of his/her teachers and student's peers should be encouraged to learn to FC with them. With great patience a student can learn and be encouraged to facilitate with many people (Biklen, 1993a). Teacher's can foster peer conversations including students using FC in group activities and groupwork. There are many activities that enable a student using FC to participate, such as, allowing the student to choose a partner for group activities, word games where the students make up their own definition and the rest of the students have to guess, and working out math and science problems. When given the opportunity and patience the students' using FC may feel less pressure and are more likely to engage in the lesson. A student using FC should have access to communication devices and a facilitator for every class just as a deaf student would have access to an interpreter. Communication allows for greater understanding and should not be denied to any student.

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#### Appendix: Communication Board

A	B	C	D	E	.
F	G	H	I	J	!
K	L	M	N	O	DELETE
P	Q	R	S	T	YES
U	V	W	X	Y	NO
Z	LESS BACKWARD PRESSURE	MORE BACKWARD PRESSURE			?

## **Barriers to Parent Involvement and Ways that Schools Can Help Overcome the Barriers**

*Parent involvement in schools is related to the higher academic achievement of students, yet there are barriers that prevent many parents' involvement. Schools can take steps to overcome such barriers as culture and language mismatch by communicating with parents, in language that is readily understood, the importance of parent involvement and by providing parent training and multiple ways for parents to be involved. Flexibility and respect are essential; therefore, providing teachers with training in communicating across differences, such as socio-economic status and culture, will facilitate involvement. Schools should provide multiple avenues for involvement in order to engage as many parents as possible, as well as to encourage parents to be involved in multiple ways, which creates 'thicker' benefits for students.*

It is widely agreed upon that parent involvement is related to higher academic achievement (Batey, 1996; Muller & Kerbow, 1993; Ovando, Collier, & Combs, 2003; Ramirez, 2001; Young & Hite, 1994). Further, parent involvement helps improve the student's attendance and behavior (Trotman, 2001) and helps to reduce the rates of repeating a grade, remediation, expulsion and suspension from school (Strom & Strom, 2003). Yet another important reason for parent involvement in schools is that it has been shown to reduce dropout rates (Mazur & Thureau, 1990).

Despite widespread agreement about the importance of parent involvement, many schools are not encouraging parents to seek a role in the education of their child (Christenson & Sheridan, 2001). This may be due in part to teachers and schools not having the necessary knowledge or training to initiate parent involvement (Tichenor, 1997). Cotton and Wikelund (2001) state that the assumption by administrators that parents are not interested or able to help only intensifies the barriers that already exist.

Of course, barriers do not come only from the school. In fact, parents often have barriers such as lack of time or energy, embarrassment of educational levels or language ability, and lack of understanding about the school that stand in the way of their involvement. The perceived unwelcome from teachers and other school staff, although many times unwarranted, can be the barrier that keeps some parents from becoming involved in the education of their child (Cotton & Wikelund, 2001). That barriers may stem from the parents does not give schools reason to assume that the responsibility for parent involvement lies solely with the parents. In fact,

schools can and should take a leading role in the implementation of parent involvement in the education of children.

In summary, while research confirms that parent involvement is beneficial to students, there are barriers that schools must overcome in order to promote the effective involvement of parents. This review of the literature focuses on reasons that parents may not be involved and, most importantly, on ways that schools can promote parent involvement.

Due to the high frequency of the terms *parent* and *parent involvement* throughout this paper, it is necessary to define them. Therefore, for the purposes of this paper, *parent* will signify any adult who cares for the student on an ongoing basis (Lewis, 1995). *Parent involvement* will signify any action taken by parents to promote the education of their child.

### **Literature Review**

#### **Barriers to Parent Involvement**

Since the 1960s the United States has become more multicultural and more multilingual than ever before (Ovando et al., 2003). However, although public school student population reflects this multicultural and multilingual reality, the schools are still predominantly staffed by white teachers. This has contributed significantly to some of the barriers to parent involvement due to a culture mismatch between teachers and students, and thus between teachers and parents. Stacey (1991) makes the argument that if teachers are worried that black parents do not get involved in the school, it could be time to question the reasons for their absence. She argues that the absence of people of color in

leadership reinforces the notion that American public schools are White institutions. This results in a school that reflects the needs of only one culture to the detriment of the other cultures within the school.

Culture mismatches occur when values that are sacred in one's culture are not validated or are misunderstood in another culture (Christenson & Sheridan, 2001). Smrekar and Cohen-Vogel (2001) conducted a study of 10 families to define ideas and attitudes that minority parents had about education. They found that while parents were very interested in becoming involved in the school, family-school relations were based on "socially constructed scripts" (p. 1) that did not reflect their culture. In fact, although parents knew that a good education is necessary in order to get ahead, parents did not necessarily agree with the rules, assessments, policies and organizational norms of schools because they are a reflection of White dominant culture. According to Dykeman, Nelson, and Appleton (1995), "the greatest stumbling block to the formation of [school-family] alliances is professional ignorance of a way of life that differs in ideas, habits, history, and language from the majority culture" (p. 9). However, this ignorance does not only apply to culture. Socio-economic differences pose a barrier to parent involvement for many of the same reasons as does culture.

When educators remain ignorant of different social classes within the school, some educators may treat parents as another student to teach instead of as an equal. Thirty-three mothers and three fathers from different social classes in London were interviewed and observed to determine the role of social class positioning in parent-school communication. One of the results of the study was their discovery of the idea of infantilism which took place predominantly in teacher relationships with low income mothers. In these cases, teachers treated the mothers as children and did not respond to their requests as promptly as to the requests of the middle class mothers and fathers. In fact, the middle class mothers were also more likely to voice their opinions about issues concerning their children, probably due to the fact that teachers validated the ideas of the middle class mothers more than the ideas of the low income mothers (Reay, 1999). This problem is a result of differences in social class without the teacher being aware of such differences. In addition to culture and social class differences, some parents do not become

involved in the school because of language barriers.

Language can be a large barrier to parent involvement when parents speak a language other than English. When newsletters and other forms of communication to the parents are written in a language that the parent does not understand, a barrier is created. In addition, it is necessary to provide a translator when non-English speaking parents are invited to teacher conferences and other meetings (Gaitan, 2004; Ovando et al., 2003), yet many schools do not provide translators. This barrier may contribute to the isolation and frustration that parents feel in regards to the school.

According to Gaitan (2004), language mismatch does not only happen when a parent speaks a language other than English. In fact, many English speaking parents may have a problem understanding a teacher's educational terminology. Therefore, language is a common barrier whether or not parents speak English. In fact, one of the conclusions of Reay's (1999) study was that middle-class mothers predominantly took control of communication, while the lower class mothers were less likely to do so. The research states that language reflects the social class to which a person belongs. Therefore, language is a powerful barrier for low-income parents as well as non-English speaking parents.

However, Gaitan (2004) cautions that communication is not simply a matter of hiring a translator or making sure that parents understand the information. It is a matter of having a meaningful exchange with the parents, in which teacher and parents listen and understand one other, in order to make a positive impact on the child's learning. If this meaningful exchange does not take place, parents and teachers may not benefit from the communication.

Another reason that some parents may not become involved is because they are embarrassed of their lack of education and they feel that they have nothing to offer (Batey, 1996). School personnel reinforce the parents' feelings of inadequacy when they view the parents and the community of the student as being the factors that need to change. According to Smrekar and Cohen-Vogel (2001), school staff had this attitude when parents did not execute a prescribed role given to them by the school. Clearly, this attitude is not conducive to positive relationships between parents, the community and the school (Cotton & Wiklund, 2001). In fact, Ramirez (2001) states that many

“parents confided that at times they did not feel welcomed at the school by teachers” (p. 6). Although parents may not feel comfortable in the school, Smrekar and Cohen-Vogel (2001) found little evidence that minority parents feel intimidated in the school. In fact, they state that parents seemed more frustrated than intimidated.

In some cases parents may have the means to become involved, but they simply do not know how to do so. Arias and Casanova (1993) give the example of a study in which a mother from Mexico stopped teaching the letters of the alphabet to her daughter because she had been told by the child’s teacher that “this was not the way they taught reading at school” (p. 232). The teacher failed to provide the mother with an alternate way to teach the child, so the mother simply stopped teaching her child in order to not interfere with the child’s learning. This child was far below level on reading achievement although her parents were literate and willing to teach her to read. Training teachers to successfully involve parents may have been a simple solution to the problem.

An important barrier to parent involvement is the lack of teacher training. Some of this lack may be due to teacher reluctance to the training. Ramirez (2000) interviewed 51 educators to determine teachers’ views toward parent involvement at the high school level. He states that 61% believed strongly that in a good high school, parent involvement was important. However, 95% of the educators responded that they were not willing to participate in training that would help them increase the level of parent involvement in school. Even when teachers are willing to undergo such training, however, the training that is available may not be adequate. Young and Hite (1994) conducted a study in which their purpose was to describe the preparation of preservice educators to involve parents in education. They report that nearly 50% of administrators of preservice training programs were not satisfied with the amount of training that preservice teachers receive (Young & Hite, 1994). This lack of adequate teacher training is a serious barrier to parent involvement.

Studies have shown that parents want to be involved in the education of their children; however, there is not always support in place in order for parents to overcome the barriers to becoming involved (Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001). Barriers such as culture and language mismatches, lack of knowledge by the parent of how to be involved,

and teacher attitudes or lack of training may be in the way of such involvement. Most of the time, lack of involvement stems from a combination of these factors (Muller & Kerbow, 1993). However, there are many things that schools can do in order to help parents and teachers to overcome the obstacles to effective parent involvement in schools.

### **Ways in Which Schools Can Overcome the Barriers to Parent Involvement**

It is the responsibility of the school to promote parent involvement. In fact, such efforts are more important in whether or not parents become involved than such factors as social class, education level (Northwest Regional Educational Laboratory, 1999; Overstreet, Devine, Bevans, & Efreom, 2005), marital status, mother’s work status, or race or ethnicity (Eccles & Harold, 1996). This is important considering that many teachers consider the uninvolvement of parents as a sign of not caring (Crozier, 1999) and consider it the responsibility of the parent to contact the teacher (Ramirez, 2001). Whitaker and Fiore (2001) state that educators must inform parents of their importance and then repeat it as many times as necessary. In fact, Henry (1996) hopes to replace the “corporate” model, in which people are slotted into preconceived roles, for parent-school relationships with a feminist model in which “people and information sharing become the focus, rather than procedures and segmented roles” (p. 20).

Due to the diversity of parents and families, teachers must be prepared to involve parents using a variety of different methods. According to Tichenor (1997), it is crucial that preservice teachers be exposed to as many different strategies as possible for encouraging parent involvement. Therefore, providing workshops for in-service teachers is a step that schools could take to make up for the deficit in adequate training. A group of four researchers and seven teachers associated with the *Bridging Cultures Project* came together to study the effects of a series of workshops that had been designed by the four researchers. These workshops were put in place to help teachers become more aware of “individualism and collectivism as value orientations” (Trumbull et al., 2001, p. 139). After only three workshops, the teachers demonstrated a significant change from individualistic to collectivistic methods in teaching. In fact, the teachers were applying the new knowledge to their classrooms even before

the end of the series of workshops. An unexpected outcome, according to the teachers themselves, was that the “framework was altering their perceptions of interactions... between parents and school” (p. 141). This workshop allowed the teachers to see past the barrier of culture mismatch in order to connect with parents.

Gaitan (2004) puts a new twist on teacher training. She suggests that when training teachers in workshops, Latino parents can serve as co-leaders in order to “supply information about the culture and the community that teachers can use to relate better to students and their parents” (p. 81). This provides a way in which schools can encourage parent involvement while respecting the culture that they bring with them. However, becoming co-leader in a workshop is only one example of different ways that parents can become leaders in the school.

Batey (1996) agrees that it is important to have representatives from different groups in leadership. She states that it is necessary to “have principals and parent-leaders make sure that parents from all backgrounds have a representative on all of the school’s committees” (p. 23). Gaitan (2004) gives a specific example of a Latina parent who became active in a leadership position and thus influenced other Latino parents to become involved in the school. This involvement was made possible in part due to the Latino student’s teacher who encouraged the participation of the parent in school activities.

Parents respond to invitations when they have the confidence that they will be respected and well received. Due to the diversity of families in such areas as race, income and family structure, it is necessary for educators to be culturally aware in order to properly welcome parents into the school. In fact, it is necessary to have this awareness in order to effectively implement techniques for getting parents involved in the first place (Dykeman, Nelson, & Appleton, 1995). When teachers involve parents, those teachers rate parents of different backgrounds and cultures more positively than teachers who do not involve parents. Therefore, as parents become involved, teachers have better attitudes, which leads parents to become more involved (Eccles & Harold, 1996). In other words, involving parents may create a “cycle of acceptance.” Acceptance is a vital first step to parent involvement, but it alone is not sufficient. One important part of parent involvement is parent-teacher conferences.

Schools must make conferences possible for all parents. Swap (1987) proposes offering incentives to parents who may have certain barriers to attending conferences. Among the incentives that she proposes are providing refreshments, offering babysitting, sending notices in the parent’s primary language and making invitations by telephone. Lynch (1992) adds that working parents may have a time barrier, and therefore scheduling conferences and meeting in after-work hours may make it more feasible for these parents to attend. Much emphasis is given to parent-teacher conferences. Yet Trumbull, Rothstein-Fisch, Greenfield and Quiroz (2001) believe that conferences should serve only a small part of the communication between school and home. Allowing impromptu visits in the classroom and seeking everyday interaction between parents and teachers are some of the methods that they suggest for increasing communication.

Teachers should strive to communicate in language that is readily understood, free of educational jargon that may confuse English speaking and non-English speaking parents alike. Gaitan (2004) calls this language that is readily understood “common language” (p. 33). Batey (1996) suggests that parents who speak some English but are not yet fluent should be given sufficient time to answer questions and could be asked to translate materials from English into their language for other parents. According to Gaitan (2004), when parents speak a language other than English, “parent-teacher conferences need to be conducted bilingually” (p. 33). This common language is important in order to make sure parents and teachers understand one another and to make parents feel more welcome in the school.

There is a misconception that parent involvement must take place in the school. Yet, according to Trusty (1997), involvement that takes place at home (such as homework help) has a stronger correlation to school achievement than do other dimensions of parent involvement. Therefore, schools should encourage such involvement. However, the school should be careful to not use a cultural deficit approach. Cultural deficit programs approach parents with the attitude that there is one right way to be involved. In this approach, there is an underlying assumption that there is something “missing” in the parents’ and child’s culture. This is a misconception, however. In fact, students’ families have “funds of knowledge,” which are “the essential cultural practices and bodies of

knowledge and information that households use to survive, to get ahead, or to thrive” (Ovando et al., 2003, p. 410). Teachers can learn from the families’ “funds of knowledge” in order to “capitalize on the resources communities can provide for learning” (p. 410) and can build on them in order to help parents to support their children’s education.

Arias and Casanova (1993) state that if Hispanic parents were told how they can help their children do well in school, many would take the steps to do so. Moreover, Cotton and Wiklund (2001) state that with adequate training, parents with any level of education can make a positive difference. In fact, they propose that disadvantaged children are the ones who stand to gain the most from parent involvement programs. In a study of African American students, Flowers (2003) found that African American students’ reading for pleasure made a positive impact on their scores on a standardized test that tested reading. She states that it may be beneficial to work with African American parents in order to provide them with information about literacy development. This could inform parents about ways to encourage their children to read within the context of their home and lifestyle. Lewis (1995) emphasizes the need to educate the family when it is important to the child. She gives the example that if a mother does not know how to help her child succeed, then it is the responsibility of the school to help her learn. It is very important, however, to approach such teaching with respect for the culture of the family. One way for teachers to learn about the culture of a student’s family is through visits to the student’s home.

Research indicates that home visits can be effective in promoting parent involvement in schools (Allen & Tracy, 2004; Ovando et al., 2003; Reglin, 2002). According to Tracy (2004), home visits can help reach a variety of family backgrounds. In Project Reading and Writing (R.A.W.), Reglin (2002) conducted a Home Visit Survey of 80 high-risk families to determine the effect of home visits on parent involvement in the schools. According to this survey, 91.3% of parents felt that home visits would increase their involvement in the school. However, 78.8% felt that visits from the child’s teacher would be *very effective* and only 43.8% of parents felt that visits from the counselor would be *somewhat effective*. 42.5% felt that home visits by the principal would be *barely effective*. Therefore, according to this research, *who* conducts the home visits is very important. Reglin (2002) states that teachers

and counselors should be provided with time and training to make home visits in order to promote parent involvement in the schools. Ovando adds that during home visits teachers can find out more about topics such as “areas of parental expertise, family history, language use practices, children’s everyday life at home, parents’ theories about how children learn, and parents’ views on schooling” (Ovando et al., 2003, p. 411). This is an excellent way to tap into the funds of knowledge that later can be used in the classroom and to promote parent involvement.

For specific school needs that may be filled by parents, Batey (1996) proposes the idea of a wish list. She advised a principal to make a wish list request form, and when the list was presented to a group of parents, all but one of the “wishes” was granted. Parents signed up to volunteer in the classrooms, to donate items, to do some work at home, and to participate on different committees. This method works to give parents and family members specific ideas of how they can be involved in helping the school specifically. In fact, Batey (1996) adds that some of the parents wanted to create a volunteer handbook that spells out the needs of the school and the job descriptions. Therefore, making the needs of the school clear can help parents to know what to do if they want to be involved within the school. Parents can then choose something that is suitable for their interest and capabilities. However, even when making specific requests, it is necessary to remain flexible to parents and their circumstances.

Ovando, Collier, and Combs (2003) state that there will be differences in what programs for parent involvement should do. In fact, some parents feel that parent involvement in the schools is a reflection of White middle-class ideals and is not necessarily applicable to all groups. Therefore, widespread programs would not be appropriate (DeCarvalho, 2001). In other words, schools cannot have only one way to promote parent involvement. Sometimes teachers must work with some parents on an individual basis. For example, Winters (1993), describes a mother of three school-aged children who was struggling to make ends meet. She constantly avoided being involved with the school because she did not know what to expect. Yet the school kept inviting her through the use of fliers, notices and notes. When a school social worker found out that this mother dropped off her children at a certain spot for school every day, the social worker made a point to be there at that time to speak to her. It took the mother yet another



month to show up to a workshop, but the workshop was only the beginning. After spending time being involved in the school, she was motivated to attend the community college, and eventually graduate school. She was aided in this process by the school social worker who helped her receive money for daycare in her welfare check. Throughout her time in school and after she graduated, she remained involved in the education of her children. Winters (1993) states that “through the exchange and interaction common to participation and ongoing socialization, she acquired knowledge, developed skills, and learned new attitudes” (p. 105). This parent’s involvement was made possible because the school staff remained flexible to the needs of parents on an individual basis.

Joyce Epstein defines six types of parent involvement. These six types of involvement are parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community (Christensen & Sheridan, 2001). This list of types of involvement demonstrates that parent involvement should not be relinquished to one aspect of schooling. In fact, Epstein suggests that “schools with comprehensive home involvement programs encompassing various types of home-school connections probably help families and children in a large number of important ways” (as cited in Arias & Casanova, 1993, p. 239). Arias and Casanova (1993) propose that more types of home-school interaction make a “thicker” relationship between home and school. Therefore, the more schools can promote and maintain different types of interaction with parents, the more the child stands to gain from those interactions.

No matter how a school chooses to promote the involvement of parents, “their involvement need[s] to be a systematic and sustained effort. The point is that just as children need to be incorporated into the learning process as active participants, so do their parents because they are the principal parties responsible for socializing children” (Gaitan & Trueba, 1991, p. 136). The majority of the research indicates that parent involvement is beneficial, and such involvement can be expressed in many different ways.

This literature review has presented some barriers to parent involvement including lack of teacher training, negative attitudes on the part of the school toward some parents, language differences, and culture mismatch. It has also presented some ways that schools can promote

parent involvement such as teacher training, inviting parents to act as workshop co-leaders, and communicating in language that is readily accessible to parents. Above all, while there may be many factors contributing to a lack of parent involvement in schools, educators have the responsibility to initiate this involvement. The literature is clear: if schools encourage parents to become involved, many parents will respond; and students, parents, and educators all stand to gain from such involvement.

### **Conclusions**

Educators have the responsibility to promote parent involvement in the education of children. The relationship between parent involvement and the academic success of students renders this need indisputable. Schools must increase the numbers of parents who are involved in order for more children to reap the benefit of such involvement.

The research confirms that there are several specific barriers to effective parent involvement, yet, there are steps that schools can take in order to tap into the invaluable resource that parents can bring into the school. Unfortunately, educators may sometimes blame parents for the lack of involvement, citing lack of caring as the main cause. This shifts the responsibility for initiative into the parent’s field and thus takes responsibility away from the school. Educators must shift the responsibility for parent involvement back into the school in order to instill the changes that need to be made.

Barriers such as culture and language mismatch must be approached with great respect for the home culture and language of the family. It is imperative that parents understand the communications from the school whether the language of the parent is English or any other language. Also, educators should ensure that communication, whether direct or translated, results in a meaningful exchange between the parents and the school.

Schools must promote awareness among teachers and staff about culture, social class and language differences by providing training in effectively communicating across differences. Research suggests that teacher training is a very important step that schools can take to improve communication and understanding in the school.

Simply beginning to involve parents with respect and communication can often initiate a ‘cycle of acceptance’ that encourages further parent involvement. Therefore, it may be helpful to begin involving parents in small ways even

before an official parent involvement program is formed.

It is important for schools to provide multiple avenues for parent involvement. This is important for two reasons. First, it is important because parent involvement can be expressed in many different ways, and opportunities for involvement should reflect this diversity. Second, the more ways that parents become involved, the thicker the benefits will be for the student. Therefore, it is also important for schools to encourage parents to be involved in more than one way, if possible.

One of the most valuable forms of parent involvement is involvement that takes place in the home of the student. Parent training workshops are an effective way to inform parents about ways that they support the education of their children in the home. This is significant since research has shown that when parents know how to help their children, they do.

Above all, it is essential that educators remain flexible to the needs of different parents. If schools are to encourage the involvement of as many parents as possible, there must be flexibility in the methods that are used to bring parents into the school, as well as in the ways that parents can be involved. Therefore, it is imperative that schools begin involving parents by initiating contact and letting parents know that their involvement is a valuable component of the education of their children.

In the literature that was reviewed, there was no reference to the effect that parent involvement had on students in areas other than academic work and school related matters. Future research might focus on the emotional and social implications for children whose parents are involved in their education. This would make a more comprehensive picture available for educators and parents when making decisions on how parents can be involved in the education of their children.

### **Recommendations for Practice**

There are many ways that schools can bring parents into the education of their children. The research suggests some specific ways that schools can promote parent involvement. Of course, schools should be creative and find different ways to bring in different parents; however, there are some specific practices that promote parent involvement and there are some practices that should be avoided. These recommendations should not be seen as limitations to what can be done to involve

parents, but rather should be seen as a starting point for involving parents and letting them know how essential they are to the education of their children.

### **Practices to Promote**

- Let parents know that they are welcome in the classroom and that they are important to the education of their children.
- Make conferences possible for all parents by scheduling them to fit various schedules and by providing snacks and childcare.
- Require appropriate training in parent involvement for all teachers and staff in the school (especially training in communicating through differences).
- Make training available for parents (e.g. a workshop on enhancing child literacy).
- Provide many different ways for parents to become involved.
- Make a wish list for parents who want to help the school but do not know where to begin. This is not to be a list of restrictions, rather a list of possibilities.
- Communicate with parents often and in language that they can understand.
- Visit student's homes in order to connect with parents and learn from their funds of knowledge.
- Always remain flexible to the needs of different families.

### **Cautions**

- Do not blame parents for their lack of involvement. Instead, look at how the school can help overcome barriers that may be impeding their involvement.
- Do not treat parents with a cultural deficit approach. Instead, value their funds of knowledge.
- Do not give up if a parent does not seem to respond. While remaining respectful, continue to politely invite parents to become involved.

Above all, schools must take responsibility for promoting parent involvement, and they must do so with respect and flexibility. Due to the barriers that exist, schools should be careful not to criticize parents for their lack of involvement but instead to take the challenge of overcoming the barriers that are holding parents back.

The most important part of any parent involvement effort is simply beginning to communicate with parents about the importance

of their participation. By letting parents know that they are a valuable part of their child's education, educators are initiating the very important 'cycle of acceptance' that will facilitate further parent involvement. This is imperative due to the significance of respect and acceptance in how involved parents are in schools.

The specific manner in which schools encourage parent involvement is not as important as the fact that it is initiated and maintained. Respect and communication are the key ingredients for a successful parent involvement program. While promoting parent involvement will require some effort on the part of schools, the effort will be rewarded with a gain in student achievement and the satisfaction that comes with knowing that the school is doing all that it can to promote the academic achievement of its students.

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## **Students with Post-Traumatic Stress Disorder in the Classroom: Strategies for Teachers**

*Pediatric Post-Traumatic Stress Disorder (PTSD) rates have been steadily increasing over the past few years. PTSD symptoms make staying on task, and remembering new information more challenging for students with PTSD in the classroom. Cognitive-behavioral therapy (CBT) has been used to effectively treat PTSD. To apply CBT in the classroom, in addition to many practices teachers employ already, teachers can use self-monitoring and self-instruction. Both are specific CBT-based strategies and practices, and both best help students with PTSD gain academic skills and confidence. Cognitive-behavioral management (CBM) may be used as a classroom management technique, as a more comprehensive method that is helpful to PTSD students. This management style holistically addresses the needs of PTSD students. CBM also controls behavior and thought processes in a way that teachers can easily adopt.*

In times of extreme danger and traumatic stress, the human body automatically starts operating in survival mode. The brain starts a chemical reaction and as a result the body becomes supremely aroused, prepared to protect and preserve itself at all costs. Once the danger passes or the stressor is removed, the body returns to a normal, non-aroused status. Unfortunately, in some people who have experienced extreme trauma, their bodies respond to everyday situations with increased internal arousal reaction. This reoccurring alarm state is called Post-Traumatic Stress Disorder (PTSD).

Traumatic events are becoming more common in modern society. Consider the effects of wars in Afghanistan and Iraq, the effect of Hurricane Katrina, the effect of September 11<sup>th</sup>, and the increasing occurrence of sexual abuse of children, child maltreatment, children who witness violence inflicted on their loved ones, car accidents, chronic illness in childhood, and gang violence. Children are simply exposed to numerous traumatic events. In fact, it is estimated that before age sixteen, twenty-five percent of children will experience a traumatic event (Costello, Erkanli, Fairbank, & Angold, 2002). With that in mind, a conservative estimate of children at risk for PTSD in the U.S. exceeds 15 million. This number increases as new children are traumatized each year (Perry, 1994). Undoubtedly, the incidence of pediatric PTSD is continuously expanding.

Whether they realize it or not, most teachers have at least one child within their classrooms who is suffering from PTSD symptoms. After a traumatic event in a child's life, these symptoms often appear in familiar behaviors. Examples

include children who are less interested in certain activities than they once were, children having difficulty concentrating (Keppel-Benson & Ollendick, 1993), children who daydream a lot, children who come to school complaining of a lack of sleep (Johnson, 1998), children who are hypervigilant and therefore prone to irritability and anger (Drake, Bush, & vanGorp, 2001), and children who have overall academic difficulties with learning and memory (Cook-Cottone, 2004). In all of these cases, the children may be suffering from PTSD. Most teachers do not recognize these behaviors as PTSD symptoms, nor do most teachers know much about PTSD.

However, because of their constant interaction with students, teachers are in a unique position to help students with PTSD. Teachers should take the initiative to intervene because, as Johnson (1998) states:

An event that happens to one child affects other classmates vicariously. A class is an intimate group, and just as experiences of individual family members affect the rest of the family, one student's experiences will affect the rest of the class. (p. 84)

When one student suffers from PTSD, it affects the rest of the class. In order to teach most effectively, teachers must be aware of students with PTSD and of strategies to help these students.

The most promising treatment of pediatric PTSD is cognitive-behavioral therapy (Brown, Albrecht, McQuaid, Munoz-Silva, & Silva, 2004). The basic strategies and rationale behind cognitive-behavioral therapy (CBT) easily translate into simple, additive classroom

practices. The goal of these practices is to provide a safe setting in which students can use self-regulation and stress management techniques to deal with the PTSD symptoms they face.

Furthermore, a classroom management style of cognitive-behavioral management (CBM) shares and supports the underlying principles of CBT. CBM may be the most supportive way teachers can help students with PTSD. Because CBM is an overarching class-wide form of support, students with PTSD benefit from the self-regulation their peers also engage in.

## **Literature Review**

### **Post-Traumatic Stress Disorder**

In a dangerous situation, it is important to focus on the threat of the situation—not on other less relevant things. A fight or flight mentality is the body's automatic protective response to threat. After the danger passes, the body returns to normal. However, not everyone returns to normal. In some people, danger and threat response symptoms persist day and night. This is when temporary alarm turns into PTSD (Yule, Perrin, & Smith, 2001). To develop PTSD, a child or adolescent must first experience a dangerous event. This event might be the death of a loved one, a house fire, the effects of war, terrorism, child abuse or maltreatment, sexual abuse, chronic illness, witnessing a violent crime, a car accident, or even a natural disaster. These are only a few examples of the numerous types of traumatic events many children experience. However, the specific type of event is not especially significant. More significant is the child's prolonged adjustment reaction to the event, which is manifested in certain symptoms. PTSD symptoms are categorized into three main areas: (a) re-experiencing, (b) avoidance/ numbing, and (c) increased arousal (American Psychiatric Association, *DSM-IV*, 1994).

### **History of Pediatric PTSD**

For a long time, PTSD symptoms as a diagnostic criteria of the adjustment reaction to trauma have been exclusively ascribed to combat veterans. This identification is a misconception, but it is re-enforced by history. Prior to 1900, the main terms associated with PTSD included *shell shock*, *traumatic neurosis*, and *nervous shock* (Keppel-Benson & Ollendick, 1993). All three terms are commonly applied to soldiers with PTSD. However, the disorder extends far beyond the confines of military trauma. In fact, stress

reaction first appeared in the original *DSM* in 1952.

With regard to children and adolescents being specifically included in a PTSD diagnosis, before the 1950s, very little investigation into the effects of trauma on children had been undertaken. One of the few exceptions was the early work of Anna Freud, but she only studied the effects of war on children (Keppel-Benson & Ollendick, 1993). While the 1950s brought further exploration of pediatric PTSD, it was not recognized as a disorder until the 1980s (Boucher, 1999). Along with the emergence of pediatric PTSD, there was some disagreement among psychiatrists in the 1980s as to whether or not children could develop PTSD. Some psychiatrists believed that children were not cognitively or emotionally able to respond to stress in such a way (Spitalny, 2004). However, this debate has been resolved. Clearly, students can develop PTSD. A clear resolution to this debate is evident because since the 1980s the body of research in the field of pediatric PTSD has steadily grown to further define pediatric PTSD and elaborate on innovative treatment strategies.

### **Risk Factors for PTSD**

Certain factors increase children's risk for developing PTSD. These factors include age, trauma type, extent of exposure, functioning prior to the traumatic event, social support, and coping behaviors (Lonigan, Phillips & Richey, 2003). The most striking and common risk factor is age. Several studies agree that the younger the child, the more intense the PTSD after exposure to the traumatic event (Lonigan et al., 2003; Costello et al., 2002). Age creates an increased risk for PTSD because children have not matured cognitively, emotionally, or in their behavioral self-regulation. Therefore, children have fewer resources for properly processing traumatic experiences (Scott, Wolf, & Wekerle, 2003).

### **Prevalence of Pediatric PTSD**

Pediatric PTSD is more common than most people realize. Most adults and children do not have long-lasting emotional after-effects from traumatic experiences. Yet some children do have long term emotional effects, and these children are a significant minority (Feeny, Foa, Treadwell, & March, 2004). Roughly 25% of children experience a traumatic event before the age of sixteen (Costello et al., 2002) and the lifetime prevalence of PTSD in the general adult population is roughly 8% (Brown et al., 2004). If

8% of the population suffer from PTSD at some point in their lives, and 25% of children experience a traumatic event, PTSD in children appears to be growing progressively more significant. In fact, a conservative estimate of children at risk for PTSD exceeds 15 million. This number exponentially expands as more children are traumatized each year (Perry, 1994).

As our society grows increasingly traumatic, pediatric PTSD becomes less and less visible. This lack of recognition becomes a serious problem worth examining:

In high-profile events, such as Jonesboro (Jonesboro, Ark, 1998) and Columbine (Littleton, Colo, 1999) school shootings, the nation was shocked and grieved; schools closed and counseling was offered. In stark contrast, many young inner-city children enter school each day with a heavy burden of exposure to violence. The distress associated with exposure to violence is not being recognized. (Hurt, Malmud, Brodsky, & Giannetta, 2001, p. 1355)

Thus it becomes paramount that more attention is given to the extent of children's exposure to all sorts of traumatic occurrences such as terrorism, war, ethnic or religious violence, and political oppression (Pynoos, Steinberg, & Goenjian, 1996). Often, traumatic events have a greater emotional impact on children than is widely realized. The after effects of the September 11<sup>th</sup> terrorist attacks provide a prime example. Six months after the attacks there was a higher rate of psychopathology in New York City schools when compared to pre-September 11<sup>th</sup> (Wolmer, Laor, & Yazgan, 2003). Although it is true that psychopathology does not strictly correlate with PTSD, these higher rates should not be ignored. Additionally current wars in Afghanistan and Iraq and the aftermath of Hurricane Katrina, it is possible that PTSD prevalence rates will continue to rise rapidly on a global scale. Therefore, pediatric PTSD, and by effect school-age children diagnosed with PTSD, will grow in number in classrooms across the country.

#### **Diagnosis: What Qualifies as Pediatric PTSD?**

The clinical diagnosis of PTSD, according to the *DSM-IV*, requires that certain criteria be present. Regarding the event itself, two things are required: (a) the event must include death or injury, perceived or actual, of self or someone else, and (b) this event must have caused intense

fear, helplessness, or horror. Symptoms of re-experiencing, avoidance and/or numbing, and increased arousal are also required to meet diagnostic criteria. However, the actual manifestations of these symptoms may vary. Lastly, symptoms must last at least a month and must cause distress or impairment in functioning (American Psychiatric Association, 1994).

PTSD can be diagnosed in the presence of other psychological problems. When this happens it is known as *comorbidity*. Youth with PTSD are more likely to also be diagnosed with Attention-Deficit Hyperactivity Disorder, anxiety disorders, and mood disorders than their other severely traumatized non-PTSD counterparts (Runyon, Faust, & Orvaschel, 2002). In addition, children are especially likely to be diagnosed with depressive disorders, because there is overlap in diagnostic criteria (Spitalny, 2004) between these disorders and PTSD. PTSD may sometimes be confused with Acute Stress Disorder (ASD), yet they are two separate and distinct disorders. The difference between ASD and PTSD is fairly subtle. Those with PTSD are able to function in daily life (at least marginally), whereas those with ASD are not able to function at all (Boucher, 1999). Thus, functioning level becomes a determinant between the two disorders. Another difference is the onset of symptoms. ASD generally occurs within four weeks of the event and lasts from two days to a maximum of four weeks (Johnson, 1998). PTSD, on the other hand, has a much later onset and can last much longer—even into adulthood. Therefore, ASD and PTSD cannot be comorbid, and each must be carefully diagnosed by mental health professionals.

When it comes to diagnosing pediatric PTSD, empirically supported methods or instruments are far and few at best. Validated, accessible measurements, which are based specifically on *DSM-IV* criteria, are relatively rare (Drake et al., 2001). This makes it difficult for mental health practitioners to have a common method for diagnosis. While literature on child and adolescent PTSD does present a wide array of testing instruments such as self-reports, parental-reports, tests, and questionnaires, not any specific one is consistently used by most practitioners. However, a thorough PTSD evaluation process typically involves a team of medical and mental health professionals (Drake et al., 2001). Diagnosis can only be made by mental health professionals, yet teacher awareness of PTSD symptoms and possible

classroom behaviors is important in order to best teach students with PTSD.

### **PTSD Symptoms and Classroom Behaviors**

The symptoms for PTSD are more common among students than most educators realize. For example, school age children with PTSD might exhibit any of the following; lowered intellectual functioning, decline in school performance, obsessive talking about the incident, isolation of affect, constant anxious arousal, problems relating to peers, more elaborate reenactments, and psychosomatic complaints (Johnson, 1998). To illustrate more specifically, consider again that the *DSM-IV* classifies PTSD symptoms into three main clusters: (a) avoidance/numbing, (b) re-experiencing, and (c) increased arousal (American Psychiatric Association, 1994). Each of these areas has a broad range of specific symptoms (see Table 1).

Avoidance and numbing symptoms can appear in a student in many ways. These symptoms can include the child's avoidance of anything or anyone who reminds the child of the trauma. Another avoidance/numbing symptom is when the child has a sense of a foreshortened future (American Psychiatric Association, *DSM-IV*, 1994). For example, the student may be hesitant to talk about future career or schooling, explaining that he or she will not live long enough to participate. Also, as mentioned by Keppel-Benson and Ollendick (1993), and Yule et al. (2001), after trauma, students might be generally numb in response or lacking proper emotional response. General numbing may appear in the classroom as decreased interest in activities that were once exciting or as a decline in maintenance of relationships that were once important to the student.

Beyond avoidance/numbing symptoms, students may exhibit re-experiencing symptoms. When hearing the term *re-experiencing*, many think of the flashbacks experienced by war veterans. It is important when considering re-experiencing not to generalize adult PTSD to pediatric PTSD. Children have a tendency to daydream intentionally, and because of this their sense of reality differs from that of adults. Therefore, children are less likely to experience intrusive, disruptive flashbacks (Johnson, 1998). Thus children are not as likely to have huge symptoms of re-experiencing in class but may instead seem to daydream frequently. It is also possible that re-experiencing may manifest itself as repetitive play where themes and aspects of the trauma are expressed over and over again

(American Psychiatric Association, *DSM-IV*, 1994). Regardless of exactly how re-experiencing occurs, it is important to remember that intrusive memories can sometimes be terrifying for children. Intrusive memories might also make concentration difficult. Unfortunately, quiet times at school may be prime times for intrusive memories (Keppel-Benson & Ollendick, 1993). With regard to quiet times, children with PTSD often have sleep difficulties. These difficulties can include the inability to fall asleep, night terrors, and nightmares (Johnson, 1998). As a result, a child may arrive at school tired or complaining about not being able to sleep. Actually, this symptom may be attributed to either re-experiencing symptoms or hyperarousal symptoms.

Arousal symptoms comprise the third symptom cluster. Sleep difficulties, irritability, difficulty concentrating, and hypervigilance are the main ways arousal symptoms appear (Keppel-Benson & Ollendick, 1993). These particular symptoms can sometimes appear similar to the symptoms of ADHD. Like those diagnosed with ADHD, children with PTSD seem to be more irritable and anxious, have diminished attention, and struggle with memory problems (Drake et al., 2001). The *DSM-IV* adds outbursts of anger and an exaggerated startle response to the arousal symptom cluster (American Psychiatric Association, 1994). These symptoms can be explained as the student being:

...overly alert to stimuli relevant to danger; any change in his [or her] environment, such as an unexpected sound, draws attention: he [or she] is overly vigilant to any signal that might be indicative of danger. At the same time, he [or she] has difficulty in focusing his [or her] attention on those components of his [or her] environment that do not denote danger. (Beck, 1976, p. 80)

Therefore, teachers may notice overly alert student behaviors or hypervigilance at times when teachers want students to focus on instruction.

### **PTSD Physiology and Impact on Learning**

Cumulatively, all three symptom clusters make learning and normal school functioning more difficult for students with PTSD. By considering the emotional interference caused by PTSD, teachers can holistically address the learning needs of students who are low



Table 1: Student Symptom Manifestations

Manifestation of the Symptom	Examples of Student Manifestation
General Avoidance	Student will not go near or mention anything pertaining to the traumatic event that was experienced. Student avoids situations or activities irrationally.
Foreshortened Future	Student insists he or she will not live long enough to do certain natural things (go to high school, college, have a career, get married, etc.)
General Numbness	Student is not interested in activities that once interested them. Student is generally not excited about much of anything. Student presents a consistent, non-expressive affect the majority of the time in class.
Lacking Proper Emotional Response	Student may show no remorse after hurting a classmate. Student may laugh inappropriately. Student might have no visible reaction to a situation that warrants emotion.
Daydreaming (Flashbacks)	Student often zones out during class discussions. Student seems to be clueless or disoriented after instructions are given.
Repetitive Play	Student frequently draws pictures with the same characters. Student often plays with dolls/action figures that do the same actions repeatedly. Student always writes stories with the same themes. (Usually the character, actions, or themes pertain to the trauma).
Intrusive Memories	Student daydreams frequently. Student gets noticeably upset over a stimulus which is not physically present.
Sleep Difficulties	Student is frequently tired. Student complains of not getting enough sleep. Student has nightmares pertaining to the trauma they have experienced. Student is afraid to sleep because he or she will have nightmares/experience the trauma again.
Difficulty Concentrating	Student seems to lack focus. Student gets agitated when forced to attend to tasks requiring attention (such as a timed math test). Student may struggle with reading because it requires concentration. Student may have difficulty sitting still.
Memory Difficulty	Student has a hard time remembering math facts or spelling words. Student might be unable to complete a test because they cannot remember the answers. When reviewing, student may seem more forgetful of concepts learned earlier in the year.
Hypervigilance	Student is keenly aware of slight noises, motion, and those around them. Student is easily startled.
Irritability/Outbursts of Anger	Student may become angry for no apparent reason. When angry, student may become extremely upset. Student may seem extra sensitive to comments, privileges, and classmates' behaviors—often resulting in anger.

performers or appear to lack motivation to learn (Purnell, 1999). Students who come from severely traumatic backgrounds with high stress have difficulties with attention. This, again, is based on emotional interference. These students are constantly monitoring their surroundings by scanning the classroom for danger, noting the looks they get from other students, and emotionally being very survival oriented. These behaviors may be distracting for teachers, but they make sense for students who are *emotionally fixated* on a survival orientation due to their background experiences (Jensen, 1998).

Traumatized children have different attentional processes, sometimes lack cognitive systems necessary for learning, have inefficient memories, and may respond with different emotional affect than other children (Moradi, Doost, Yule, & Dangleish, 1999). These behaviors are based in the physiology of the brain's reaction to stress. It has been theorized that high levels of stress alter the central nervous system. This alteration seems to be related to abnormal cardiovascular regulation, behavioral impulsivity, additional anxiety, increased startle response, and sleep difficulties (Perry, 1994). Specifically, when stressed, the body releases a peptide called cortisol. This peptide is released when the body is confronted with any sort of physical, environmental, academic, or emotional danger (Jensen, 1998). Cortisol effects the area of the brain, the hippocampus, which is involved in learning and memory. Constantly elevated levels of cortisol destroy brain cells in the hippocampus (Jensen, 1998). The additional cortisol has negative effects on memory, cognition, and the ability to learn new information that can sometimes end in long-term dysfunction and deficits in these particular areas (Bremmer, 2002). Due to cortisol, it is even possible that parts of the brain associated with memory, learning, and emotional expression shrink in children who have experienced constant stress. This shrinking has been found in adults who experienced continuous stress as children (Cook-Cottone, 2004). Therefore, traumatic stress may put a child at risk for emotional and academic problems. Also, development may have been impacted by experiencing traumatic stress and as a result, the child may have difficulty reflecting and focusing attention (Cook-Cottone, 2004).

The emotional impact of a traumatic experience also plays a significant role in the student's functioning. Consider that the more intense the arousal, the stronger the imprint the

memory will have in the brain. It is almost as if memories that are emotionally charged are stored in a different part of the brain than where mundane facts are stored (Wolfe, 2001). Also, the brain first pays attention to information with a strong emotional content. Furthermore, such information is remembered longer (Wolfe, 2001). Since academic achievement difficulties due to memory, attention, development, and emotional dysfunction are a major risk with PTSD, it becomes relevant for teachers and other school personnel to consider PTSD as a possibility.

### **Need for Treatment of PTSD**

Beyond consideration of PTSD's impact on learning, treatment of PTSD in children is essential to prevent the additional difficulties often associated with the PTSD symptoms, including: (a) risk of additional mental health problems, (b) academic struggles, (c) suicidal behaviors, and (d) physical health problems (Seedat & Stein, 2001). Beyond these symptoms, PTSD can also be a catalyst for other mental health problems such as lowered self-esteem. In that same vein, if emotional regulation and interpersonal problems as a result of traumatic experience are not dealt with, they are likely to result in worse symptoms, higher dropout rates, and compliance problems (Follette, Palm, & Rassmussen Hall, 2004). Overall, in children with high exposure to violence, lowered self-esteem and interpersonal problems are suggestive of potential future maladaptive behavior and are a precursor to risk behaviors (Hurt, Malmud, Brodsky, & Giannetta, 2001). One specific risk behavior, for example, is that children with PTSD are more likely to become smokers (Bremmer, 2002). Furthermore, neurophysiological alterations that result from a traumatic event, may disrupt normal biological maturation in children. Over time, these alterations may have a significant impact on other aspects of child development (Pynoos et al., 1996). Trauma may cause regression in a child's social and emotional development; therefore, treatment is essential to foster normal development into adulthood. Plus, for learners, treating PTSD can have beneficial effects. After all, the role of emotions in learning is not to be overlooked. Emotions can enhance or impede learning. Therefore, educators need to understand the biological role of emotions in order to provide emotionally healthy and exciting classrooms that promote optimal learning for all students (Wolfe, 2001).

### **Issues to consider in Treatment of PTSD**

In treatment, most simply, children and adolescents must address the issues of: (a) accountability, who is responsible for the trauma, (b) resolving fantasies about actions that would have remedied the situation, (c) resolving punishment/retaliation issues, and (d) reassuring the child that they are safe (Petersen & Prout, 1991). Powerlessness is another aspect that needs to be addressed in treatment. Overall, powerlessness can become part of a child's self image, so the clinician should help the child recognize ways he or she has power in his or her own life (James, 1989). As this is done, and the student becomes more empowered, the therapist should also consider, "needs for acceptance/approval, internal control, appropriate engagement, encouragement, and consistency/routine" (Boucher, 1999, p. 227). The most effective way to deal with all these issues is through cognitive behavioral therapy (CBT).

### **Cognitive-Behavioral Therapy**

Cognitive-behavioral therapy (CBT) dates back to the work of Albert Ellis in 1962. The first texts on cognitive-behavioral modification began to appear until the 1970s (Dobson & Dozois, 2001). Beck (1976) wrote one of the early foundational texts which explained that cognitive therapy generally consists of approaches which alleviate psychological distress by correcting faulty conceptions and self-signals.

Beck (1976) was essentially the first practitioner of CBT, and he theorized that there were four stages in cognitive therapy: (a) the individual becoming aware of his or her thoughts, (b) the individual recognizing the inaccuracy of his or her thoughts, (c) the individual replacing the inaccurate thoughts with accurate ones, and (d) the individual receiving feedback from someone else as to the correctness of the changes. Research findings indicate that the use of CBT for PTSD not only helps reduce PTSD symptoms, but it also provides treatment for some of the comorbid mental health problems such as general anxiety and depression (Cahill & Foa, 2004). Due to the effectiveness of CBT, the number of professionals using cognitive-behavioral strategies has sharply increased (Rosenberg, Wilson, Maheady, & Sinclair, 2004). CBT has been successful with a variety of populations traumatized by different events (Cahill & Foa, 2004). This success is likely because CBT specifically eliminates

symptoms of the disorder (Foa, Rothbaum, & Molmar, 1995).

### **Treating PTSD with CBT**

Changing inaccurate thoughts is the premise behind CBT. To institute this kind of change, persons suffering from PTSD need: (a) to know what they are thinking, (b) to know why their thinking is inaccurate, and then (c) to begin to substitute accurate thoughts while receiving feedback from someone else (Beck, 1976). Actual CBT techniques are more complex than this sounds. To give an overview of how treatment works, CBT techniques break down into three important parts: (a) exposure therapy, (b) cognitive restructuring, and (c) additional coping skills such as stress inoculation training (SIT) (Brown et al., 2004). When compared with each other, no one part of CBT has been more effective than any of the others (Cahill & Foa, 2004).

Exposure therapy, as a method for showing what the person with PTSD is thinking, can occur through a variety of methods. For example, the therapist may gradually present what the child is afraid of while the child uses relaxation techniques. If the fear becomes too overwhelming, then the child can signal the therapist and end the session (Faust, 2001). Another form of exposure therapy is debriefing. During a debriefing session, the child suffering from PTSD is encouraged to focus on thoughts and emotions connected to the event. Then, the therapist is able to correct rumors, misinformation, and inaccurate thoughts that the child might be thinking (Wolmer et al., 2003). This links the exposure method with cognitive restructuring.

Cognitive restructuring points out inaccuracies in thought and changes the child's or adolescent's thought process about the incident. This can be done after cognitive errors are identified through exposure therapy and alternate explanations have been explored (Nader, 2001). Modifying dysfunctional thoughts is the ultimate aim of cognitive restructuring. The types of thoughts that are considered important to restructuring with trauma victims are "their appraisals of safety-danger, trust, and views of themselves" (Rothbaum, Meadows, Resick, & Foy, 2000, p. 66). The paramount end result of restructuring is when the child puts the traumatic experience into a better, more logical cognitive and emotional context (Cook-Cottone, 2004). Teachers can play a role in cognitive restructuring because they are able to reinforce

coping when the child is not in therapy in settings where the child is likely to encounter trauma related stimuli (Faust, 2001).

Once a child's or adolescent's thoughts are in a manageable context, reserve coping skills are the final stage of PTSD treatment. These are used in situations where the child may be exposed to traumatic stimuli or in unusual circumstances that bring up trauma symptoms. For example, a child who witnessed his or her house burn down might become agitated at a picture of fire in a textbook. Coping skills are essential for children exposed to chronic stressors. Studies show a long term decline in intelligence if children do not develop coping skills (Humphrey, 1988).

Stress-inoculation training (SIT) or stress management, as a facet of CBT, is one way these reserve skills can be developed. SIT was originally developed by Mitchenbaum and Cameron (1973). SIT mainly involves education, muscle relaxation training, breathing retraining, role-playing, guided self-dialog, and thought stopping (Rothbaum et al., 2000). Stress inoculation training has three stages: (a) training about the nature of stress and what stressful reactions are; (b) teaching of coping skills, and coping self-statements; and (c) giving the child a chance to apply these new skills (Dobson & Dozois, 2001). Stress management techniques, which are also a form of coping skill, have similar attributes. Nader (2001) explained that stress management includes deep breathing, progressive muscle relaxation, thought stopping, and positive imagery. These techniques are highly beneficial. For example, relaxation training, as a way of coping with stress, can reduce the biological impact of stressors (Kazdin, 2001). Another reason these techniques are effective is because they are all intended to give the child control over thoughts that might bother him or her. In fact, this control is extremely useful in a school setting because bothersome thoughts seem particularly common during quiet times. These are generally also times when exposure or cognitive restructuring techniques might not be useable (Nader, 2001). The purpose of teaching such coping skills is to give the child or adolescent additional strategies for dealing with PTSD symptoms when other support is unavailable.

### **Importance of Teacher Interactions**

Outside of formal therapy, the school environment becomes a critical place for children suffering from PTSD to find help and

support. Because trauma are increasingly prevalent in this society, school personnel should be aware of the dynamics of the disorder and what these dynamics look like in the classroom (Purnell, 1999). Teachers are one set of adults most likely to see these symptoms and are most likely to observe how they negatively impact the child's schoolwork. Teachers might also notice when relationships between students and peers or adults change (Spitanlly, 2004). Once they are aware of the impact PTSD has on students' lives, teachers must certainly find ways to support these students in particular. After all, specialized training is not a requirement for finding ways to *help* students with PTSD (Johnson, 1998). Based on their role alone, teachers are inherently powerful in developing students' cognitive and emotional skills (Meyers, Cohen, & Schelsser, 1989).

School personnel such as teachers are natural at helping PTSD students. Outside the family, school is the most natural support system for a child (Wolmer et al., 2003). Children may feel more comfortable talking to a person at school instead of family members regarding the traumatic event because often children do not want to upset their parents. Accordingly, teachers frequently become an available and beneficial choice for children to confide in (Yule et al., 2001). Teachers can play an important role in the child's community of support. The broader the network of social supports for the child, the greater the chance of reducing negative effects caused by stressful life events (Keppel-Benson & Ollendick, 1993). Through significant teacher support at school, PTSD symptoms can be significantly reduced (Wolmer et al., 2003).

### **Cognitive-Behavioral Management**

Both employing tenets of cognitive-behavioral psychology, cognitive behavioral management (CBM) and cognitive-behavioral therapy are related. Specifically, CBM and cognitive-behavioral therapy are similar in both treatment methods and basic assumptions (Dobson & Dozois, 2001). CBM has proven useful and effective in a variety of settings, with the classroom being a prominent example.

CBM as a classroom management style operates under three basic principles: (a) behavior is controlled by cognition; (b) changing cognition means changing behavior; and (c) all students are active participants in their learning. The major goal of CBM, "is to teach students to manage their own behavior through cognitive self-regulation" (Zirpoli & Melloy, 2001,

p. 201). To further illustrate the cognitive behavioral connection, CBM and CBT are based in re-structuring cognitive thoughts.

Research has shown that CBT is effective in treating students with PTSD. Because CBT and CBM are related, it is logical to assume that CBM would be a more effective form of classroom management for students with PTSD. To support this argument, CBM literature indicates that it is effective in helping children who manifest self-control problems (Meichenbaum & Asarnow, 1979). Students with PTSD, because of their disorder, most certainly have self-control problems.

### **Conclusions**

Roughly 15 million children are at risk for PTSD (Perry, 1994); therefore, pediatric PTSD will continue to be increasingly common in today's classroom. As more and more stressors appear in our society, the risk for and incidence of PTSD will only continue to grow.

Teachers committed to teaching all students must take PTSD seriously and begin to realize PTSD's effects on students. Frequently, PTSD symptoms hinder learning. Because PTSD alters brain chemistry, specifically through elevated cortisol levels, PTSD students commonly struggle with memory, attention, and emotional regulation. Each of these is a crucial element for successful learning to take place.

Ideally, counselors, or trained mental health professionals, will treat children who have PTSD; however, such professionals are not always available or accessible for students. As a result, teachers must pick up the slack—at least enough to maximize what children with PTSD are able to learn.

Cognitive-behavioral therapy (CBT) has been found to be the most effective clinical treatment of PTSD. CBT combines therapeutic exposure therapy, cognitive-restructuring, and the teaching of coping skills. All three components work together to make CBT effective. However, each piece can individually be beneficial for students with PTSD. Therefore, to holistically help all students learn, teachers can implement certain classroom practices. These practices may be simple and correspond to a particular aspect of CBT. Or, to provide a much more comprehensive CBT-based method of helping students with PTSD, teachers might use cognitive-behavioral management (CBM) as their dominant style of classroom management. Both adding components and adopting CBM are

methods that teachers can use to most effectively meet the needs of their students.

### **Recommendations for Practice**

In order for teachers to help students now, that they have students with PTSD in their classrooms regularly, there are two overall approaches. For the first approach, teachers can begin by adding simple regular practices or strategies to their teaching. Some of these practices most teachers engage in already, without realizing their benefits to students with PTSD. The other approach is to use cognitive-behavioral management (CBM) as their form of classroom management.

### **Strategies for Teachers**

To help students with PTSD or to help students showing symptoms of PTSD, teachers can start by doing simple things in their classroom. Wolmer et al. (2003) explains that the things teachers do may vary in focus, scope, and depth. However, all strategies are for the purpose of minimizing stigma, teaching normal reactions to stress, and reinforcing the student's future as an academic.

Restoring hope and optimism is necessary for a child to adjust successfully to a stressful event. Therefore, teachers can start helping students with PTSD by giving them a positive outlook. Because children have less life experience than adults do, an adult's positive expectations may encourage continued coping (Klingman, 1993). Another way to foster optimism is to champion futuristic thinking and a futuristic orientation. Teachers can plan interesting activities for the student to look forward to, starting slowly, with the teacher carefully building a bridge to the student's future (Boucher, 1999). For example, if a student loves dinosaurs, a teacher might read the class a story about dinosaurs later in the day. This gets the student focused on future events—the reading of the dinosaur story later in the day—and less concerned about aspects of his or her traumatic experience.

Beyond fostering a positive outlook, teachers can re-build a student's sense of security through providing a safe environment for learning. Building a safe classroom context is something that will ultimately assist the child and entire class (Johnson, 1998). A safe classroom environment is one in which students are free to express themselves emotionally, without fear of peer or teacher ridicule or disrespect. In such an environment, classmates share openly and honestly and feel comfortable doing so. It takes

Table 2: Additive Teacher Strategies

Suggestion	What it looks like	Benefit to students with PTSD	Benefit for the entire class
Promoting a positive outlook and futuristic thinking	Teacher has positive expectations of all students. Teacher plans lessons that most students will look forward to.	Increases futuristic thinking, lessens student's sense of foreshortened future.	Students are generally more positive, all students have bolstered future orientation.
Regularly using stress control/self-calming techniques	Students are encouraged to relax, take deep breaths. Teacher may lead yoga, a relaxation session, or positive visualization.	Student has an opportunity to de-stress and calm down without being singled out.	The stress level of the entire class is reduced.
Use of non-threatening language	Teacher does not threaten to take away recess, or threaten a student with detention. Teacher is careful not to embarrass or humiliate students by singling student(s) out.	Already hypervigilant, students' brains are not put into extra alarm.	Students feel safe with teacher, trust teacher not to threaten them.
Build a safe classroom environment	Students feel safe, non-judged, and free to express themselves (in appropriate ways) at all times.	Student feels safe enough that hyperarousal is minimized, and PTSD reactions are acceptable and not judged.	Students in the class can "be themselves" without being judged. All students are more comfortable.
Regularly use role-playing or sociodramatic exercises	Students frequently role-play and experience emotional freedom of expression while doing so.	Students have an emotional outlet, are free to make mistakes. Students can try hero role instead of victim role.	Students have chance to experience "acting" and a different form of expression.

time with honest and consistent classroom communication to develop the trust and intimacy involved in such a safe environment. Once a safe context is established, the teacher can encourage positive role playing. This can be done through sociodramatic enactment and role playing. These two activities, "promote the expression of feelings, allow symptom relief, and enhance personal coping" (Klingman, 1993, p. 203), and give the student a chance to experience all these positive benefits in a peer supported safe environment (Klingman, 1993). Success with role playing may be due to the fact role playing

has an element of emotional connection for participants (Wolfe, 2001). Beyond being an outlet for shared experience, expression, and emotional connection, through role playing students can also benefit from teacher coaching in a safe context. That is, a teacher might coach a child into changing the themes of his or her play. In this way, the child might be encouraged to pretend to be the hero rather than a helpless victim (Keppel-Benson & Ollendick, 1993).

If role playing is not conducive to what a teacher feels comfortable with, then teaching relaxation and stress control techniques in class

might be another avenue to consider. One form of relaxation technique is self-calming activities. These are easily adapted to the classroom as forms of yoga, visualization, and deep breathing. The benefits of such techniques are a reduction in tension and giving students a sense of control over something in their lives (Klingman, 1993). Adding stress control techniques may be very beneficial to students with PTSD and reduce the stress level of the entire class.

Next, to aid in cognitive restructuring, teachers can also help students learn to replace negative inaccurate thoughts with accurate ones. For example, when a child says, "I am stupid. I never get anything right," this is inaccurate. A teacher can correct this thought by responding, "Everyone makes mistakes. How can you learn from this?" This practice helps students to begin thinking positive, accurate, and helpful thoughts versus negative inaccurate ones.

When they work to elicit students' feelings, teachers must also be careful with how they interact with students, making sure to be as unthreatening as possible. Humiliation, detention, loss of recess, or embarrassment in front of peers all can put the brain on alert. Threats that activate defense mechanisms are not helpful to learning (Jensen, 1998). When teachers threaten students, students with PTSD may have an even greater response because they are already functioning at a heightened sense of alarm. In fact, in the classroom, a student can see even a mild event as a threatening stressor. Such a perception initiates the stress response, and the student's emotional reaction becomes dominant over cognition. The student's rational thinking cortex is less efficient because the child is on alert (Wolfe, 2001). As a result, the teacher should monitor behavior and change the situation when it makes a student feel uncomfortable (Boucher, 1999), or if the child begins to behave irrationally.

Table 2 lists and summarizes teacher strategies. When teachers implement cognitive behavioral management techniques they can help students with PTSD in a more comprehensive and effective manner.

### **Cognitive Behavioral Management**

Cognitive-behavioral management (CBM) is the more comprehensive way teachers can best help students with PTSD. CBM is highly similar to cognitive-behavioral therapy. According to Beck (1976), CBT has the patient: (a) learn what he or she is thinking, generally through exposure therapy; (b) know why his or her thoughts are

inaccurate, generally through cognitive restructuring; and (c) begin to change thoughts and behaviors with therapist feedback, generally through coping skills. CBM mirrors this. CBM as a classroom management style is based on three basic assumptions: (a) behavior is controlled by cognition; (b) changing cognition means changing behavior; and (c) all students are active participants in their learning.

To put CBM into practice, problem behaviors must first be identified. Behavior identification is typically teacher directed. However, allowing the student to participate in the creation of strategy has clear advantages. Chances of success increase when the child participates and the child learns increased responsibility, self-awareness, and independence (Wielkiewicz, 1986). Once student and teacher have identified the behavior they wish to change, together they can consider the thought process behind the behavior. A strategy for *thinking about the thinking* behind the behavior can be something as simple as drawing thought bubbles above cartoon heads. It is possible to have the child fill in thought bubbles as they see a cartoon character in a situation similar to their own, so that the student may begin to conceptualize the idea that all humans have inner thoughts and that these inner thoughts can be controlled (Braswell & Kendal, 2001).

Once the behavior and corresponding thoughts have been identified, strategies for cognition control are the next step. The two most common strategies to control thoughts underlying behavior are self-monitoring and self-instruction. Both ultimately are premised in cognitive restructuring.

Basically, self-instruction means that a student is taught a series of statements that he or she can say to him or herself when certain situations arise. For example, in a situation that may cause the student to be angry, the student is taught a self-instructional strategy to keep calm (Zirpoli & Melloy, 2001). Self-instruction has proven beneficial for treating all sorts of disorders—from hyperactivity to basic academic deficiencies (Meyers et al., 1989). In fact, self-instructional training might enable students to perform academic tasks they were not able to perform before. A student's internal dialog can be useful for "facilitating reading comprehension, accelerating problem-solving ability, and fostering self control" (Meichenbaum & Asarnow, 1979, p. 18).

If self-instruction does not seem to pertain to a particular student, perhaps self-monitoring

Table 3: Examples of CBM; Non-PTSD Behaviors that Inhibit Learning

Non-PTSD Behaviors that Inhibit Learning	Self-Instructional Strategies	Self-Monitoring Strategies
Student frequently blurts out answers in class without raising his/her hand	When thinking about blurting (or after each blurt) student audibly reminds self that blurting is not appropriate when the teacher is teaching.	Student keeps track of how many times they blurt out on a post-it note at his/her desk (teacher can remind him/her to mark it down).
Student frequently wanders away from seat without permission	When student thinks about walking away from area (or when in the process of wandering), student audibly reminds self that wandering is not acceptable unless permission has been granted.	Student keeps track of how many times they wander away from seat (teacher can remind him/her to mark it down).
Student frequently rushes to complete in-class assignments without doing quality work	Student is taught to finish an assignment, count to ten, check his/her work—or a similar mental checklist to be audibly rehearsed at the completion of each in-class assignment.	Student collects a pile (in designated place) of assignments that were rushed through and therefore the teacher judged them to be of poor quality.
Student struggles with a particular subject/content area and is now discouraged	Student is taught to repeat positive affirmations audibly to self while independently working on that particular subject/content area. Statements reaffirm student is a capable learner, even if subject is difficult.	Student keeps track of each time he/she feels discouraged about subject. Student also keeps track of each time he/she finds something positive, funny, or enjoyable about subject.

might be more useful. To self-monitor, students must be aware of the behavior they are supposed to pay attention to (monitoring). Then the students keep track of each time they perform that behavior. This continues, with the students being rewarded when the pattern of performance is consistent with the teacher's expectations. The act of collecting self-monitoring data alone may actually decrease the behavior (Zirpoli & Melloy, 2001).

No matter which technique is used, whether self-instruction or self-monitoring, teacher feedback is crucial for CBM to be effective. Eventually the behavior must be reevaluated, and further cognitive strategies may be employed if necessary (Zirpoli & Melloy, 2001).

Table 3 shows how CBM modifies problem behaviors. It highlights how self-instructional and self-monitoring strategies can both be used.

All strategies mentioned in Table 3 should be discussed with students. Rewards may be given

to students as they make progress towards changing cognition and behavior. Progress should be closely monitored by the teacher. The goal of self-monitoring and self-instruction is to facilitate a cognitive restructuring so that the child is less likely to exhibit problem behaviors. With PTSD, cognitive restructuring is best when the child thinks less and less about the traumatic event and is able to shift attention back to calmer, more natural events.

Because the strategies do not have to apply strictly to PTSD, a teacher might ask the entire class to repeat certain statements using self-instruction or to self-monitor to check certain behaviors. This may mean having certain kids monitor how many times they find themselves out of their seats, talking without raising their hands, or talking through the thoughts involved in long division problems. Overall, CBM is comprehensive and useful for the entire class as a method for modifying behavior, facilitating



academic performance, and inciting students' sense of self-control (Zirpoli & Melloy, 2001). After all, if the entire class participates, the child with PTSD is not singled out as being different or strange. This makes it so the teacher meets the needs of all students, not just those with PTSD.

Accommodating and helping students with PTSD is a teacher's responsibility. Most practices and strategies that benefit students with PTSD many teachers already use. However, making sure that these practices and strategies are paramount, while possibly using CBM methodology, will ensure that students with PTSD are learning and gaining academic confidence vital to their survival.

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### **Ethnocentric Schools: The Power of Culture and Academics Intertwined**

*Ethnocentric charter schools emerged to create schools environments that can bring in culturally specific curriculum and teaching styles to reach students of color. These schools recognize that the needs of students of color are often not being met in mainstream classrooms. Opposition to these movements caution that ethnocentric schools walk a line potentially right back to segregation and that these separate environments actually isolate students more. This paper examines qualitative research that has explored both effective and ineffective means in which these schools have taken shape. It shows that the most important part of a successful school is who works to create these environments and what effective practices are used to reach students academically and emotionally.*

Buchanan and Fox (2003) define ethnocentric charter schools as schools “whose mission is the promotion and study of one ethnic group as a means of providing students with their cultural heritage” (ethnocentric section, para. 4). Ethnocentric charter schools have emerged as community solutions to better reach students of color whose social, emotional and educational needs are not being met through mainstream education. The lack of representation in the curriculum and/or the culture of the schools can create feelings of isolation and marginalization for students of color (Asante, 1992; Bielenberg, 2000; Leake & Leake, 1992; Lomotey, 1992; Noguera, 1996). Many school environments and teachers remain deficient in showing sensitivity to cultures or values that do not fit into White Anglo-American beliefs (Leake & Leake, 1992; Spring, 2005). Students of color, therefore, are more at risk of dropping out of school or participating in other activities that can limit their opportunities for the future (Garibaldi, 1992; Podsiadlo & Philliber, 2003; Shannon & Bylsma, 2002).

The ethnocentric school movement started in the 1960s by black communities as a means to challenge the prejudicial teachings of the mainstream public schools. Parents were angry at the isolation their students felt due to the social environment’s overtly sent messages of inferiority to African American students that favored white middle class norms of interaction and communication. The curriculum was another area of contention since neither textbooks nor lessons acknowledged the existence or contributions of African Americans (Madhubuti & Madhubuti, 1994). By creating what was known as Independent Black schools parents took control of their children’s education and

ensured that they were learning from an Afrocentric curriculum (Yancey, 2004). A centric curriculum is one that attempts to center and empower the students by using materials and contents that reflects their histories, values, and cultures (Asante, 1992; Garibaldi, 1992). In the past few decades, Afrocentric, Indian centric, Native Hawi’ian-centric, and Latino centric curriculums have been implemented in various schools around the country.

While many educators agree that children of color are not being properly educated in schools, the solutions to these problems differ greatly. Proponents of ethnocentric schools say that these schools reestablish the connection between a child’s self esteem and their academic opportunities by building upon culture and academics in culturally sensitive manners of teaching. There are many communities of color that have created ethnocentric schools to address the problems their students have in mainstream education in order to rectify a history of inadequate schooling for their children. Supporters of ethnocentric schools believe that by focusing on the social environment of the school, the content and the language instruction, they are reaching the needs of the whole student (Belgarde, 2004; Buchanan & Fox, 2003; Lomotey, 1992; Watson & Smitherman, 1996). These advocates believe that ethnocentric schools will increase the self-esteem for children of color and engage these students in learning.

Opponents of ethnocentric schools object that public funding is going towards schools that are promoting a resegregation of students of color (Watson & Smitherman, 1996). They worry that (a) students of color are going to continue feeling marginalized because they are separated on the basis of race and (b) the real issues of racism and

prejudice are not getting addressed by simply removing students of color from mainstream schools (Noguera, 1996). Adversaries also contend that ethnocentric schools focus too much on culture and not enough on academic rigor.

These positions have been explored through qualitative research. Research includes case studies from various regions in the United States (Belgarde, 2004; Bielenburg, 2000; Buchanan & Fox, 2003; Noguera, 1996; Watson & Smitherman, 1996; Yancey, 2004). The scope of the research in this paper is limited to publicly funded charter schools and only discusses ethnocentric schools that have been developed upon race and ethnicity and in some cases gender. This literature review focuses on Afro-centric, Hawi'ian, and Native American ethnocentric charters schools.

### **Historical Overview**

The history of the public schooling system in the United States was built upon common ideals and principals of what every child should learn. Anglo- American values and beliefs dictated which ideals and principals were taught. The focus of education became an avenue to assimilate various ethnic and/or racial groups who did not fit the Anglo American norm (Buchanan & Fox, 2004). Spring (2005) states that "education in colonial New England was used to maintain the authority of the government and religion. People were taught to read and write so they could obey the laws of God and the state" (p. 14). In this way education is viewed as a means to communicate to a wide multiplicity of people. Schools are locations where students are indoctrinated with ideas of what it means to be American. Through these ideas, many students have been taught to assimilate by giving up their native language in order to speak English and become "American." English, after all, has been the historical the language of power and dominance in the U.S.

### **Students of Color**

Not all students were expected to receive a quality education. Education was prohibited for African Americans for many years, so some slaves responded to these laws by teaching each other to read in secret (Takaki, 1993). The education of Native Americans, Asians Americans, and Mexican Americans was a practice in deculturalization; these groups were prohibited to speak their native languages and banned from participating in any cultural rituals. Subsequently they were expected to replace their

destroyed culture with the white Anglo - American culture (Spring, 2005).

The process of assimilation varied in degree depending on the group that the Anglo - Americans were trying to mold. Native American children were sent off to boarding schools so they could become "cultured." The boarding schools were deemed necessary because the Anglo Americans thought that Native children needed to cut off all ties to their community, culture and traditions in order to become assimilated. The means by which they took Native children away from their families and the means by which they were 'educated' were done in harsh and brutal ways (Takaki, 1993). One of the goals of the boarding schools was to teach Native children the English language and job skills so that they could supply menial labor and better integrate into American civilization (Spring, 2005).

Education for Mexicans American education consisted of learning a basic amount of reading skills so that as adults they would be able to read in order to comply with laws and other rules. The classroom became a place where Mexican American children would become "Americanized," which was intended to teach them English and require them to give up aspects of their culture (Spring, 2005). The desire to educate Mexican children was not met with favor among the companies that relied on Mexican labor. They did not want a new generation of Mexicans acquiring knowledge that would have them look critically at the social and economic injustices in their working conditions (Takaki, 1993). Mexicans were not viewed as full citizens under the law, and their worth in the Anglo's view was tied up in their cheap labor. Thus, education for Mexican Americans was not seen as important because education was not needed to work in the fields.

African Americans were prohibited from receiving an education for many years. Slaves risked severe punishment or death by working secretly to teach one another how to read. After the Civil War, literacy rates spiked as Blacks attempted to undo the grave injustices that had banned them from education (Spring, 2005). Black schools were established inside communities to give Black children the same opportunities afforded to whites to educate and better themselves, as education was viewed as the most viable path to upward social mobility (Noguera, 1996). The resources for these schools had to come from the community itself, because in many cases local and city governments

refused to assist in establishing schools for Blacks children due to the prevalent racism of whites and their ideology of Black inferiority. As with Mexican American students, landowners were opposed to Black children receiving an education, because it would have directly challenged their use of Black children as laborers (Spring, 2005).

The history of educating children of color includes some consistent patterns and themes. One was that children of color were viewed as dumb and inferior to white children. Secondly, education implemented a process for social control where students of color were only taught rudimentary skills to train them for menial jobs. Third, the inadequate education that was given to children of color was a means of assimilation and “deculturalization” (Spring, 2005).

### **The Current Reflection of History**

For African-American, Native American, Hawai’ian, and Latino students, problems of the past such as racism, invisibility, marginalization and derisory curriculums are still prevalent in the education of today. Students of color are still viewed by many educators as “being culturally and cognitively deficient” (Bielenberg, 2000, p. 133). They are still marginalized by being overrepresented in special education programs and white teachers continue to have low expectations of their skills and abilities (Garobaldi, 1996; Yancey, 2004). The lofty drop out rates for African, Latino, and Native American males are considerably higher compared to National White averages. In “1999, 31% of Latino boys between the ages of 16 and 24 were high school dropouts” (Podsiadlo & Philliber, 2003, p. 419) and statistics continue to rise. “The dropout statistics for Washington State for the year 2001 are: 16.7%, for American Indian, 14.0% for Black students, and 14.3% for Hispanic students” (Shannon & Bylsma, 2002, p. 13).

Since the 1990s, a national dialogue has emerged that has begun to address the failures of the public school system for students of color. Reactions to these issues include the view that these students just need to work harder and that they are lazy. These types of responses are based on the “ideology of meritocracy” (Gutierrez, Baquendano-Lopez, & Alvarez, 2000, p. 218). This ideal states that if the student and family only put forth more of an effort, then the student will do well in school and acquire a good job upon graduation. This ideology ignores the prevalent factors of discrimination and racism

throughout both history and inside the school system of today that can significantly affects a student’s self-esteem and confidence (Bielenberg, 2000; Watson & Smitherman, 1996).

Educators and parents are starting to look at the educational system as a whole and examine the ways education, fails to address the needs of students of color. In the 1990s, educators and advocates started becoming part of a growing movement of people who examined what messages were being internalized by students at school. The findings revealed that children of color were being isolated in the classroom by curriculum and school culture (Bielenberg, 2000; Leake & Leake, 1992; Lomotey, 1992; Noguera, 1996). Asante (1992) states:

Most teachers do not have to think about using the white child’s culture to empower the white child. The white child’s language is the language of the classroom. Information that is being conveyed is ‘white’ cultural information in most cases; indeed, the curriculum in most schools is a ‘white self-esteem curriculum.’ (p. 29)

This lack of cultural sensitivity or voice leads many students of color to feel ostracized and disengaged. “In a typical urban school, minority students are expected to learn in an environment that negates their home language, denies their historical existence, and demeans their culture” (Leake & Leake, 1992, p. 25).

Whereas major legal battles such as *Brown vs. Board of Education* and other legal cases have established by law the end to unequal schooling, these court cases have not completely fixed the problems or the current trends of inadequate education for students of color. Madhubuti (1994) contends:

the fight was never a battle to sit next to white children in a classroom. It was and still is a struggle for an equal and level playing field in all areas of human endeavor: finance, law, politics, military, commerce, sports, entertainment, science, technology, and education. (p. 4)

That equal and level playing field has yet to be established in education. Numerous injustices against student of color show up in the curriculum and other structures of the school environment. “Much of what occurs in our urban schools is predicated on a Eurocentric paradigm,

and little, if any, variance exists in curriculum and pedagogy relative to the race or socioeconomic status of the student body” (Leake & Leake, 1992, p. 25). Solutions are emerging to counter the Eurocentric paradigm and alter the direction of unequal schooling practices. One important solution for educators to implement is to transform the current Eurocentric curriculum; another is to create new schooling environments that are culturally appropriate and nurturing to students of color.

### **Why Ethnocentric Schools?**

Ethnocentric schools are schools whose “mission is the promotion and study of one ethnic group as a means of providing students with a link to their cultural heritage” (Buchanan & Fox, 2003, pp. 3-4). These schools go deeper than “integrating the history and culture of dominated groups into the curriculum” (Spring, 2005, p. 426). They teach every subject from a particular cultural and ethnic perspective (Asante, 1992), and they generally attempt to “emphasize change through social environment, values, content, pedagogy and language” (Buchanan & Fox, 2003, p. 3). Ethnocentric schools have manifested themselves through private and public schools via the charter school movement.

Charter schools have provided communities with the means to implement ethnocentric schooling for their children and allowed many students to receive the type of education normally reserved for those who could afford to pay the expense of private schooling. Despite being implemented just over a decade ago, charter schools “are the most rapidly growing force within the school choice movement” (Buchanan & Fox, 2003, p. 2). Charter schools are viewed by some as a means to decentralize state government and give the community control of schools (Fuller, 2000). Others see charter schools as an “emancipatory promise” (Rofes & Stulberg, 2004) of what education can be for students of color.

Ethnocentric schools stem from the Black Power movement of the 1960s. African Americans were angry and frustrated about the lack of valuable education happening inside the classroom. As one parent put it, “too much schooling and not enough learning has occurred” (Watson & Smitherman, 1996, p. 24). African Americans were absent from the history textbooks; in fact they were invisible in most parts of the curriculum. More detrimental, though, were the ways in which African

American children were being treated and the messages of inferiority that were being sent to them. It was African American parents that mobilized the movement to establish their own schools for Black students (Yancey, 2004). The Council of Independent Black Institutions (CIBI) created a network of alternative schools for African Americans, which were called independent Black institutions (IBIs) (Yancey, 2004). In these schools children would not only get the foundations of education, but they would also receive an outlook of history and culture from Afro-centered perspectives. “Ethnocentric schools were based on the assumption that culturally relevant education would improve self-esteem and then improve academic performance” (Buchanan & Fox, 2003, p. 3). An important aspect of the IBIs was that they were both a family and community solution to address the deficits in the education of African American children in the traditional school system. Madhubuti and Madhubuti (1994) state, “[A]ll too often, the answer to what must be done to correct the injustice is left in the hands of those most responsible for creating the problem” (p. 1). Because of this, IBI and various ethnocentric schools are built from families and the community to “take back” their children’s education.

Groups such as Native Americans, Latinos, and Native Hawai’ian’s have also designed their own schools to serve the whole student. These schools focused on reaching students from culturally relevant and academic stimulating perspectives. They did this by focusing on the social environment of the school, using a centric curriculum and focusing of learning, or retaining of native languages (Belgarde, 2004; Buchanan & Fox, 2004; Madhubuti & Madhubuti, 1994; Watson & Smitherman, 1996; Yancey, 2004).

*Social Environment* The social environment consists of the rituals and routines as well as the overall structure of the school. Yancey (2004), using qualitative methods, conducted field research for a year at 3 different ethnocentric charter schools. One of the schools was Umoja in Michigan. Umoja was initially a private school funded with some money from an Episcopal ministry. It first served preschoolers through 8th graders, later adding on a high school in 1992. Two years after adding on the high school, Umoja was invited by the school board to become a charter school (p. 131). Umoja is an Afrocentric educational program that emphasizes using a philosophy in

developing the whole child (Yancey, 2004). A key concept from the Umoja mission statement is the desire to “produce a new activist leadership for the redevelopment of the African American community” (as cited in Yancey, 2004, p. 132).

Buchanan and Fox (2003, 2004) used qualitative research methods to examine three ethnocentric charter schools in Hawai’i. The first two schools Makai and Koa Charter both create a social environment where students become part of a community of teachers and learners. The Makai school focuses on cultural knowledge and is a Hawi’ian language immersion school. It teaches K-6 students and operates on a year round program (Buchanan & Fox, 2004).

The Koa charter, located on the big island of Hawai’i, is a bilingual K-12 school. Its focus is on developing culture, language and traditions. The philosophy of the schools founders is based on the belief that Hawai’ians can achieve success without giving up any of the important components. The third Hawai’ian charter school was Hilo. Hilo offers a 7-12 program taught in English. Both the Koa and Hilo charter schools have school-wide projects on Fridays that connect the students to service projects in the local community (Buchanan & Fox, 2004).

All of these charters schools began their days with some form of rituals. The Umoja high school students began their day doing Tai Chi, and afterwards a drum sounds to gather the community of students, faculty and staff together. The students and faculty pledge to the school’s oath, and then they all sang the African American anthem (Yancey, 2004). Both the Makai and Koa charter schools began their days with an opening ritual as well, yet these rituals are performed in the Native Hawi’ian language (Buchanan & Fox, 2004). The students performed a song and dance, and afterwards students were invited to enter the school and began their learning day. As the students entered the school building, the teachers reminded the students of their responsibilities to learn and behave. All of these schools created a welcoming social environment because they put heavy emphasis on parental involvement. Parents may volunteer and participate in many different ways, but parents all had certain hours dedicated to assisting the school. These environments also had a real sense of pride and dedication with the high levels of staff, parents and community involvement (Buchanan & Fox, 2004; Watson & Smitherman, 1996; Wexler & Huerta, 2000; Yancey, 2004). Additionally, the social

environment of the school was overtly stated and strictly established. The students knew the purpose of why they were there and what would be expected of them upon entering the school building.

*Content* The curriculum at many ethnocentric schools is centered around the particular group of students who are being taught. For example, at an African American school, the curriculum is Afrocentric. Asante (1992) states that “the role of the teacher is to make the student’s world and the classroom congruent” (p. 30). Including a student’s history and cultural perspectives helps these worlds to merge. The curriculum, while being Afrocentric, still explores the history and voices of other ethnic groups, and in that way is still multicultural (Asante, 1992). While there are many schoolroom teachers that use multicultural education throughout their lesson plans, a way in which ethnocentric education is unique is that it announces which lenses and perspectives are used to explore various subjects (Lomotey, 1992). Students receive instruction of basic skills such as reading and mathematics by exploring issues of culture and identity. At Malcolm X academy students studied mathematics by exploring how Egyptians calculated directions (Watson & Smitherman, 1996).

Lomotey (1992) points out that “curriculum, in the narrow sense, is not all that matters. However, the curriculum is a critical element, and, in the absence of African-centered curriculum materials, larger numbers of African American children will continue to be disenfranchised” (p. 456). The curriculum approach of a school and the content in which it is taught is crucial to fulfilling the mission of that school. Yet, Bielenberg (2000) states how that information is taught is also an extremely crucial element. This includes how the information is organized, presented and structured in comparison with the intent of the lessons.

Ethnocentric schools, while transformative in ideals, do not necessarily guarantee a powerful education. Neither changing the curriculum nor merely bringing children together from the same, ethnic, racial, cultural and/or gender background can fix all problems. Noguera (1996) reminds educators that the whole structure of the school, the training of the staff, and the pedagogical approaches and applications are an essential key to creating a powerful, simulating and nurturing environment for learning.



Watson and Smitherman (1996) write about their part in establishing the Malcolm X Academy in Detroit, which is an academy primarily for African American males. Watson is the founder and principal and Smitherman helped in the final development of the Malcolm X Academy. The academy's focus and goals were to educate the needs of the whole child. The school was established on an 11-month school year with an extended day, and offered African American literature, history and culture. They also had a community and university mentoring program where these young boys spend time with African American college students to mentor and support them academically and socially. Parents volunteered and took an active role inside the learning community. The Malcolm X Academy is a prime example of a school that views learning as more than merely subjects and tests. They created a community where the curriculum is Afro-centric and can stimulate the children (Watson & Smitherman, 1996).

Denton College Preparatory, an Afrocentric charter school in Arizona was another school that Yancey (2004) observed in her case studies. Yancey (2004) described the school's founder and his all encompassing relationship to the school. He operated as the principal, the accountant, and hired everyone himself without a search committee. He also appointed all the board members, including his wife. Yancey (2004) addressed the dissatisfaction from the teachers and the high turnover in the staff. The founder wanted teachers and staff to accentuate his vision. He had based the school's curriculum on a study-kit he had developed. He owned the for-profit company that created these kits and then had the company donate the kits to all the students in the school (Yancey, 2004). Staff training consisted of two weeks in the summer time where they were instructed on how to teach from the study-kit. The pedagogy was not clearly established and the ultimate goal of reaching the students and stimulating their thinking became lost in the conflict and arguments of the school (Yancey, 2004).

Bielenberg (2000) described an American Indian charter school in an urban setting where he gathered qualitative research by observing one teacher over the course of a school year. This instructor taught a curriculum that Bielenberg (2000) described as "Pan-Indian." With 30 different tribes at this teacher's school she could not delve into just one tribes customs or cultures, so she had to be broad in her scope.

The curriculum was divided into separate subjects, and Bielenberg (2000) observed that while the instructor had the best of intentions to reach her students, her teaching style was so traditional that it continued to isolate the students. "In a very telling way, the structure of the institution of Western, Anglo developed education holds great sway over how she teaches" (p. 145). Bielenberg (2000) states that it is essential that teacher education programs address the needs of a diverse group of students. He also states that it is critical that teacher education programs explore various classroom environments and programs. Bielenberg (2000) points out that having a multicultural or Indian-centric curriculum is very important, but he argues that how one teaches the material is just as vital to the learning process.

*Language* One of the major outcomes of the deculturalization process of early education was a loss of non English languages. Therefore, one of the prevalent goals of the ethnocentric school movement is to bring native languages into the schools. All three charter schools in Hawai'i spoke Native Hawai'ian in their schools. In fact, one of the specific purposes in the establishment of charter schools in Hawai'i was to re-establish the use of the Native Hawai'ian language in education. One of the schools operated as a Hawai'ian immersion model, another bilingual, and the third was mainly monolingual but the students heard Native Hawai'i from teachers and elders who actively participated in the school. In various Native American charter schools one of the major programs was language immersion or Native language instruction. For both the Native Hawai'ian and the Native American populations the instruction of one's native language through education was critical to the language's preservation (Belgarde, 2004; Bielenberg, 2000; Buchanan & Fox, 2004). The Malcolm X Academy also saw the value and importance of teaching their students other languages. Malcolm X Academy taught Spanish, French, and Kiswahili. All three of these languages can allow these students to communicate with various African populations around the world.

### **Opposition to Ethnocentric Schools**

There are various positions against the ethnocentric school movement. Many authors who are advocating for ethnocentric schools cannot deny the slippery line that is sometimes crossed by separating students in terms of race and/or gender. Noguera (1996) argues that

regardless of how benevolent or well-intentioned such efforts may seem, history would suggest that great risks are involved in advocating and promoting separate treatment for African Americans, be they male or female. Formerly, slavery and Jim Crow segregation were rationalized and sustained in the United States by the notion that Blacks should be separated and accorded different treatment from the rest of the population because of their purported racial inferiority. (p. 222)

The question of whether ethnocentric schools are just a form of resegregation from another direction is a critical one. In the case of the Malcolm X academy, both the National Organization of Women (NOW) and the American Civil Liberties Union (ACLU) filed a lawsuit against the Detroit Public School (DPS) system for trying to open up three all-male schools. The courts ruled on the side of NOW and the ACLU; therefore, the DPS Board had to allow the academy to be operated as a co-ed school. Addressing the issue of racial stratification was not a problem since Detroit had experienced a huge migration of white people leaving the city and moving into the suburbs during the school integrations years in the late 1950s through 1970s. In 1992 DPS system was only 2% white. The fact that Detroit Public Schools were already segregated assisted in the implementation of these ethnocentric schools (Watson & Smitherman, 1996). A charter school in the Milwaukee school district was attempting to propose a similar school as the one in Detroit. They were able to establish their schools without fear of lawsuits because they proposed that

the sites for the two immersion schools would be selected from 19 existing predominantly (90% or greater concentration) African American schools in the Milwaukee district which were exempted from an earlier desegregation agreement. Thus, the task force's plan does not further segregate its student or necessitate the deliberate or artificial creation of new, racially identifiable schools. (Leake & Leake 1992, p. 28)

Noguera (1996) volunteered at East Side High School, an alternative school in California, while gathering qualitative data. East Side High School was a school that was able to use the system of segregation already established to

create positive change within the school. East Side was a public school that was a dumping ground for students who were not making progress in other schools. The racial make up of the school was "90% Black, 8% Latino and 2% Asian American, inside a district that was comprised of 42% White, 38% Black, 10% Latino and 10% Asian American students" (p. 226). East Side hired a new principal who was able to motivate and restructure the environment to be innovative with a focus on transformative education (Noguera, 1996, p. 234). Adding classes such as African American studies and other improvements inside the education environment helped establish a more "conscious and deliberate effort to affirm the culture and social experiences of the largely Black student population" (p. 228).

Noguera (1996) does not support separating students based on their race. He believes that isolating students because of the color of their skin leads to the isolation and marginalization that students of color already feel inside the classroom. Noguera (1996) also contends that

more recent times have seen a growing awareness that special education programs and schools specially designed for troubled youth often target Black males because of persistent prejudice, assumptions of Black males' innate inferiority, and society's deeply ingrained fear of the hostility toward them. (p. 222)

Noguera (1996) observed in his research a school in West Oakland that was an example of an environment that created a feeling of isolation and inferiority. This school developed a separate classroom for African American males who were having difficulty in the mainstream classrooms. They placed 25 students with a Black teacher, and the principal and school district hailed this program as an innovative experience for African American students. Noguera (1996) stated that this example was just a way in which teachers aided by their prejudice and stereotypes had placed all of "their troublemakers" into a classroom together. The students felt the frustration of being linked together and outcasts from the rest of the school. Noguera (1996) stated that this program did more harm to the students and the school in general because their isolated status "reinforce negative images and stereotypes" (p. 224).

Noguera (1996) contends that "if one rejects the notion that race is the cause of student

Table 1: California Achievement Test for Reading and Math: Percent of Students At or Above National Norm by Grade

Grade level	Math		Reading	
	Malcolm X	Comparison Group	Malcolm X	Comparison Group
3rd	84	46	59	46
4th	78	52	81	38
5th	70	62	51	46

Note. Adapted from Watson, C. & Smitherman, G. (1996). *Educating African American males: Detroit's Malcolm X academy solution*. Chicago: Third World Press, p. 84.

failure, one must also be critical of any effort that over emphasizes the role of race as a prescription for amelioration” (Noguera 1996). Responding to the issues of racism, Eurocentric curriculum, and injustices with the disbursement of wealth by placing all students with the same color of skin together is not going to solve the problem. Noguera (1996) stressed the importance of remembering that when addressing issues of students of color in schools one cannot come up with a solution without working on fixing the deeply engrained problem of racism.

On the other hand, one parent in Michigan challenged the angry reaction from community members who cried out against what they viewed as resegregation. “So what? Poor and low-income Black children are already being educated in public schools that serve a predominantly low-income Black population. No one seemed to care about that until the charter school came along. So what does that tell me” (as cited in Yancey, 2004, p. 154)? This mother’s reaction shows the complexity of the issues of ethnocentric schools. It also raises the question of when and where can an ethnocentric school be established. Is it acceptable to establish an ethnocentric school in an already segregated neighborhood? Or would ethnocentric schools be more valuable in a racial mixed area?

Ethnocentric schools are a means by which communities are taking control of their children’s education. They are establishing learning communities that address children as whole learners, taking into account their academic and social needs. Bielenberg (2000) states that “the educational system that for so many decades sought to destroy Indian cultures, languages, values, and people must now help to undo the damage of the past” (p. 133). For others, it is a way that they can take the power

away from the perpetrator and bring back community control. The question of whether this form of education works raises the question of what is valued (Belgrade, 2004; Buchanan & Fox, 2003, 2004). Is value placed on students having a strong cultural identity and a high self-esteem, or that students have a higher attendance and lower dropout rates? Research answered that ethnocentric schools have a positive impact in all these criteria (Bielenberg, 2000; Buchanan & Fox, 2003; Garibaldi, 1992, Noguera, 1996). If success is based only on whether students can achieve on standardized achievement tests, then these schools again show higher achievement results (Lomotey, 1992, Watson & Smitherman, 1996). At the Malcolm X Academy students took the California Achievement Test to determine academic achievement. Table 1 illustrates the math and reading scores that were above the national norm by grade level. The Malcolm X scores were compared to other Detroit schools who have a similar demographic and fall in the same poverty index. The table shows that the Malcolm X academy outranked the other schools in every area except the 5<sup>th</sup> grade math exam in which their lead dropped considerably (Watson & Smitherman, 1996).

One of the biggest indicators of a school’s success must come from parents and students. “Parents interviewed indicated that they are proud of having a voice in the school and have wanted that for many years” (Belgarde, 2004, p. 118). Because in the world of high stakes testing where instant outcomes in the evaluation of testing may not be attained, the response and evaluation from the students and parents can be attained on a regular basis (Belgarde, 2004). Research indicates that simply placing children together based on race or ethnicity is not enough. There needs to be innovate teachers, powerful curriculum that centers on the student in the

academic world, and a community of support and dedication to the students' journey of learning. (Belgarde, 2004; Bielenberg, 2000; Noguera, 1996; Watson & Smitherman, 1996).

### **Conclusions**

Traditional schools are not meeting the needs of many students of color. The lack of representation for students of color in the curriculum of traditional schools, and the culture of a "white self esteem curriculum" inside the classroom (Asante, 1992, p. 29) can add to feelings of isolation and marginalization for students of color. The historical purpose of education in the United States functioned as an instrument of deculturalization towards students of color. The struggle still exists today as students of color attempt to negotiate the boundaries between their own cultures and roots and the expectations and norms taught in mainstream White American classrooms (Asante, 1992). Just as schooling in the past punished Native American, Native Hawai'ian, and Mexican students for speaking their native language inside the classroom, so today continues the struggle of students of color to find their own voice inside mainstream schools.

Ethnocentric charter schools are community-based solutions to solve the disconnections in educational practices for students of color. These schools attempt to reestablish connections among a child's self identity, self esteem, and their academic success by building a community of learning that is both culturally sensitive and academically engaging (Belgarde, 2004; Watson & Smitherman, 1996). Many ethnocentric schools focus on multiple language instruction and attempt to bring cultural traditions inside the classroom experience. Their goals are to build a sense of pride in their students' cultural background and develop strong academic students. While critics state that ethnocentric schools marginalize students of color, the goals of ethnocentric schools is in fact to stop this marginalization process that occurs in mainstream public schools.

The social environment of ethnocentric charter schools was a critical element in the way schools pay particular attention in connecting the student's culture with their academics. Buchanan and Fox (2003) illustrate examples of schools that used traditions and routines that are consistent with ethnic and cultural traditions to help establish connections with an student's home life and their academic environment. Another important aspect of ethnocentric schools

is the focus on curriculum and content. These schools used a centric curriculum that approaches all topics from the perspectives and outlooks of a particular ethnic group. This allowed students to gain various perspectives and voices that have been whitewashed from the traditional school textbooks and lesson plans. It also allowed these students to see representations of themselves in every subject and topic.

Instruction in a second language is another critical reason as to why various ethnocentric schools were established (Belgarde, 2004; Buchanan & Fox, 2004). One of the major outcomes of the deculturalization process of early education was a loss of native languages. Therefore, a way in which communities can build roots and bridges from past generations is to help their languages reemerge by teaching community members how to speak these languages.

While opponents fear that creating environments for students of color is a form of resegregation, many supporters point out that segregation already exist and what these communities are doing is just using this division to create culturally specific classrooms and schools. Supporters also purport that these kinds of schools are community solutions meant to fix problems within their own community and, therefore, they know what is best for their children.

This literature review demonstrates that not all ethnocentric schools operate by the same guidelines or principals. There were ethnocentric schools that may alter the curriculum to a native-centric curriculum, and yet the teaching practices and environment reflect one of a mainstream traditional classroom (Bielenburg, 2000). The most effective ethnocentric schools were ones that alter more than just the curriculum and color of the students inside the classroom.

### **Recommendations for Practice**

If we as educators truly want to create a powerful educational experience for students of color we need to change not only what we teach but also the manner in which we teach it. There were ample examples of schools altering their school environments and curriculums to better match the need of their students in both the traditional schools and the ethnocentric schools. Table 2, "Recommended Practices," highlights these changes that need to occur on three different levels: learning environments, curriculum, and teachers.

Table 2: Recommended Practices

Areas to Change	Recommended Practices
Learning Environments	<ul style="list-style-type: none"> <li>• Stress community participation and involvement.</li> <li>• Bring in the culture of the students intertwining them with academics.</li> <li>• Focusing on the children's emotional and academic needs and alter systems according to need of students.</li> </ul>
Curriculum	<ul style="list-style-type: none"> <li>• Overtly state the perspective and views of material and voices being taught.</li> <li>• Bringing histories and voices of students of color, and incorporating these voices in the curriculum.</li> <li>• Bring in cultural and traditional practices and rituals into lesson plans.</li> <li>• Become a multilingual learning environment.</li> <li>• Incorporate community projects and activities into students learning experiences.</li> </ul>
Teachers	<ul style="list-style-type: none"> <li>• Increase number of teachers and administrators of color in school environments.</li> <li>• Hire teachers who see their student's assets and work to create stimulate and challenging learning environments for their students.</li> <li>• Bring in community members and other voices and experiences into the classroom.</li> </ul>

### Learning Environments

Successful schools stressed community participation and involvement and worked to create better learning environments. Ways to create this change in the environment was not limited to learning in the classroom. Stressing that learning occurs in the everyday interactions with community members can allow students to gain a plethora of valuable knowledge from community members that just is not in the textbooks. This community interaction also instills the message that learning is a continuous process that is not limited to the school day. Another effective means in which to change the learning environments is to be overt about bringing in student culture into the classroom and intertwine these stories and experiences with academic subjects. Schools should put the time and the resources into supporting students on an emotional level. If students feel supported and nurtured, then they will be more able to engage academically because of the support and the safe and nurturing environment that they feel a part of.

### Curriculum

The curriculum of the schools is a critical aspect to explore both in the ethnocentric schools and in traditional schools. Curriculum must be multicultural and overtly state the perspectives and views in which the material is being taught. The curriculum should be filled with the minority voices and these voices should be incorporated throughout the schools curriculum. Effective teachers should also bring in cultural and traditional practices into the lesson plans. If teachers are not from the same culture and do not know how to address certain issues beyond tokenism, then they need to go in to community and gain that knowledge and those resources. These curriculum practices are ones that ethnocentric schools developed and have been proven to engage and stimulate students. Creating an environment where students see representations of themselves through staff, community members, and textbooks can foster a sense of pride in the students.

### Teachers

Teaching practices also need to be as engaging and creative as the curriculum and content of the lessons. Acknowledging that

traditional schooling methods are not serving students of color and that this failure lies much deeper than the textbooks that are used is paramount. There needs to be increased numbers of teachers and administrators of color in the school environments. Schools need to hire teacher who will examine their stereotypes and assumptions and are willing to labor on a daily basis doing anti-oppression work. These teachers can see their students' assets and work to stimulate and engage their students. Teachers also need to be able to bring in community members and add other voices and experiences to their classroom.

An ethnocentric school is a viable and productive solution for some students of color. These environments offer a type of nurturing and stimulation that is not commonly found in mainstream education. And yet, ethnocentric schools are not available to all students, and because of this public schools need to take the effective practices that ethnocentric schools have had and apply it to the current structure of schools. Public schools need to reexamine the whole structure of the school environments in order to serve the needs of students of color. Adding color to the textbooks that have been whitewashed is not enough. Teachers and administrators need to first acknowledge and then change the "white self-esteem" curriculum (Asante, 1992) that is taught in schools and create a curriculum that is a multicultural self-esteem curriculum that can benefit and reach every student in the classroom.

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## **Arts Education Advocacy in a Standardized World: Learning to Learn or Learning for the Right Answer**

*This paper explores the impact of an advanced capitalist economy on definitions of student achievement and provides an historical overview of the standardization of school curriculum. The history of art education provides a context for understanding the many challenges educators face in advocating for art programs in relation to the recent demands of No Child Left Behind legislation. Implications of Eisner's findings that art education supports students' cognitive development are considered. Various art education advocacy arguments are explored along with their limits and contradictions. This paper concludes that advocates should not minimize the cognitive significance of art education and should avoid defining the value of art education in relation to standardized achievement in other core subjects.*

In this paper I explore the context in which art educators must increasingly struggle to market the importance of their programs. I provide an historical overview of the creation of what are considered the “basic” subjects as well as an overview of current legislation that many art educators believe to be narrowing public school curriculum. My assumption is that all educators, of the sciences and the arts alike, share the responsibility of teaching in a way that facilitates academic achievement. Because art skills are not assessed by the standardized tests that measure, and in a sense define, student achievement, art educators are under pressure to demonstrate that the arts are a necessary part of an academic education. Advocates for arts education make use of a wide variety of strategies to market the value of their programs. I look at the main arguments put forth by advocates for the inclusion of the arts in the core curriculum of the nation's schools.

Most educators would agree that public schools have the responsibility to teach students how to succeed in U.S. society. The federal government, through the No Child Left Behind Act (NCLB) of 2001, demands that student success be measured by standardized tests. NCLB aims to promote high achievement from all students by monitoring the quality of the teachers and the curriculum of the schools that they attend. The skills demonstrated through tests scores will, the NCLB act implies, prepare students to succeed in U.S. society and compete in the modern global market (Chapman, 2004; Meyer, 2005). What these skills are and how they will be measured is increasingly dictated by a corporate agenda (Berliner & Biddle, 1995; Boyles, 1998). The Reagan administration of the

1980s began the now familiar push towards the privatization of education and the spread of a public notion that students in public schools are failing to meet academic standards critical to the economic security of the nation (Berliner & Biddle, 1995; Fowler, 1996; Spring, 2005). The often-low scores gathered from standardized testing are used to prove to the public that students are failing to achieve. Academic success in the current system is expressed in students' ability to demonstrate specific skills needed in order to achieve on standardized tests in mathematics, science and reading (Berliner & Biddle, 1995). Schools have the responsibility to facilitate the learning of these skills in order to ensure that their students are able to graduate with as many options as possible and that the schools themselves can continue to receive federal dollars.

In response to the notion that public schools are failing and the increase in high stakes standardized testing, the curricular content explored in U.S. classrooms is shifting to meet the demands of federal legislation. With NCLB emphasizing “accountability in only a few academic subjects,” (Meyer, 2005, p. 35) many educators are concerned that key components of education, such as critical thinking and creative discovery, are being marginalized. Eisner (2002) describes a mode of cognition accessed through engaging in the arts that cannot be taught through the rationality of the hard sciences. The cognitive function of the arts, he argues, “includes the most sophisticated forms of problem solving through the loftiest flights of the imagination” (p. 9). Many educators fear that standardized testing trains learners to answer questions with static, correct answers as opposed



to teaching students how to enjoy the process of discovery. Boyles (1998) describes ways in which student achievement is measured in terms of “outputs and products” (p. xiv) as opposed to measuring multiple ways of looking at things. Greene (1988) equates the ability to engage in the infinite process of learning with the pursuit of freedom. She emphasizes this connection in describing the importance of recognizing that no amount of learning “disciplinary or otherwise, can ever be complete. There is always more. There is always possibility. And this is where the space opens for the pursuit of freedom” (p. 128).

The fundamental goals of modern education, however, do not always leave room for the creative and limitless pursuit of knowledge that Greene (1988) describes. “The fundamental purpose of American schooling today,” Fowler (1996) observes, “is preparation for work” (p. 8). The distinct tension between training students to be efficient and successful workers as opposed to training students to think critically and limitlessly can be found in arts education advocacy itself. In a climate of scarce funding and increased corporate influence in the formation of curriculum (Boyles, 1998), arts education advocates often stress the academic benefit of the arts in terms of its relationship to the subjects labeled as “basic.” The notion that the arts boost academic achievement on standardized tests in math, science and reading has become central to the marketing of art programs (Gee, 2004; Modrick, 1998). Many art educators fear, however, that emphasizing the “hard” academic benefits of an arts enriched curriculum will further marginalize the arts by failing to define the value of arts education with its own cognitively rich contributions to student success.

### **The Value of the Arts in the Age of Technology**

There are countless definitions of what student success means and how to best facilitate achievement in modern U.S. society. Historically there has been persistent tension between two significantly different views of the purpose of education. On one end is the notion, clearly stated in the 1980s by the Reagan administration, that the security of the nation rests on the strength of our technologically skilled and scientifically competitive workforce. Within this view, school is an institution in which this workforce is trained. Students, then, are viewed only in terms of their economic benefit to U.S. society. They are treated in turn as human

capital. On the other end of the spectrum is the notion that schools are social systems in which students are encouraged to cultivate multiple ways of thinking and communicating. If maximum learning is the goal of education, it follows that multiple modes of thinking should be encouraged in school. The arts, in this view, can be considered a basic part of a balanced education. The pressure to meet federal definitions of student and school success increasingly defines the purpose of public schooling (Berliner & Biddle, 1995; Boyles, 1998; Chapman, 2004; Spring, 2005).

In order to understand the urgency for establishing value in arts education in K-12 schools, it is necessary to explore the various forces that continuously push the arts out of the core curriculum. The “hard” sciences are emphasized over the “soft” arts in school curriculum while the U.S. public is made to believe that the nation’s schools are failing and the increasing corporate influence in school reform. In the face of a growing scarcity of funding and legislative support for the arts in schools, art educators have had to define and market the value of the arts to the public as well as to the business community.

Public schools have historically served many different purposes in society. Some would say that schools are in place in order to produce a labor force that is prepared for the economic and social demands of the day while others would argue that school is an institution designed to produce democratic citizens. Modern education has been known to instill in youth habits of consumerism and competition that fuel a capitalist system, while simultaneously educators have sought to provide a moral and humanistic value base for all students (Spring, 2005). Embedded within a maze of political, economic and cultural influences on the purpose of education is the ability of students to learn, reflect and contribute their informed responses to the culture in which they live. Schools can be thought of as a social system in which the cognitive capacity of each student is cultivated and applied.

In *The Arts and the Creation of Mind*, Elliot Eisner (2002), a scholar and advocate for the arts in schools, explores the relationship between school curriculum and the modes of thinking that students are able to acquire and then apply. Eisner stresses the significance of which fields of study are emphasized in the public school setting. When educational theorists and policymakers “define a curriculum for a school

or a classroom, they are also defining the forms of thinking that are likely to be promoted in the school. They are, in effect, laying out an agenda for the development of mind” (p. 148). The fields of study that are emphasized in K-12 schools are increasingly bound to national demands of academic achievement and a corporate agenda (Berliner & Biddle, 1995; Spring, 2005). Teachers today “are expected to process the young (seen as *human resources*) to perform acceptably on some level of an increasingly systematized world” (Greene, 1988, p. 12). The subjects that are emphasized in school curriculum are deeply significant because they influence the modes of thinking that students are able to access.

### **The Basic Subjects: Who Decides?**

Students today “live in a world in which the lion’s share of inherently limited educational resources do not go to the arts, but to that narrow slice of education on which the success of schools and students alike is judged” (Blakeslee, 2004, p. 31). Competitiveness in the global market economy has fueled a trend for today’s schools to serve corporate and commercial demands (Fowler, 1996; Spring, 2005). Pressure from corporations has led to an increase in standardized testing and has “established an elite core of subjects in American schools that are labeled *the basics*, the subjects that every student must master” (Fowler, 1996, p. 8). Following World War II, there has been increasing pressure from the federal government to keep the United States ahead of the world in the technological race, first with the Soviet Union and later with Japan and West Germany. It has been in the interest of competitive corporate powers and, in turn, the federal government to create the notion that the public school system must focus its curriculum on science and mathematics.

In 1957 the Soviet Union launched its first satellite, *Sputnik*. The fact that the Soviet Union was first in space was used to convince the American public that their security was at stake and that the U.S. was losing the military race. The brunt of the blame for this perceived lag in technological development was placed on the public school system itself (Berliner & Biddle, 1995; Boyles, 1998; Fowler, 1996; Spring, 2005). President Eisenhower responded with a “massive (\$1 billion) federal mobilization of education to meet the pressing demands of national security and to maintain its competitive edge in math and science” (Fowler, 1996, p. 20). This undertaking set the stage for corporate and

federal attempts to control school curriculum and decide what the basic subjects taught in schools would be. The selection of content in the school curriculum has had enormous implications for the modes of thinking that students and later adults are able to utilize. What is or is not taught to the nation’s youth has tremendous impact on the kind of society we create. Eisner (2002) stresses that “school’s curriculum can be considered a mind-altering device. And it should be” (p. 9). The question arises then: Who decides what fields of study are emphasized in K-12 education?

### **A Nation Always at Risk?**

In 1983, under the Reagan administration, the White House released the document *A Nation At Risk*. This document, which failed to provide supportive evidence for its findings, “charged that American students never excelled in international comparisons of student achievement and that this failure reflected systematic weakness in our school programs” (Berliner & Biddle, 1995, p. 3). The language used in *A Nation at Risk* has become familiar to the public as the school system continues to be blamed for the erosion of the American competitive edge in the global market. Berliner and Biddle (1995) describe how poorly researched rhetoric such as that used in *A Nation at Risk* has created a manufactured crisis in the public mind. Federal reports calling for educational reform continue to persuade the public to believe that “student achievement has declined *massively* and that this decline is confirmed by *many* different standardized test records” (Berliner & Biddle, 1995, p. 14). *A Nation at Risk*, which failed to provide citations for its claims, instilled a public fear of failure that helped to provide the conditions for a federal makeover of the public school system. The report asserted,

Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world.... The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people.... We have, in effect, been committing an act of unthinkable, unilateral educational disarmament. (National Commission on Excellence in Education, 1983, p. 5)

The Reagan administration responded to this crisis by demanding that state and local communities “increase academic standards, improve the quality of teachers, and reform the curriculum” (Spring, 2005, p. 453). The White House, however, did not call for increased federal aid. Along with the manufactured fear of falling behind in a global race, the U.S. public in the 1980s was grappling with rapidly changing technological innovations. Education, the public was told, should emphasize information-age subjects and meet national standards through standardized testing. In the early 1980s,

the Reagan administration’s singular focus on a military buildup of unprecedented size and cost threatened all federal domestic and social programs with massive cutbacks. President Reagan recommended that the Department of Education (DOE) be dissolved and that appropriations for the National Endowment for the Arts (NEA) be cut in half. The arts and education had to scramble for their lives. (Fowler, 1988, p. 101)

The White House effectively eliminated monetary, federal support for art education (Berliner & Biddle, 1995; Fowler, 1996).

This highly publicized report created the now widespread notion that the public school system is failing to produce students fit to compete in the global economy. Corporate interests and nationwide standardized testing have since become central forces in school reform. Big business has been increasingly involved in creating both state and federal policy that stresses mathematics and the sciences. In the technological age, scientific modes of thinking are seen as essential to the growth of the national economy. Students qualified in the sciences, in this light, are viewed as human resources. The organization of school curriculum for the production of students qualified to fuel the national economy has its roots in the nineteenth century notion of human capital. Human capital theory suggests that students can be seen as investments, and education can provide them with specialized training for corporate employment. Within this view, moral, social and creative concerns are not considered important to the development of a student as they “are understood to have no life outside their ultimate economic value” (Vavrus, 2002, pp. 114-115). This view of the purpose of public education was reinforced by vocational education and continues to this day to influence what subjects are

considered relevant to our national goals (Spring, 2005). There is an ongoing debate as to whether or not the close relationship between business goals and educational policy benefits the students themselves. Many analysts have challenged the linking of students trained in technology to a theoretical demand for qualified corporate workers. Berliner and Biddle (1995) raise important questions about “whether the new technologies will actually create or destroy more jobs” (p. 141). The relationship between business and educational reform is continuously presented to the public as a positive remedy for failing schools. This relationship has led to “overstressing technological curricula rather than curricula concerned with moral, social, or aesthetic concerns” (p. 143).

Boyles (1998) describes ways in which school curriculum has shifted to meet the demands of an increasingly profit driven, corporate society. Corporate influence in the schools, he argues, limits and reduces the ability of students to be critical of the society in which they live. The growing connection between business and education narrows the curriculum and reinforces the view that the purpose of education is to provide society with a skilled workforce. Corporations, Boyles asserts, “promote school sites for technorationality, consumer materialism, and intransitive consciousness when instead...schools should be sites for multirational investigation, economic discernment, and critical transitivity” (p. xv). The implications of an education that emphasizes employable skills and technical focus at the expense of critical thinking and creative exploration are culturally momentous. Greene (1988) argues that “children who have been provoked to reach beyond themselves, to wonder, to imagine, to pose their own questions are the ones most likely to learn to learn” (p. 14). When schools strive to meet corporate demands, educators are restricted to teach concrete skills that are considered useful in the corporate workplace rather than to encourage students to think critically (Boyles, 1998; Greene, 1998).

In 2001 the federal NCLB Act implemented massive testing requirements in order to reshape public education in the United States. The high stakes demands of “the No Child Left Behind Act reinforced the educational goal of producing workers to compete in a global economy that was first expressed in the 1983 report *Nation at Risk*” (Spring, 2005, p. 461). Riding on the substantial bipartisan support in Congress and the misinformed public notion that the school

achievement was plummeting, George W. Bush's administration demanded that all public schools show academic improvement by producing annual increments in standardized test scores. These national standards and tests directly influence how teachers teach. It is their responsibility to ensure that all students are able to succeed within the standardized framework. Teachers are perpetually faced with "external mandates regarding how they should teach, what they should teach, and which tests are 'acceptable' measures to 'account' for their teaching and the 'success' of student learning" (Boyles, 1998, p. 174). The continuous improvement required by the NCLB Act is measured by standardized testing in reading, mathematics and science only (Chapman, 2004). NCLB "stresses back-to-basics with a vengeance under the guise of excellence" (Chapman, 2004, p. 3).

Schools across the nation must now meet higher academic standards in order to benefit from federal dollars. Schools are under great pressure to help all their students succeed in the skills that the tests require them to master. Fowler (1996) describes how, "the unrelenting pressure on schools to serve corporate and commercial needs has established an elite core of subjects in American schools that are labeled *the basics*, the subjects that every student must master" (Fowler, 1996, p. 8). This pressure molds curriculum while school resources are funneled into strengthening those subjects labeled "basic." Although the general public and even the NCLB Act of 2001 supports a well rounded, comprehensive education, it is clear that current educational reforms have "inadvertently placed the arts at risk as policy makers and administrators, as they comply with new federal requirements, choose to narrow the curriculum to reach higher student achievement results in a few subjects" (Meyer, 2005, p. 35). Policy decisions that dictate the content that is taught to the nation's youth ultimately influence how students are taught to view the world and what modes of thinking they use in order to respond to their experience. Balais (1997), a drama educator and arts advocate, states that modern education "sees its current mandate to engage in job training by employing service learning and seamless school-to-work transitions as a part of the new pedagogy and to move away from 'soft' ways of knowing into the hard disciplines, *the basics*" (p. 80). The standards of achievement that schools must demonstrate through student test scores in order to receive

federal money do influence what skills teachers emphasize in their classes. The NCLB Act, although publicly supportive of art education, has created a high-stakes climate of testing that emphasizes scientific, standardized teaching methods (Chapman, 2004; Meyer, 2005).

The struggle to balance the science and technology focus in school reform with education in the arts is not a new one. As art educators face the constant fight over funds for their programs, advocates for the arts in schools face the challenge of proving that there is value in what the arts can teach. Notions of that value have changed throughout history. While art education advocates today all agree that there is indeed value in teaching art in K-12 schools, there is no common philosophy about what that value is. Art education advocates have had to market the value of art education to state and federal policy makers, public grant-making agencies such as the National Endowment for the Arts, private philanthropic organizations, and local communities (Fowler, 1988). Art education advocates have utilized a wide array of research that supports the validity of art as an essential ingredient in a balanced curriculum. There are countless focal points for arts advocacy such as "the proof and promise that arts education raises SAT scores: improves reading, math and special skills: increases overall academic performance: and builds self-esteem, self-discipline, creativity, community cohesion, and greater tolerance for difference" (Gee, 2004, p. 9). Art education has even been said to strengthen the competitive workforce in order to secure U.S. global competitiveness and national security (Blakeslee, 2004; Gee, 2004).

### **The Early Years of Public Art Education**

The value of art education in the public school system is linked to the ever-changing and multi-faceted role of the public school itself. The purpose of schooling has shifted as the nation has grown out of an agrarian economy, into an industrial giant and now a high-tech force in a competitive global economy (Cruickshanks, 1994; Fowler, 1996; Spring, 2005). The arts were integrated into the public school curriculum in the mid-1880s to fulfill the need for draftsmen in the textile industry. The applied arts taught in schools were believed to have industrial practicality. For the most part, the aesthetic aspects of fine art were restricted to upper-class citizens who "sent their children either to private schools of for private music, painting, or dance lessons" (Elkind, 1997, p. 8). In the beginning of

the 20<sup>th</sup> century there was a split perception about the value of arts education in the school system. There was the utilitarian focus of the applied arts on one end and a growing notion of the social value of creativity on the other. By the 1940s developmental psychology research emerged with scientific support for the value of the arts apart from the practicality of the created product. Connections between cognitive development and creativity were supported by the writings of John Dewey who recognized the powerful role the imagination could play in the process of learning (Cruikshanks, 1994). Art education gained public support from two very different perspectives. When producing handmade objects was still a part of the U.S. economy, art education maintained its popularity through its practical application. As the economy shifted away from domestic industry and manual fabrication techniques became obsolete, the psychological premise that engaging in the arts supports the cognitive development of children became a more popular justification for its inclusion in school curriculum (Cruikshanks, 1994).

### **Arts Education Advocacy: A Spectrum of Visions**

Arts education advocacy struggles to incorporate often contradictory notions of the value of art itself and its relationship to the changing demands of the U.S. economy. The perception that our schools are in a perpetual crisis of failure has stratified various camps of arts advocacy. Many art teachers are placed in the “image-conscious position of needing to generate interest in, and attention to, the inherent value of art education” (Cruikshanks, 1994, p. 238). As the arts are placed on the fringe of school priorities in the face of high stakes testing, art educators are increasingly desperate to market a justification of their programs in order to acquire state, federal and corporate support. In comparison to math, science and language arts teachers, “art educators have spent a disproportionate amount of time and effort over the years trying to justify the role and the value of the arts in schooling” (Fowler, 1996, p. 35). In a postmodern era, one in which the validity of certainty and truth is scrutinized, there is no pure value in art to be found. “There is,” as a result, “no single sacrosanct vision of the aims of arts education” (Eisner, 2002, p. 25). Educators have defined the value of art education today and in the past in a diversity of ways.

*Discipline-Based Art Education.*<sup>1</sup> Discipline-based art education (DBAE) was developed by Jerome Bruner “in response to the Soviets’ launching of *Sputnik I*, the first manned spacecraft to circle the Earth, on October 4, 1957” (Eisner, 2002, p. 27). Because achievement in math and science was viewed as crucial to national security, Bruner attempted to adjust art education methodology in order to establish art as a valid discipline instead of a subject perceived as “soft”. Primarily focused on the visual arts, DBAE addresses four curricular aims. The first aim encompasses the teaching of all the skills needed to enable a student to produce a high-quality product. In order to reach this aim students were expected “to develop their sensibilities, foster the growth of their imagination, and acquire the technical skills needed to work well with materials” (Eisner, 2002, p. 26). Although this aim may seem vague and broad in scope, this skill and concept based approach was a departure from an arts and crafts method. The second aim of DBAE was to teach students to look at and talk about other peoples’ art. In order to accomplish this aim, students would have to develop an aesthetic perspective as well as vocabulary specific to the art domain. “Being able to see from an aesthetic perspective,” Eisner explains, “requires an ability to focus on the formal and expressive qualities of form rather than solely on its utilitarian functions” (p. 26). This aim makes a significant departure from a vision of the arts as purely practical. In this academic context, learning how to sew in order to seek employment in bookbinding has no value. The value is placed in the development of artistic skills that are contextualized in knowledge of art history.

Advocates of DBAE tried to establish the arts as a valid academic contender in the age of science and technology. DBAE “was a vision of curriculum that art educators believed would restore substance and rigor to what was broadly perceived to be a ‘soft’ subject” (Eisner, 2002, p. 28). The traditional approach to developing quality art by utilizing classic skills has been challenged by other art education advocates. The critical question asked of DBAE is whether the end product of the creative process (the art piece itself) is a valid focal point for a curriculum in the arts (Fowler, 1996)?

*Media Literacy.* In the 1960s, artists in the U.S. began to examine the visual world of popular culture. As the nation was bombarded with new and exciting imagery from television

and massive advertising, artists responded to mass media with critical analysis. Art education advocates such as Graeme Chalmers, saw media literacy as an essential foundation for the learning of art in the modern world. Eisner (2002) explains that art education, in Chalmers view, “becomes a means for understanding and improving the culture” (p. 28). Education in media literacy gained popularity along with movements such as multiculturalism, feminism, and postmodernism. All of these views “challenge foundationalism, and opt for a perspectivalism that is skeptical about ‘intrinsic’ values; what is artistically good is what people value, and what people value is the result of the social forces...rather than qualities inherent in the work” (Eisner, 2002, p. 30). Art education that “draws attention to the process through which knowledge is produced” (Trend, 1998, p. 169) requires a shift away from the more traditional approach of discipline-based art education. Literary researchers have encouraged curricular “attention to ‘new literacies’, for example those found in digital technologies such as meta-literacies or cyberliteracies -- all of which consider the impact of visual representations on learning” (Sanders-Bustle, 2003, p. 159). In seeking to understand how culture is created by learning to read the messages imbedded in popular imagery, students in this kind of learning environment would be struggling with cultural and humanistic issues as opposed to traditional, skill-based, aesthetic training (Eisner, 2002; Greene, 2001; Trend, 1998).

*Creative Problem Solving.* The field of design offers a modern utilitarian angle to art education advocacy reminiscent of the applied arts taught in the late 1800s. Unlike DBAE and media literacy approaches, art classes centered on notions of design have direct career applications in the modern economy. Design as a mode of thinking challenges students “to deal with the practical problems -- the design of a new container for CDs, for example -- in which both practical and aesthetic criteria are important” (Eisner, 2002, p. 31). This approach to teaching art is pragmatic as well as aesthetic. It has its philosophical roots in the influential German Bauhaus movement of the early 1900s. The Bauhaus movement aimed to create a humane physical environment by “elevating the level of the crafts to the status of the fine arts” (Weltge, 1993, p. 16). The Bauhaus tradition is very alive in schools of design and engineering.

Many art educators seek to teach K-12 students to consider the “economical, structural, ergonomic, and aesthetic” aspects of creating an object (Eisner, 2002, p. 31).

*Self-Expression.* Many art educators have promoted the arts in schools based on the principle that creativity itself is the basis for all learning. Art, when viewed as the practice of imagining, teaches people to “look for new connections, new orders, and new possibilities” (Fowler, 1996, p. 123). Maxine Greene (2001), the founder and director of the Center for Social Imagination, describes ways in which the arts can release “diverse persons from the confinement to the actual, particularly confinement to the world of techniques and skill training, to fixed categories and measurable competencies” (p. 44). Greene eloquently promotes cultivating the imagination in order to break away from the routine “‘cotton wool’ of dailiness and passivity” that saturates school classrooms (p. 7). Greene urges art educators to address the hopelessness and passivity that many youth face in today’s society. Aesthetic education, she argues, “can alter the atmosphere in schools” (p. 47). Because the creation of art is an individual and introspective act that has no right or wrong answer, students in an art class can become familiar with the process of giving form to their original thoughts.

*Education for the Workplace.* Some arts advocates place the value in art education on its ability to prepare students for the modern workplace. In light of corporate pressure for students to compete in the global market, a vocational justification for the arts provides a persuasive rationale for securing corporate funding. Sterling (1995) views using the arts to provide a skilled labor force as the only arts advocacy position that the business community will be able to hear. She states that

the U.S. business community is particularly concerned about the impact of the deteriorating quality of contemporary education on business’s ability to recruit an ever more sophisticated workforce for the new twenty-first century economy. Therefore, it is not surprising that the business community is ready to listen and possibly to act upon our findings that education in the arts can be a compelling catalyst for helping to arrest this deterioration and provide members of the business

community with the more skilled and sophisticated employees they require to contend successfully in an increasingly competitive global economy. (p. 1)

Sterling stresses the use of presentations that make use of current technologies in the classroom as well as teacher facilitated group work to instill the corporate spirit of working in a team on the job. This form of arts advocacy stresses the importance of “national goals, the development of standards, and the arts assessments” (p. 5). Many art educators also stress the role that the arts play in the rapidly growing entertainment industry. Art classes in schools, for example, can train students in the kind of creative production that fuels the Hollywood industry. This vision of arts advocacy stands in direct opposition to Greene’s notion of personal discovery for social change (Eisner, 2002; Fowler, 1996; Greene, 2001).

*Youth Resiliency Through the Arts.* Education in the arts has been shown to promote a sense of community and belonging for students that are thought to be at risk of dropping out of school (Delgado, 2000; Gasman & Anderson-Thompkins, 2003). Art classrooms often provide a safe place for students who are considered low status to express themselves openly with their peers. In an effective art classroom this kind of personal expression would not only be welcome but also encouraged and respected. Opportunities to communicate through various mediums can make room for personal exploration of cultural heritage and issues of oppression that many students experience within the school system. This is an experience that many students cannot find in their core academic classes. Unlike many of the core classes where the emphasis is on producing the only right answer, “hands-on creative work allows young people a chance to experiment with multiple artistic methods and to explore different outcomes without risk of failure” (Gasman & Anderson-Thompkins, 2003, p. 431).

*Cognitive Development.* Researchers, in the fields of psychology, philosophy and neuroscience are providing an increasing amount of scientific support for significant connections between arts engagement and cognitive development. Eisner (2002) describes in great detail the relationship between perception, representation and cognitive development. At the most basic level, making art promotes a deeper

awareness of the world in which we live. Learning to experience the world through the senses with awakened awareness is a cognitive function that can be cultivated through working with the many mediums that art education provides. The ability to formulate these raw sensory experiences into communicable representations is what Eisner describes as a cognitive miracle. Roper and Davis (2000) describe how Howard Gardner’s theory of Multiple Intelligences supports the view that the arts enhance cognitive development. Similar to Eisner’s theories, Gardner explores the cognitive connection between perception and representation. Gardner describes a “mind that is continuously and actively working at understanding the world as presented by the senses. How the mind represents and symbolizes the world becomes the crucial link in the chain from the inside out” (p. 4). The mind’s ability to follow a complex chain from perception to communication engages various human intelligences (Eisner, 2002; Roper & Davis, 2000).

*Academic Achievement.* With the support of Eisner and Gardner’s theories on the cognitive benefits of engaging in the arts, many advocates promote art programs in the schools with the claim that the arts encourage academic achievement in core subject areas. There have been many links created between student achievement and participation in an art programs. The Florida Department of Education attributed an increase in student motivation and a decrease in dropout rates once an “active fine and performing arts program” was in place (Fowler, 1996, p. 138). Promoting the arts by touting the outcomes achieved in other fields, however, supports the idea put forth by U.S. policymakers that the arts themselves are not an essential subject to be assessed. According to administrators of the SAT, students who “enroll in art courses in high school get significantly higher Scholastic Achievement Test scores than students who do not take art courses” (Eisner, 2002, p. 38). The correlation between standardized test scores and exposure to art classes has not, however, been clearly established (Eisner, 2002; Fowler, 1996). For example, it is not clear from SAT statistics if high achieving students simply have more access to art programs and it appears that students who take more art courses also take more math and science courses (Fowler, 1996). Like Sterling’s (1995) notion that the arts must appeal to

corporate interests by linking art education to information-age employability, placing the value of art education within claims that art promotes rational achievement reinforces the growing emphasis on the “basics” in response to low standardized test scores. If the goal of art education is to support achievement in the more science-based classrooms, where lies the value of art education on its own terms (Greene, 2001; Modrick, 1998)?

### Conclusions

The U.S education system is increasingly bound to promoting student achievement in what has been defined by policymakers as the basic knowledge relevant to life in the global market. Art education advocates have had to respond to the narrowing of school curriculum by persistently promoting the value of art education through a variety of arguments to win support from both policy makers and fellow educators. Art teachers have had to become increasingly active advocates for the arts in schools as NCLB legislation pressures schools into focusing on curriculum that produces high achievement on standardized tests. The need to justify art programs has “been a relentless and demoralizing component of professional life for arts teachers from preschool through graduate school” (Kritzmire, 1993, p. 19). They not only teach with the life of their programs under constant threat, but they are often also forced to participate in the political arena to justify the necessity of their classes.

The widespread notion that the students in our public schools are failing to achieve has allowed for a school reform movement that significantly prioritizes scientific thought above the multiple modes of thinking that engagement in the arts can provide. This notion of the failure has been fueled by federal legislation as corporate interests gain increasing influence on education. As a result, art education is consistently undervalued in relation to “educational planning, funding, and implementation, yet ironically overburdened with expectations of miraculous curative properties when showcasing its usefulness” (Cruikshanks, 1994, p. 234). While art educators are as busy as any other K-12 teachers, they also face the philosophical challenge of defining and marketing the elusive value of the art education (Blakeslee, 2004; Fowler, 1996).

In reviewing the researched and marketed notions of the value of art education, it is clear that history offers no single definition of what

the purpose of art education is. The array of advocacy approaches is further complicated by the fact that art educators are often seeking financial support from the very policy makers that are increasingly focused on standardized testing. Because of this narrow focus, advocates often place the value of art education in relation to the indirect support it provides for academic achievement in “basic” academic classrooms. The value of an education in the arts, however, is thought of by many as directly “contrary to the prevailing ethos of national policy at many levels” (Chapman, 2004, p. 12). There is also a tendency for the value of art education to be defined in relation to how the arts can prepare students to compete in the global market. The cultivation of creative skills, in this context, is viewed as a kind of vocational training for the technological age. Attempts to define the value of art education within the narrow goal of providing job skills appropriate for the high technology global market or simply facilitating academic test achievement in a few core subjects ignores the philosophical and social values that art education can offer (Chapman, 2004; Gee, 2004).

On the other end of the art education advocacy spectrum are the claims that the arts can provide a humanistic and spiritual dimension to school culture. Art, many argue, can create a sense freedom and exploration because youth can express themselves without having to produce a right answer. Art in this context is defined as a way of knowing, i.e., a way of connecting with the imagination of humanity. The value of an education in the arts is defined in broad philosophical terms that many criticize as irrelevant to an academic setting. Emphasis on what Gee (2004) refers to as the claim of cultural redemption through the arts has been viewed as problematic in that art for art’s sake has historically been reserved for an elite social arena (Blakeslee, 2004; Cruickshanks, 1984; Kritzmire, 1994).

It is not necessary or possible for art education advocacy to provide one culminating definition of the value of the arts in schools. Although advocates must define the purpose of the arts for policy makers and corporate sponsors, strong arts programs fueled by informed and committed art educators themselves provide the grounds for all advocacy claims. Engaging in the arts in a multidisciplinary and cognitively challenging way supports student learning. It is the job of all educators to provide classrooms upon which



multiple modes of thinking are encouraged and built.

### Recommendations for Practice

Realistically, emphasizing the social and humanistic value of art education will not likely result in an increase of funding for art programs in a pressurized context of high stakes academic accountability. Limiting the value of art education, however, by emphasizing academic gains in “basic,” core classes does little to advocate for the significance of the arts as a separate and respected field of study. There is, nevertheless, a persistent need to defend the importance of the arts in public schools. The survival of comprehensive art education within the standardized world of NCLB depends on the persistent articulation of *all* the researched benefits of an arts rich curriculum. Art teachers should be constantly refining their knowledge of this research.

Those that are inspired to teach art in the public school system, however, must be realistic about the challenges they face when advocating for their programs in light of increasingly scarce funding. Art will not save youth from the often demeaning effects of a school system that has historically viewed them as human capital. Art education will not ease the pressure that schools face in light of NCLB legislation. Humanistic and aesthetic values have not historically gained support from increasingly corporate influenced educational reform movements. History, in fact, suggests that the survival of humanistic and socially informed curriculum has never been central to the institution of the public school.

The public school institution is intricately embedded in an advanced capitalist system that may never prioritize limitless, imaginative learning for all students. I do not believe, however, that successful art programs depend on a complete ideological shift within the corporate influenced public school system. Art educators – along with all educators concerned with providing classes in which learning is maximized – can continue to teach with passion in any political circumstance that allows them to teach. They can pour their energy into facilitating classrooms in which their students are engaged with multiple modes of thinking. Their students should be encouraged to problem solve, paint murals, build sets for shadow puppet shows, and write papers about the cultural relevance of their work. The interdisciplinary art class, in other words, can provide sharp contrast to the quality of passivity and boredom that

permeates a pressurized school system. In this way the art classroom can become vital to the life of the school community. The undeniable value of student engagement with the learning process can be made clear through the commitment of art educators in the classroom. Although teachers should be informed and articulate about the researched benefits of art education they should avoid the temptation to limit the multidimensional value of the arts to narrow, marketable definitions. The increasingly standardized notion of student success is narrow enough.

### Note

<sup>1</sup> Tertiary headings in this section are adapted from Eisner (2002, pp. 25-40).

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### **Adequate, Equal, Equitable: What Kind of School Funding is Necessary for all Children to Succeed?**

*This paper examines school finance systems within the U.S. in relation to adequacy, equality, and equity to determine whether or not current funding levels are meeting the educational needs of all students. Starting with the history of school finance, this paper moves to investigate funding disparities between districts and states within the context of school finance formulas. This paper also seeks to examine academic achievement in relation to funding, citizen perceptions of school funding, and state and federal litigation in relation to increased funding support. The findings of this review conclude that schools are unable to financially meet the needs of all students. This paper seeks to offer incentives to increase school funding, especially to those districts in need.*

One could argue that the future of the United States is based solely on the potential of generations to come. They will be responsible for keeping the U.S. competitive in the global market, reaffirming democracy at home, and supporting values that emphasize humanity and justice (Biddle & Berliner, 2002; Imber & Van Geel, 1993; Koski & Levin, 2000). Therefore, it would seem that support for financing public education should be one of the highest priorities for all citizens because it helps foster national ideals. Currently in the eyes of the public the common perception is that the U.S. educational system is functioning sufficiently. However, this viewpoint does not take into account U.S. spending on education in comparison to the rest of the world or to other U.S. government expenditures (Biddle & Berliner, 2002).

School funding differences across the U.S. have created large disparities between states as well as districts. As a result, more and more students are unable to succeed academically in the educational system. Presently, there is debate about whether or not the amount of funding schools receive impacts student achievement (Biddle & Berliner, 2002; Koski & Levin, 2002). Despite this, there is little argument that additional funding does equate to an increase in teacher efficacy and classroom resources and supplies (Carey, 2004; Goertz, 1994; Odden & Picus, 1992).

Although disparities in funding exist among schools in the U.S., significant improvements have been made during the last couple of decades (Yinger, 2004). Several finance programs have been implemented across the nation to aid in the equalization process (Downes, 2004; Jordan & Lyons, 1992; Odden & Picus, 1992; Walter & Sweetland, 2003;

Yinger, 2004). However, many people question if the improvements made are considerable enough to support the growing needs of society. Not only is there an increased demand for educated individuals in the current capitalist economy, but there is also a significant portion of the population, such as English language learners (ELLs), special education students and students living in poverty, that require additional resources if they are to achieve in the current educational system (Odden & Picus, 1992; Yinger, 2004).

One could claim that school funding is the overall determining factor in deciding whether or not the quality of education is sufficient enough to prepare students for the future. Accordingly, the intent of this literature review is to analyze the educational system from a finance perspective in order to determine if funding allotments meet the needs of all students. This discussion centers on three key terms in relation to school finance: adequacy, equality and equity. For the purpose of this paper, the terms are defined as follows: *adequacy* refers to the minimum amount of funding needed to educate children, regardless of the quality; *equal funding* designates equal funding per pupil despite their specific needs; and *equitable funding* ensures not only that per pupil expenditures were significant enough to effectively educate students, but that children with special needs received an extra allotted amount. The paper uses these definitions to analyze the history of funding in the U.S. and where the nation stands when it comes to adequacy, equality and equity within the school system today.

### **School Finance Formulas in the Making**

In order to develop a clear picture of the current school finance situation within the U.S., it is necessary to take a brief look at the history of public school creation and school funding throughout the nation. During the late 1800's, the idea of a common school was created to "assure the dominance of Protestant Anglo-American culture, reduce tensions between social classes," and "stabilize the political system" (Spring, 2005, p. 73). It was during this time that the term "common school" was coined to have a distinct meaning. Essentially, it was to be a school that all children attended and were taught a uniform political, social, and religious ideology (Spring, 2005). Because much of what was taught was centered on Protestant values, a large amount of funding for schools was contributed by local churches (Odden & Picus, 1992; Spring, 2005). As the need for education began to grow, some districts were entirely too poor to fund any schools, while others started imposing levies to support the system. While concern grew about educating people to become good citizens and forming a "common culture" within the U.S., local governments began to get more involved in the financing of public schools (Odden & Picus, 1992). What was unique about this movement is that it linked the government's policies about social, economic and political issues within society to public education (Spring, 2005).

At the beginning of the 20<sup>th</sup> century, inequalities between districts elicited a response by the state to issue flat grants, usually on a per school basis (Odden & Picus, 1992). Essentially, the flat grant was created to ensure that even the poorest communities had some form of education, regardless of the quality. These grants eventually increased from "flat grants per school to flat grants per classroom or per teacher in order finance schools and classrooms that had outgrown the initial one-room school format" (p. 167). Despite the increase, it became clear that the low-level of funding provided by the flat grant method would need to be significantly increased to meet the needs of the growing educational system and industrial demands for educated people.

The creation of the foundation aid program was the state's solution to the growing needs of the educational system in the United States. The construction of the foundation aid formula addressed the need for a "minimal" quality education system. It not only established that the flat grant failed to provide a "minimal" quality

education, but also that the state could not bear the entire school finance bill alone. One solution to this dilemma was to require local tax effort, in the form of a property tax, as a condition for receiving state aid (Odden & Picus, 1992). Using this method, "state aid per pupil is the difference between the foundation per-pupil expenditure level and the per-pupil revenues raised by the required local tax rate (p. 174). The following puts the formula for state aid per pupil (SAPP) in an algebraic perspective:

$$\text{SAPP} = \text{FEPP} - (\text{RTR} * \text{PVPP}),$$

where

FEPP = foundation expenditure per pupil,

RTR = local required tax rate, and

PVPP = local property value per pupil.

A district's total state aid (TSA) would be:

$$\text{TSA} = \text{SAPP} * \text{Pupils},$$

where

SAPP = state aid per pupil, and

Pupils = number of students in the school district. (p. 174)

Foundation aid is the current aid program used by 80% of states. Another aid program used by 4% of states in the U.S. is full state funding (Walter & Sweetland, 2003). States using this method set an equal expenditure level for each student. Districts cannot spend above this set amount or below it. The only state in the U.S. that has a program funded fully by state revenues is Hawaii (Odden & Picus, 1992). Flat grant programs, as discussed above are still used in some form by 4% of states. One last school finance method is guaranteed local tax baseline (GTB) funding. The GTB program is currently used by 4% of states and is discussed in the next section of this paper. Other states use some combination of the preceding funding methods (Walter & Sweetland, 2003).

### **Current Issues with School Finance Formulas**

Perhaps the most discussed and debated aspect of school finance formulas is the local property tax. This is partly because besides the inheritance tax, the property tax is the closest the U.S. has to a wealth tax. Property taxes vary substantially depending not only by state, but by districts as well (Odden & Picus, 1992). When implemented within a school finance formula without any equalization methods, differences in property values and tax rates create vast disparities between districts within states.

One way to counter-balance the financial disparities within districts is to implement the

guaranteed tax base model (GTB) into the school finance plan. The way the GTB model is used is when districts set a specific tax rate they wish to receive. The state then makes up the differences between the actual tax-dollar yield and the state guaranteed amount. Within this model there is a cap on the percentage that can be taxed in a district as well as a minimum authority percent implemented by the state (Jordan & Lyons, 1992). Although this creates some equalization, it does leave room for the wealthy districts to far surpass poor districts when it comes to tax dollars. For example, in 2004 within the state of Washington approved levy percentages ranged from 6.83% to 33.67%. Because Washington has a minimum levy authority percent of 24%, the state had to make-up the difference between the tax yield and minimum amount for the district with the low-levy percentage. However, the district with the high-levy percentage received a significant amount more in their certified levy (Office of Superintendent of Public Instruction, 2004). It should also be noted that the districts that already surpass the minimum state requirement for local tax do not receive any tax compensation.

To understand the school finance situation across the states, it is useful to begin by comparing their finance equations to one another. The spending per pupil within the U.S. varies from \$4,625 in Utah to \$10,922 in New York, with a national average being \$7,284. These numbers illustrate large discrepancies in state definitions regarding the amount of money it takes to provide a minimum quality education. It is important to note that funding equations vary significantly from state to state. For example, percentages of state funding range from 36.7 in Illinois to 72.5 in Vermont (Huang, 2004, p. 333). Research indicates that state finance formulas that rely on a higher proportion of state money show a more equal distribution of resources than states that rely on local revenues (Moser & Rubenstein, 2002). In relation to dependence on local levies, percentages range from 18.7 in Arkansas to 57.8 in Nebraska. Nationwide federally-supported education percentages range from 4.1 in Connecticut to 17.3 in Alaska. Hawaii does have a local percentage of 1.8; however, their finance method is based on a state-run education system, which is the only one in our nation (Huang, 2004, p. 333).

In order to get a clear picture of the school finance situation in the U.S., not only is it necessary to explore the history of school finance

and how school funding is currently implemented across the United States; it is also essential to examine the effects of funding directly on schools and students. The following sections note how funding contributes to the quality of education in schools. Discussed are questions of adequacy, equality and equity and what these definitions can mean or not mean for students who are striving for success in the U.S. educational system.

### **Adequate Education**

Within the realm of school finance, a funding mandate is said to be adequate if it provides a minimum allotted amount to every pupil within a district. This means that every child will have some form of education regardless of the quality. Schools using this method are free to spend above this amount, but are generally not allowed to go below it (Lukemeyer, 2004). This type of funding can create large disparities across the districts and call into question the definition of “adequate” spending and the type of education that can be given within this context. This was exactly the situation following the implementation of the foundation aid method across the nation. After the disparities began to rise between districts, questions of “adequacy” began to surface. These inquiries eventually led to a number of court cases involving discrepancies in state spending between districts and district spending between schools. In these cases the role of the state was called into question, as well as the federal government, on whether or not education was considered a constitutional right for citizens within the U.S.

Perhaps the first and most significant court case concerning state constitutions and their role regarding funding and education was *Serrano v. Priest* in 1971. In this case the plaintiffs, Los Angeles children and their parents, filed a suit against the state of California. The case claimed that because California’s finance system relied on local property taxes, there were large disparities between districts that were high in property value and those low in property value. They argued that these disparities in funding were providing a less-than adequate education for all of the children in the poor districts and requiring the parents to pay higher tax rates to raise money for the minimal-quality education. This case relied heavily on the claim that the education received by the children was a violation of the equal protection clauses of both the California and United States constitutions (Imber & Van Geel, 1993; Ramirez, 2003).

Although these children received a minimal-quality education, focus shifted from discussions about adequacy to equality across the districts. In the end, the California Supreme Court ruled that the system financing elementary and secondary education did in fact violate the state's constitution, (Ramirez, 2003). Since this ruling, 43 additional state courts witnessed challenges to their state financing systems in regards to their constitutionality (Yinger, 2004). Some cases were based on the state's equal protection clause, which resulted in few victories for education reformers. Several others, however, were based on the state's education clauses which is what several courts have relied on when overturning school finance systems (Lukemeyer, 2004).

Although *Serrano v. Priest* made a dramatic impact on school finance across the U.S., so has one other ruling. In 1973 *San Antonio Independent School District v. Rodriguez* concluded that disparities seen in Texas did not violate the equal protection clause of the 14<sup>th</sup> amendment in the U.S. Constitution, even though they were very similar to those in *Serrano v. Priest* (Imber & Van Geel, 1993; Koski & Levin, 2000; Ramirez, 2003). Although some cases have been brought before the federal court since this decision, it more or less closed the doors to federal litigation regarding the 14<sup>th</sup> amendment (Lukemeyer, 2004). This meant that the bulk of school finance litigation would be brought before the state courts because their constitutions were still open for interpretation. The state court would determine whether education was in fact a civil right at the state level.

Even though school finance litigation has made considerable progress in the past several decades, many school equalization supporters do not think enough improvements have been made. The effects of these court cases will be looked at again in the subsequent sections of this review. First, however, the school finance situation must be looked at from another perspective.

### **Adequacy from Another Perspective**

When inquiring about the status of the United States from a global perspective, in comparison to the rest of the world the U.S. ranks close to 9<sup>th</sup> when educational spending is adjusted with the exchange rate and 14<sup>th</sup> when adjusted for per capita income (Berliner & Biddle, 1995; Bracey, 1995). Some researchers claim that the resistance to an increase in educational spending is partly due to certain beliefs about spending within the U.S. The public tends to think that because the

nation already spends the most, or close to it, the government should not have to spend anymore. However, evidence shows that the U.S. government does not spend the most on education (Berliner & Biddle, 1995). Furthermore, the U.S. is the only country that funds elementary and secondary education based on local wealth (Biddle & Berliner, 2002).

What may seem like a substantial amount for educational spending quickly appears small when looked at in comparison to other government expenditures such as defense spending. In 2004, the Department of Defense spent \$375.3 billion and purposed a 7.1% increase to \$401.7 billion for the 2005 fiscal year. On the other hand, the Department of Education spent \$55.7 billion in 2004 with a purposed budget of \$57.3 for 2005. This translates to a 3% increase for federally-supported education (Office of Management and Budget, 2005).

The struggle to define adequacy in education has also led to a debate about another issue within the U.S. Many school equalization supporters think that the education of children should not be dependent on their family's socioeconomic status. This would mean that more extensive equalization methods would have to be enacted to ensure all students receive the same quality of education. The following section discusses what an equal education is, how the U.S. is doing in terms of equality and why equal school funding is such a debated issue in the nation today.

### **Equal Education**

When equality in educational finance is discussed, it is generally in reference to the amount of money spent per pupil. As discussed above, several courts have made decisions regarding not only the adequacy of students' education, but also the equality in relation to other schools or districts. Currently, a state's spending is said to be equal as long as the money received by each district is the same. However, this does not address the inequalities resulting from differences between districts because of issues such as property tax. It also does not address increased spending for children with special needs. This equal treatment of all students is referred to as horizontal equity where there is an equal distribution of state resources for everyone (Odden & Picus, 1992).

Table 1: Funding and Enrollment for Washington State's 10 Largest School Districts

District	FTE Enrollment	Total Expenditures Per Pupil	Local Tax Per Pupil	State Expenditures Per Pupil	Federal Expenditures Per Pupil	Other	Total Revenues Per Pupil
Seattle	45123.00	9079.75	2244.14	5357.25	1120.99	619.97	9342.35
Tacoma	30879.00	8571.58	1823.12	5422.68	1095.87	261.26	8602.93
Spokane	30041.00	8157.87	1290.84	5495.67	926.17	453.85	8166.53
Kent	25803.00	7068.36	1360.32	4959.79	503.24	307.42	7130.77
Evergreen (Clark)	23396.00	7164.78	1111.17	5242.00	468.22	377.00	7198.39
Lake Washington	22991.00	7071.80	1353.55	4945.31	339.00	476.04	7113.90
Federal Way	21532.00	7024.21	1146.34	5026.71	514.66	278.57	6966.28
Vancouver	21131.00	7710.60	1280.92	5326.73	782.27	385.42	7775.34
Edmonds	20495.00	7199.95	1413.24	5033.85	519.85	346.94	7313.88
Puyallup	19906.00	6927.26	1193.26	5201.37	351.11	276.73	7022.47
Total	261297.00						

Note: Adapted from *Washington State school districts: General fund expenditures, revenue, and ending total fund balance per pupil by enrollment groups, fiscal year 2003-2004*, by Office of Superintendent of Public Instruction (n.d.), Olympia, WA.

### U.S. Schools and Equality of Funding

Although some states have made progress in terms of school finance equalization, others have not. According to Carey (2004) the funding gap, which is the difference in the amount spent in rich districts as opposed to poor, is increasing in many states. Other states have stayed the same or relatively the same while a few have made significant progress. Currently, 36 states have a funding gap, with a national per-pupil gap averaging \$1,348 between high-poverty districts and low-poverty districts. Furthermore, there is a gap between districts high in minority students and those low in minority student in 31 states. These states instruct “six out of every ten poor and minority children” in the nation (p. 2). When enrollment and expenditure data is analyzed specifically for Washington State's 10 largest districts, several disparities in spending can be noted. Table 1, “Funding and Enrollment for Washington State's 10 Largest Districts,” presents tax revenues for districts in the state. It should be noted that these districts educate 27% of all students in the state. Currently, there is an overall funding gap of approximately \$2,152. The local tax gap is currently at \$1,133 and the federal spending gap at \$782. The state spending gap is the lowest of the three largest revenues sources at \$550. Although these figures are not adjusted for cost of living, they are significant nevertheless (Office of Superintendent of Public Instruction, n.d.).

Biddle and Berliner (2002) contend that most citizens when asked would say that they are “committed to the welfare of children, the ideal of equal opportunity and the notion that public education can and should provide a level playing field for all students” (p. 51). One reason that these inequalities are still present may be due to the fact that many citizens are either unaware of funding disparities or think that they are not related to an individual's chances at success. This frame of mind stems from the Jeffersonian idea of meritocracy that contends success is the result of individual effort and not one's social circumstance. In other words, anyone can succeed as long as they try hard enough. Another belief that perpetuates the inequalities within school is the culture of poverty thesis. According to Biddle and Berliner (2002), this suggests that “impoverished communities... are handicapped by lack of appropriate ‘cultural or social capital’” (p. 51). These arguments lead to the assertion by school finance equalization critics that “because students from impoverished homes are unlikely to benefit from a ‘quality’ education, funding public school equally in rich and poor neighborhoods would only waste tax dollars” (p. 51).

This issue of poverty and students with special needs is covered in depth under the equity section of this paper. Before issues of equity are discussed, however, the issue of equality in schools needs to be addressed

somewhat further. It is important to understand why school finance equalization has been debated in the past years and continues to be a prominent issue within the U.S.

### **Why Does Equality in Funding Matter?**

One issue that continues to be debated is whether or not school funding impacts student achievement. Some anti-equalization critics such as Eric Hanushek (as cited in Biddle & Berliner, 2002) have declared, “Detailed research spanning two decades and observing performance in many different educational settings provides strong and consistent evidence that expenditures are not systematically related to student achievement” (p. 48). This flood of research was spurred by a 1966 study titled *Equality of Educational Opportunity*. This report, written by James Coleman and several others, is also known as *The Coleman Report*. The findings stated that the school environment had no significant effects on the achievement of children. Although it was used by many critics to hinder the equalization of school funding, it has now been deemed to have several flaws. According to Biddle and Berliner (2002), “The report’s authors had failed to use available scaling techniques to validate their procedures, had made serious mistakes when assigning indicator to major variables, and had failed to measure crucial variables now know to be associated with school effects” (p. 52). The report had also “used non-standard procedures for statistical analyses, which generated falsely deflated estimates of school effects” (p. 52). Thus, it is no longer used as a thoroughly reliable source against funding equalization.

Another argument used is based on the premise that if funding is related to student achievement, there should be substantial evidence noting the increase in achievement with the increase in funding over the past couple of years (Koski & Levin, 2002). However, the increase in educational spending has been allocated to various services and programs created within the last couple of decades. This means that classrooms are not necessarily directly receiving the extra state aid. For instance, one study found that 30% of the increase went to special education, 30% went to creating smaller class sizes, 21% to salary increases (i.e., salaries growing less than 1%), 10% to school breakfast and lunch programs, 5% to transportation, and 3% to programs designed to prevent dropping out (Bracey, 1995, p. 67). Although money was directly spent on the

classroom to reduce the class size, the average number of pupils remained at about 24 students. This is still above the number at which positive effects are reported in terms of smaller class sizes (p. 67).

Despite the findings against school equalization, several researchers have found opposite results. For instance, one analysis by Greenwald, Hedges and Laine showed that “school resources are systematically related to student achievement and that those relations are large [and] educationally important” (as cited in Biddle & Berliner, 2002, p. 48). Another study examined the effects of a state finance equalization act on student performance when implemented by the state of Vermont (Downes, 2004). The analysis concluded that “there is some evidence that the gaps in performance between students in high-spending and those in low-spending districts and between students in high-wealth and those in low-wealth districts have...declined post [implementation of the equalization act]” (p. 306). Odden and Picus (1992) draw the conclusion that increased spending, when money is allocated efficiently, in many instances is positively related to student achievement.

Based on the studies in the previous paragraph, one could assert that money matters as long as it is spent in the most efficient manner. One could also maintain that more money results in increased resources for schools regardless of student achievement. These resources include increased teacher salaries that often result in an increase of teachers with greater efficacy, knowledge, and experience (Carey, 2004). It can also increase and improve the quality and number of supplies, books, and facilities. Whether or not each individual item increases student achievement remains to be seen. However, one could hypothesize that it would not have any negative effects on student success. This notion was affirmed in the 1990 court case *Abbott v. Burke* in which the New Jersey Supreme Court ruled that the amount of money available to a school impacts the quality of education available to the students. The judges noted, “We return to the plaintiffs’ insistent and persuasive question: if these factors are not related to the quality of education, why are the richer districts willing to spend so much for them” (as cited in Goertz, 1994, disparities between section, para. 2).

Other research also shows that high-poverty schools are at a greater risk of academic failure than schools low in poverty. Within this context,



national studies assert that as school poverty increases, especially by more than 30%, academic achievement declines (Goertz, 1994). A parallel can now be drawn between funding gap statistics and student achievement. As poverty increases in the U.S., both funding and achievement decrease. This leaves the following: How much funding equalization should take place, if any, between the financially advantaged and disadvantaged schools?

### **Equitable Education**

Throughout the previous sections, the impact funding equalization can have on schools has been discussed. The next step is to look at what is necessary for all children to succeed given their situation in life. This would be the premise of an equitable school system. It not only attempts to counter the differences in tax-bases and neutralize wealth advantages across the districts, but takes into account the special needs of various groups of individuals within the school district (Lukemeyer, 2004). In regards to school finance, this is defined as vertical equity. Vertical equity is where there is compensatory education for children with special needs such as, special education, low achievement, ELLs, and students living in poverty. There are also measures to counter-balance issues within districts such as size, transportation, and enrollment growth. Lastly there is extra funding made available for certain programs. These include vocational education, lab science, and advanced topics (Odden & Picus, 1992). This method of school finance reform serves to “level the playing field” between the more or less financially disadvantaged schools.

### **What Should Factor into the “Equitable” Equation?**

Many equity advocates assert that the economic situation of the school district population must factor into the funding equation. Because poor districts cannot raise enough local money through tax revenue to fund their schools, they must be compensated by state aid. Poor districts not only lack funding to purchase essential items such as new books, but they are also unable to provide additional programs and services needed to address the social and economic needs of their students (Goertz, 1994).

Other issues that need to be taken into consideration are the ever-increasing mandates set in place by federal and state lawmakers. If schools are to adhere to the specific achievement benchmarks set forth for all students to reach,

they must be given the means necessary to help those children meet those standards. Specifically, ELLs, special education students, and students who live in poverty need additional help if they are going to achieve under standard-driven conditions (Ramirez, 2003). The number of students in need of special services is growing. Some of the largest school districts such as Dallas, Chicago, New York City and Los Angeles, need special services for as much as 50% of the student population (Odden & Picus, 1992). Critics may claim that funding is not related to achievement. However, research is available which illustrates that funding is related to a school’s ability to increase services, such as tutoring, which has been shown to increase a student’s achievement by two standard deviations over time (Bracey, 1995). This could assist the low-achieving districts in their efforts to meet the benchmarks.

Despite the fact rather large gaps still exist throughout the nation, several states have taken steps in an attempt to equalize school funding. Currently, 38 states allocate some form of state funding to schools on the basis of poverty. Of these, “thirteen incorporate district poverty into their main aid formula, eighteen have supplementary aid programs weighted toward districts with poor children, and seven use both of these approaches” (Yinger, 2004, p. 19). Several other states also have aid formulas that factor in cost of living, ELLs and special-education. Even with this slight increase in funding, large, central cities also face another burden. These are usually the districts that have the highest majority of special need students in an area where the services are the most expensive (Odden & Picus, 1992). This is just another reason why large, high minority, high poverty districts are lagging behind.

### **Equitable Funding Distribution Benefits for Society**

Although the U.S. can be viewed as the “promised land,” many people, specifically children, are without basic needs of survival. Within the U.S., nearly 13 million or more children live in poverty, with 5 million living on less than half of what the federal government deems poverty level. This number has increased drastically within the last couple of decades and will most likely continue on this path (Berliner & Biddle, 1995). These figures are significant when considering the negative effects of poverty on student achievement. Despite this, it is the obligation of the educational system to give

students the tools necessary to be an active citizen within society. If schools fail to meet their needs, students will be hindered academically, economically and perhaps even socially. Ward (1992) maintains, "If this is what the children of tomorrow can expect, a generation is truly at risk" (p. 120).

If the idea of equitable funding compensation programs are not compelling to an individual solely based on a general obligation to help children in need within the U.S., one can argue that it brings with it other benefits to society. One Supreme Court justice in the 1971 case *Serrano v. Priest* stated:

Education is a major determinant of an individual's chances for economic and social success in our competitive society; second, education is a unique influence on a child's development as a citizen and his participation in political and community life... Public education [is] a unifying social force and a basic tool for shaping democratic values. (as cited in Imber & Van Geel, 1993, p. 375)

Essentially, school finance compensation would enable all schools to provide students with education that would prepare them to "play their roles as citizens and to compete in the labor market" (Biddle & Berliner, 2002, p. 56). Koski and Levin (2000) assert that the capital gains within society produced by educated, high achieving individuals outweighs the costs of increasing funding for special services such as class-size reduction. Furthermore, education is crucial at a time when there is extensive concern about the U.S. competing in the global market and the quality of labor force available to meet that competition.

### Conclusions

Throughout the history of the U.S. the common school, much like schools of today, was a place where students could congregate to learn a common way of thinking about the world. However, what schools primarily taught was of a religious context and was thus funded by local churches. The onset of the school finance dilemma was triggered by not only a need for larger schools, but ones that were more religiously neutral as well. Since that time, the issue of school funding has been highly debated. It was not until the last couple of decades that questions of the federal and state responsibility for school funding has been pursued by equality and equity advocates.

Within the context of this paper, it has been found that despite court rulings calling for school finance equalization, large disparities still exist between districts within states as well as across the nation. Currently, there is a \$1,348 per pupil gap between the advantaged and disadvantaged schools nationwide. The schools that are said to be disadvantaged are generally those with the highest poverty rate and those districts that depend on local levies rather than state aid. In several instances state finance formulas that rely more on state spending than on local levies are shown to have a more equal distribution of resources across the districts.

When it comes to the impact of increased funding directly on schools, research cited in the previous sections of this paper indicates that funding does have a positive effect on student achievement. Studies also indicate that students in poverty are at greater risk of academic failure and therefore need additional help to succeed in the school environment. Not only is there a positive effect on achievement in the classroom, but findings indicate that the capital gains for society in the long-run may outweigh an immediate increase in educational expenditures. Increased funding also translates into greater teacher efficacy as well as increased resources available in the classroom.

Public opposition to an increase and equalization in school funding has been attributed to two reasons. One is an absence of awareness about the disparities in U.S. school funding. The other stems from the notion that the U.S. already spends the most on education in comparison to the rest of the world. Studies indicate not only that this notion is false, but that the U.S. also spends far less on education than on other government expenditures.

Despite several positive changes enacted within the educational system by policy makers, there continues to be a significant population within society that continues to be denied an equal educational opportunity. Based on the facts presented in the preceding literature review, it is clear that the number of children receiving an unequal education in terms of school finance is staggering. All children should have equal access to resources such as, special programs, books, supplies and qualified teachers. It has been shown that these resources do make a positive difference when it comes to educational success and are all necessary for their educational achievement. Not only should all students receive equal resources, but many students require additional assistance if they are to meet

the high standards of society. Some students who live in poverty are also ELLs or those enrolled in special education. These students in particular need compensatory school finance systems if they are to achieve to their fullest potential.

It can be difficult to understand how the vast disparities between schools have been allowed to remain a reality in the public school system. It is especially difficult when taking into account how the country has always prided itself on its educational system and placed serious importance on our nation's ability to prepare students for the future. Unfortunately, because the U.S. is a highly capitalistic society, the stance that most advocates of compensatory education tend to take is from primarily an economic perspective. Further research on the costs and benefits of increased school funding on capital gains, global market, and the work force could offer incentive to provide a quality educational experience for all students. If researchers provide evidence that shows quality educational experiences produce adults who benefit the larger economic society, policy makers may be more willing to increase educational spending.

Clearly, the school finance system within several states is failing to enable all students to efficiently participate when it comes to the political and economic aspects of the nation. Currently the U.S. is doing many children in the public school system a serious injustice by providing an unequal and inequitable education. It is undoubtedly unfair to condemn a student's academic success solely based on where they live within the nation. Therefore, the question that must be asked now is what can be done to successfully improve the school finance situation and educational opportunity in the U.S.?

### **Recommendations for Practice**

Despite decades of court cases involving educational equality and equity, there are still vast disparities among the schools within the U.S. Although gains have been made in school funding equalization, many students are still without the resources needed to succeed in the present school system. This means that more litigation is necessary if school funding equalization is possible. Because the *Rodriguez* case appears to have closed the doors to federal litigation for the immediate future, all future proceedings must take place at the local and state level.

Before any further legal action can be taken, however, educational policy makers and the

general public must be informed about the harms of inadequate and inequitable education. In the democratic U.S., it is the people who ultimately govern what happens in society. If change is to happen within school finance, it must be the will of the people. An awareness of funding disparities between schools could act as a catalyst for reform. School funding equalization advocates need to communicate the realities of under-funded schools. Students in financially disadvantaged schools have fewer resources, less educated and qualified teachers, and fewer educational opportunities. In the words of the New Jersey Supreme court, "Today the disadvantaged are doubly mistreated: first, by the accident of their environment and second, by the disadvantage added by an inadequate education. The State has compounded the wrong and must right it" (Goertz, 1994, conclusion section, para. 1).

Not only must the public know about the disparities present in financially disadvantaged schools, but they must know the consequences of not adequately preparing students to live and participate in society. Students must learn how to think critically about society, so that they can make informed and intelligent decisions about governance. As Goertz (1994) explains, "If we truly believe that all children can and must learn those skills required to function in ... society, we need to guarantee that all school districts—rich and poor alike—have sufficient resources to educate their students" (conclusion section, para. 2). After all, today's students will ultimately be given the responsibility of governing their communities and the nation.

Another important aspect of society that students must be prepared for is how to participate in a capitalist nation. All students must be given the resources necessary to achieve to their fullest potential. They must be given the tools they need to enter the workforce and fully support themselves. The public must know the importance of preparing students for their future. They must also understand that the costs of creating educational equity may be outweighed by the social and economic benefits that are created after schooling. In other words, the capital created nationwide by having qualified and competent workers and citizens may outweigh the cost associated with increasing school funding equalization.

Although much of school finance equalization litigation has ended in defeat, the future itself lies in the court room. If educational policy makers and the general public continue to

witness the effects of inadequate, unequal and inequitable education, perhaps change will occur. The only way long-term change can occur is if the people of our country awaken to the fact that students in public schools today are the future leaders of the U.S. Therefore, any dime invested today in education is potentially worth a lot more politically, socially, and economically tomorrow.

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### **Transformative Service Learning: A Social Justice Approach**

*This paper argues that a properly constructed service-learning curriculum can provide a transformative educational experience, endowing students with critical thinking skills, a framework for social justice, and the impetus to effect social change. Currently service-learning programs are being employed in thousands of schools throughout the country as a means to educate students through real-world experience. However, while some service-learning programs teach civic responsibility, empathy and solidarity with marginalized populations, others reinforce stereotypes, ultimately perpetuating injustice and inequity. Recently a body of work has emerged both critiquing the values that are reinforced by these irresponsibly implemented programs, and providing promising frameworks for the creation of transformative service learning projects.*

Since inception, American public schooling has been charged with the task of creating “good” citizens out of American youth. The way in which students are expected to act out this charge is constantly evolving, changing with the economic, political and social goals mandated by those in power. Despite changes in the form and content of schooling, “a major part of the history of U.S. public schools is the attempt to ensure the domination of a protestant Anglo-American culture in the United States” (Spring, 2005, p. 3). In reaction to this brazenly exclusionary policy, social reformers and justice-oriented educators have repeatedly called for the reformation of schools toward a more inclusive, democratic and multicultural paradigm. Transformative service-learning provides educators the framework to teach the language and process of progressive social action, toward a more justice oriented and participatory citizenship.

While service-learning simply refers to the intersection of academic learning and community service projects toward the students’ personal and educational development, it does not necessarily address the social, political and economic structure creating the inequality itself. A transformative service-learning, or “service-learning for social change” pedagogy however, recognizes and addresses the “tensions” between ostensibly value-neutral “mainstream status quo knowledge” (Vavrus, 2002, p. 7) and the structural inequalities which perpetuate Anglo-American hegemony and privilege (Claus & Ogden, 1999; hooks, 1994; Kahne & Westheimer, 1999, 2004). Transformative community service-learning does not seek to minimize cultural differences amongst students and the communities they interact with, but to

recognize strengths of, celebrate and learn from them. Furthermore, in their exploration of proper and effective ways to address social inequality, students begin to recognize the limitations of reform tactics such as voting, lobbying and changing laws.

The relationship of education and experience was first brought to the mainstream educational discourse by John Dewey, who recognized that learning occurs with the application of newly acquired (academic) knowledge to the life experience one already possesses (Conrad & Hedin, 1991; Dewey, 1938). Service-learning presents students with the opportunity to identify a problem in the community in which they are already invested, explore its structural roots, and work toward alleviating it. During this process the student undertakes cooperative action with community members and school peers, gaining academic skills and experiential knowledge, and reflects upon the project, prior assumptions and newly acquired knowledge (Clause & Ogden, 1999; Conrad & Hedin, 1991; Cruz, 1990; Kinsley, 1993; Macnichol, 1993; Rothamer, 1997; Wade, 1995, 1997a, 1997b, 2000; Westheimer & Kahne, 2004). Transformative service-learning takes this basic structure a step further in its ultimate goal of creating that which Westheimer and Kahne (2004) call the justice-oriented citizen, who recognizes the political and social structures at the root of an injustice, and consciously acts to effect social change. Ultimately, the theory at the root of service-learning is that “...development occurs as individuals strive to come up with more satisfying and complex ways to understand and act on their world (p. 745).”

As Conrad and Hedin (1991) note, “youth community service advocates” tend to fall into two dominant camps. The first sees service as an opportunity to address issues of non-participation, political apathy and social malaise perceived in youth. Such arguments tend to harp on the low voter-turnout rates among younger demographics, the apparent lack of interest in volunteering and the perceived rise in individualistic interests and decrease in the concern for the common good. These advocates generally look to the stand-alone service structures such as Americorps, church and school-based service clubs, and boy-scout type activities to increase “democratic participation.”

The second camp sees the potential of service as a tactic in the reform of the educational structure rather than in the motivation of youth. Service-learning in this respect, is seen as a means by which to meet the objectives of the personal, intellectual and social development of students, through the incorporation of meeting real needs in the community (Conrad & Hedin, 1991). Thus, students see their education in action and recognize its worth as a useful tool for personal and social fulfillment.

This paper focuses on the benefits and structures of the latter. While Americorps and voluntary community service projects certainly have positive benefits to the youth involved and communities served, they have little application in addressing the shortcomings of public schooling. Service-learning on the other hand seeks a holistic and community centered approach to learning, and to supplement that which is missing in the seemingly disconnected knowledge imparted in the traditional classroom format.

Primarily working from qualitative analyses of the social and emotional impacts of service-learning, this paper seeks to identify and define the key ingredients in creating a transformative service-learning curriculum. While it is unlikely that service-learning will ever stand alone as a mainstream pedagogy, its potential to integrate academic learning into real situations while making critical connections between privilege, injustice, inequality and social responsibility is profound.

## **Literature Review**

### **The Role of Service-Learning in Education**

Service-learning provides an opportunity for teachers to implement a dynamic and socially relevant pedagogical practice in any subject area. By basing educational experiences in real

community issues, students gain skills in critical thinking, analysis, cooperative problem solving and in undertaking social action. Masucci and Renner (2000) cite Antonio Gramsci in recognizing the responsibility of the intellectual to strive for an acute understanding of the complex theoretical underpinnings of society, while simultaneously democratizing this understanding by educating the general population. In the public school, it is the classroom teacher and the curriculum that take on the role of clarifying inequality and injustice, and in providing the lenses through which the students learn to see and interact with the world. Thus, an educator teaching from a social justice framework has the responsibility of recognizing and educating about the role hegemony plays in social inequity, and in light of this knowledge, empowering students to effect positive social change. Service-learning provides the educational bridge between the classroom curriculum and meaningful experiences of service in the community (The Center for Human Resources, 1999).

Transformative service-learning charges students with the task of recognizing the structural origins of social inequities, working toward their alleviation, and reflecting on their roles and responsibilities in the community. In direct contradiction to that which Freire called the “banking system” of education, which limits education simply to the practice of a teacher imparting knowledge and students passively receiving it, transformative service-learning strives to incorporate Freire’s notion of “praxis” as action informed by theory (hooks, 1994). From this perspective, learning occurs in the exchange and interaction of the teacher, the students and their community.

### **A Short History of Service-learning in Schools**

The notion of service as a method and means of education is at least as old as William Kilpatrick, who talked of the “project method” of education, where learning outside of the school and meeting community needs were the main means of education. John Dewey combined this idea with Piaget’s theories on human development resulting from interaction with the environment. From this combination came Dewey’s oft-cited work *Experience and Education* (1938), which criticized the constraints of the traditional classroom methods of instruction and called for education through structured explorations and applications of life experience. This work validated and

mainstreamed the idea that school reform and meaningful, successful education could be affected through the integration of the community into public education.

While school based community service has been a tradition in the U.S. dating back to the 1920's, Conrad and Heden (1991) refer to the Citizenship Education Project, initiated by Columbia University during the Eisenhower administration, to be the first integration of service-learning as a pedagogy into the public school curriculum.

According to Stanton, Giles, and Cruz (1999) the modern incarnation of service-learning arose in the late 60's as a socially responsible and politically motivated movement charged by the war in Vietnam, the Civil rights movement and the War on Poverty. In response to these issues, community activists and educators began working to connect education to the community in more socially and politically relevant ways. The earliest written definition of educational service-learning with a community and local-justice emphasis is found in a 1969 Southern Regional Education Board (SREB) publication as: "The accomplishment of tasks that meet genuine needs in combination with conscious educational growth." (Stanton, Giles, & Cruz, 1999). The seventies saw several influential reports from the National Committee on Secondary education, the Panel in Youth of the President's Science Advisory Committee and the National Panel on High School and Adolescent Education, which condemned schools for their production of passive youth and urged that students be afforded more responsibility through community integration and real and meaningful tasks (Conrad & Hedin, 1991). Since this resurgence, those aiming to reform schools and youth alike have produced volumes of curriculum, studies and theories regarding the implementation and uses for service-learning in schools.

Today, service-learning experts agree that effective implementation must combine the meaningful, community-based service component with academic and curricular goals, including reflective and groupwork activities. These components help to foster the spirit of collaboration, promote higher-order and critical thinking skills in students, a sense of social responsibility, increased self-esteem and student efficacy. Recently government endorsements have helped to validate the practice in U.S. society; The National Community Service act of 1990 was put into practice by the first Bush

administration, and expanded upon by the Clinton administration with the National Service Trust Act of 1993. These were designed to provide federal support of community service and service-learning through schools and in the creation of the federal Cooperation for National Service (Halsted, 1999).

### **Educational Benefits of Service-learning**

Eric Erikson (1968) postulated that political commitment is a key aspect of identity formation in adolescence. Erikson defined identity formation as an outward-looking process in which youth anticipate their lives as adults and struggle to understand who they are within a social and historical framework. During this process, youth absorb and synthesize the norms, ideologies, and traditions of their communities and look for ways and possibilities of fitting into that system upon adulthood. Yates and Youniss (1998) define civic activity as an integral part of an individuals' personal politics, and show that the kind of service-learning and activism in which young people participate, directly affecting their community involvement and civic activities up to fifteen years later. In this same study, the authors note that inner-city youth who engaged in sustained service-learning projects in their inner-city community articulated a close relationship between the service to their community and their burgeoning self-understanding. Indeed, service-learning can help students gain an understanding of "...how they relate as individuals to their community and how they function as citizens" (Kinsley, 1993, p. 56). Wade (1997) states that the value of service-learning is inherent in its very philosophy and structure:

It is difficult to base a service-learning project on competition or individual success. Service-learning projects are team efforts, involving collaborators both in and outside of schools in pursuit of a common cause, a shared goal. The practice of service-learning, then, can have a transformative effect on the individualistic values of schools and communities, and on the values of the people within them (p. 332).

Properly conducted, a service-learning experience can help students to incorporate civic duty and positive community interactions into their self-definition. An example of this is evident in a study of college age participants in the 1964 Freedom Summer which showed that



youth who are politically active at fifteen are more likely to engage in future progressive political organizing and be actively involved in various community organizations. In addition to this, they also perceive themselves as having agency to enact social change and alter the course of history and came to view their generation's actions with pride as having helped shape the political and moral direction of the nation. (Yates & Youniss, 1998). The majority of teachers who participated in the Freedom Summer were found to have had prior service experience as a child in their family, community, schooling, or as an adult (Seigel, 1997). As these this demonstrates, those with prior community service experience tend to encourage others (often their children or students) to value and participate in community service activities. Thus, the ideals of community service tend to perpetuate themselves through successive generations of participants.

There are also quantitative academic benefits of service-learning, although they vary from study to study. In the 1998 Evaluation of K-12 Service-Learning in California, conducted by the California Dept. of Education, Weiler et al. found that in six of twelve programs studied, students experienced positive academic results in language arts and reading, homework completion, achievement tests, an increased sense of educational accomplishment, and heightened educational aspirations. The effects on the other six were either not of statistical significance or showed slight negative impact. The Center for Human Resource Studies at Brandeis University (1999) found that students involved in Learn and Serve programs demonstrated statistically significant gains in math grades and school engagement, and marginal positive impacts in science and on overall GPA. Conrad and Hedin (1991) note that researchers consistently show benefits in reading and math skills for students who serve as peer reading tutors. In their own research they have found that students who engage in school based political and social action and community problem solving show an increase in analysis skills. It is important to note the variations in the perceived academic benefits are likely due to the inconsistent structuring of the different experiences, varying teacher competence, training, and the quality of service-learning implementation.

Teachers report many benefits resulting from incorporating service-learning into their pedagogy. Seigel (1997) cites teachers as having

reported increased student motivation and learning, more creativity in developing curriculum; positive recognition from administrators, faculty and parents, and positive public and media attention. Seigel goes on to note that student reactions to service-learning were characterized by words such as "excited", "enthused" and "proud." Teachers see positive changes in attitude toward subject matter and cite the most rewarding aspect of service-learning as being the improvements in their students' motivation to learn (Seigel, 1997).

### **Service-learning for All Students**

While schools struggle to stay current with the changing economic and social needs of students, the social and economic networks that serve to support general youth development continue to deteriorate. The political, economic and social realities of today's high school student are often those of increasing poverty and single parent homes, rising rates of violence in urban communities and rising teen drug abuse and pregnancy in other communities (Hill & Pope, 1997). Be it a wealthy suburban student struggling to conform to intense parental and social expectations, or an impoverished inner-city student who must endure a daily gauntlet of violence and poverty conditions in attempting to achieve in a hostile school environment, the pressures under which every modern American student must operate can be intense and debilitating. For immigrant and ESL students, the language, economic, cultural and prejudicial barriers can be devastating.

Hill and Pope (1997) warn however, that insofar as teachers, students and administrators have been found to live in a "crisis environment" often shaped by physical fear and a sense of hopelessness, it is simply unreasonable to consider schools to be an automatic and readily available panacea or a "haven" for students. Rather, teachers can focus curriculum on empowering students to improve conditions for themselves and their communities. Service-learning can be applied in virtually any community, be it rural, suburban or urban, needing only a community need or specific issue to address through direct action.

Despite political, social and economic marginalization, some of the most promising environments for progressive implementation of service-learning programs are in low-income urban areas. Paulo Freire, the radical Brazilian educator and philosopher advocated the theory of "conscientization" as a means to turn oppressive

conditions into tangible opportunities for the education and radicalization of students through meaningful community interaction and improvement (Freire, 1970). In describing the opportunities for empowering community service in communities with few resources, Ovando, Collier, and Combs (2003) state that “the child exists within the context of the community, and this community therefore is a vast resource for the development of the child” (p. 409). Thus, while a student may be forced to struggle within and against oppressive living conditions, it is these conditions that provide the tools for transformative education.

Resiliency in impoverished youth from stressful living situations and poverty is a protective factor which appears to be in part a biological trait, and can be increased in students who have access to support networks and mentors such as healthy and productive school environments, and community organizations such as the YMCA and 4-H (Werner, 1989). Presumably, by properly tailoring a service-learning curriculum to each student’s educational need, a mentor and positive environment could be provided for a student, thereby increasing the likelihood for resilient students to thrive. Reed and Davis (1999), found that resilient students in poor urban environments had in common an engagement “in meaningful activities both in and out of school—for example, service-learning experiences such as visiting the elderly, volunteering in hospitals, collecting clothing for the homeless, and tutoring and mentoring” (p. 2).

### **Service-learning for Social Justice**

Dozens of service-learning approaches exist in public schools, and often they strive for different outcomes. While all service-learning models integrate “school learning” with experiential learning, most miss critical ingredients that might make the experience transformative. Adams, Bell, and Griffin (1997) define a socially just society as one which all members basic needs are met, are physically and psychologically safe and secure, are able to fully develop, and who can interact democratically with one another. Service-learning for social justice should be designed with these ideals in mind, and also model these values of social justice, democracy and multiculturalism in the makeup and design of the experience by allowing the students and community large parts in the planning.

As articulated in Table 1, transformative service-learning for social justice is markedly

different in practice and outcome than other forms of service-learning. Kahne and Westheimer (1999) propose two general categories that service-learning models tend to fall into. The first is the “charity model”, which promotes ideals of giving, civic duty, and a sense of altruism in the students. This model takes a decidedly additive approach which does not place emphasis on social change, but rather hopes that students might gain a feeling of responsibility for “those less fortunate” (Clause & Ogden, 1999, p. 29). The second approach the authors pose is the “caring model”, which puts focus and emphasis on ideals of social reconstruction, empathy, and a critical understanding of the causes and conditions of social problems such as poverty, homelessness and inaccessibility to resources, among others. The caring model strives to give students a personal framework for placing themselves into the social system, and the tools to act as agents for change. Within this model, teachers promote a personal schema which Westheimer and Kahne (2004) call justice-oriented citizenship, having students working collectively from a socio-political critique toward effecting systemic change.

Clause and Ogden (1999) note that the essential difference between the charity and caring model is the physical and intellectual proximity of the service-learner and the social ill being addressed (Clause & Ogden, 1999). Further, transformative service-learning strives to create a situation where the student can “apprehend the reality of the other”, and find ways to “...struggle [for progress] together” (p. 29). While charitable service-learning perpetuates the elitist sense that the privileged students are somehow better than those that need help, and de-emphasizes the common interests amongst all members of a community, the caring model challenges students to realize that while they may have a more fortunate or affluent life, the “other’s” reality is the result of dynamic social and political structures, and that the privilege of one member of society is at the expense and neglect of another.

Addressing structural inequality, understanding common interests across cultural boundaries, and being able to articulate the benefits of working for the justice of others must be essential goals of transformative service-learning, while the overall intellectual goal is for students to gain the foundations of critical thought. Through hands-on experience, students explore notions of justice, inequality, democratic

Table 1: Models of Service

	Community Service	Charity Based Service	Transformative Service
Goals Pursued	<ul style="list-style-type: none"> <li>• very little discussion of reasons for service</li> <li>• project often stems from a punishment or disciplinary action</li> </ul>	<ul style="list-style-type: none"> <li>• students taught empathy and responsibility for “those less fortunate”</li> <li>• charity, empathy and responsibility are emphasized</li> <li>• human relations approach emphasized</li> </ul>	<ul style="list-style-type: none"> <li>• students seek points of solidarity with marginalized people</li> <li>• works to counteract stereotypes</li> <li>• critically analyzes systems of power, privilege and hegemony</li> </ul>
Approach Taken	<ul style="list-style-type: none"> <li>• superfluous/additive</li> <li>• supervision is minimal</li> <li>• accountability is minimal</li> <li>• project success based on number of hours served, not quality of service</li> <li>• little or no reflection</li> </ul>	<ul style="list-style-type: none"> <li>• additive</li> <li>• range of supervision from little to a lot</li> <li>• project success based on teacher criteria</li> <li>• reflection based on teacher criteria</li> </ul>	<ul style="list-style-type: none"> <li>• transformative</li> <li>• close supervision and mediation required</li> <li>• students assessed on accountability, responsibility, and ability to synthesize information</li> <li>• reflection is a key component</li> </ul>
Results	<ul style="list-style-type: none"> <li>• students gain little education or meaningful experience from project</li> <li>• volunteer tends to come away with an aversion to such work</li> </ul>	<ul style="list-style-type: none"> <li>• project may reinforce stereotypes/ social stigmas because systemic inequity is not addressed</li> <li>• students learn to “feel bad” for marginalized populations</li> </ul>	<ul style="list-style-type: none"> <li>• students understand systemic causes and perpetuation of inequality</li> <li>• students learn to work with marginalized populations, gaining understandings of mutual community benefits</li> </ul>

participation, distribution of wealth, and access to resources. The reflective component charges students to process and synthesize what they have learned and, based on these new understandings, decide on further action. In Masucci and Renner’s (2000) words:

...reflection allows all partners to consider where they have come from and where they have gone, what changes need to be made, what improvements should be considered for the future, how the project should be demonstrated to those outside the alliance [of student/community], and what the next step should be (which becomes a pre-reflective step toward engagement in a new project or to a more critical involvement in a radically democratic society). (p. 38)

### Challenges to Effective Practice of a Service-Learning Curriculum

In considering the implementation of a service-learning program, it is important to be wary of certain obstacles, likely missteps, and possible negative outcomes that might arise. Good intentions are simply not enough to create a successful service-learning project. Teachers must carefully construct the project toward a safe, interactive, meaningful and ultimately transformative experience for all involved.

In a critique of public school culture as it pertains to service-learning pedagogy, Rahima C. Wade (1997b) identifies three overriding issues which are common problems for many teachers in implementing service-learning projects. First is the value placed on individual achievement over groupwork and collaboration amongst students. This is a theme pervasive in schools as they mirror the values of U.S. society and culture. Time and scheduling issues are identified as the second major barrier. Wade

emphasizes that teachers need a considerable amount of planning, preparation and coordination time for service-learning projects to be properly structured. Thinking creatively with other teachers in addressing curriculum through the project, scouting and planning with site specific community coordinators, finding funding and making logistical arrangements for group transportation, and getting reliable student supervision are all basic issues which cannot be overlooked. Assuming all of these factors were planned out meticulously, arranging for time in the school day or on weekends to allow students enough time to work at on the project could very well conflict with other classes and school sports. The principal and school board support are absolutely vital in creating an atmosphere conducive to addressing these issues.

The third challenge that Wade identifies is the assumption that “learning” in school is to be done in a hierarchical classroom structure, with the “knowledgeable” teacher presenting information to “unknowledgeable” students for memorization and recitation (Wade, 1997b). This closely parallels Freire’s notion of the “banking” method of education, which fails to account for student curiosity, initiative, or the desire for students and teachers both to positively impact their community. Research has shown that students do in fact learn by gaining understanding and meaning from their experiences, however schools rarely incorporate direct experience into the curriculum. Even if there is a service-learning graduation requirement (which many schools have implemented), without proper frontloading (the practice of activating prior knowledge and beginning a framework and schema within which to incorporate the experience), reflection and discussion, the experience will most likely be additive, leaving little if any impact on student political development, and possibly perpetuating stereotypes rather than interrogating them. In addressing these issues, Wade (1997b) suggests paid planning time, and school-site workshops to foster collaboration amongst teachers and administrators. Her analysis ultimately recognizes the need to fit service-learning into existing public school structures while at the same time attempting to transform them.

If a service-learning project isn’t structured carefully, the results may turn disastrous. Wade (2000) notes for instance, that if students from a privileged dominant culture interact with community members from a marginalized culture in a way that is condescending,

patronizing, or arrogant, serious issues will arise that will be in direct conflict with the aims of the project. She warns that poorly planned and implemented service has the possibility of “enhanced resentment, guilt, humiliation and alienation for all involved which can culminate in the pain of embittered polarization”. Cruz (1990) offers further clarification: “in the context of conflicting interests and historical dominance of one racial or gender group over another, it is possible that ‘service,’ in and of itself, can have racist or sexist outcomes despite good intentions (p. 322).” Proper pre-reflection addressing respectful cross-culture communication, power and privilege, and the notion of community collaboration and empowerment over charity, work to circumvent these pitfalls. Teachers planning to engage in a service-learning project must be absolutely meticulous in format, structure, implementation and reflection to the ends of subverting these possibilities while critically analyzing with students why they might occur.

### **Examples of Successful Service-learning Projects**

Although service-learning is often considered a tool solely for social studies educators, interdisciplinary models have proven to be very effective in teaching across all major secondary school subjects. Science teachers for example, are integrating service-learning into biology and ecology units, math teachers apply complicated lessons to budgeting minimum wage paychecks, foreign language students tutor ESL students in elementary literacy programs, and English teachers combine relevant classroom literature with field service experiences in homeless shelters, soup kitchens, low-income housing construction projects and women’s shelters. The notion of service-learning as the sole domain of the social studies teacher is neither accurate nor desirable in a service-learning pedagogy.

The applicability and effectiveness of cross-curriculum service-learning projects lies in the notion that cultural relevance is a key factor in academic achievement. As Ovando, Collier, and Combs (2003) state, “It is axiomatic in educational circles that all students learn best when they experience curricular content and processes that mirror their cultural, linguistic, and socioeconomic realities (p. 5).” Therefore, the more the curriculum is tailored to the culture of the local community, the more apt students are to acquire and synthesize knowledge gained from the experience. Providing the theory behind

transformative service-learning allows only a cursory understanding of what successful implementation might look, thus Hill and Pope (1997) have offered several model projects to demonstrate how different content areas might implement the aforementioned suggestions.

*Foreign language education.* Junior and senior Gig Harbor High School high school students partner with the Latino community to write and translate children's stories into Spanish. Students in the Gig Harbor drawing class illustrate them. When finished, the books are donated to the Martin Luther King Shelter for homeless families. Parents staying at the shelter are welcome and encouraged to read the books to their children as part of a literacy program.

While this experience integrated concepts of cross-class communication and multiculturalism, a transformative experience might have included an in depth analysis of the political economy of poor families, Latino populations, and the connections between literacy, language and access to resources.

*Adult literacy/immigrant studies.* Advanced foreign language students at Sequoia High School in Redwood, CA participate in an adult education literacy program for recent immigrants. Students first interview the immigrants in Spanish, then create written histories from the responses. The final compendium of the interview, complete with pictures and computer graphics are presented to all literacy program participants and family members of the students.

A transformative approach in this case could include critical study of the politics and economics of immigration, and the myriad of labor and access-to-resources issues associated with illegal immigrant status, as well as nationalist rhetoric, white privilege and the political debate raging over ESL classrooms in California schools.

*Special education.* A California project integrated students from the regular high school program who assist special education students in the creation and maintenance of a school garden. The produce grown, monitored and harvested by the students, with assistance from the school biology program is eventually transported to St. Anthony Dining Room, who then dispenses the food to free food recipients. Flowers and a special lunch are also provided to teachers and staff at the school on special appreciation days.

Transforming this experience might incorporate critical study of able-bodiedism and mainstream (mis)conceptions of people with special needs, community gardens vs. corporate farming, and community efficacy in providing for the hungry and homeless.

*Science and environmental education.* The St. Louis River Watch Project, Coordinated by Jill Jacoby of the Minnesota Pollution Control Agency, connects the curriculums of both Minnesota and Wisconsin school districts, government agencies and institutions of higher learning. The program employs a service-learning curriculum in biology, chemistry, earth science, English and civics to teach the history of the watershed and its commerce, to write scientific and creative writing assignments about the river, while the shop teacher educates about hazardous waste disposal. Jacoby summarizes participant student reactions in saying, "The river is in my backyard, but I never knew anything about it. Now I want to protect, clean it up, deal with it" (Hill & Pope, 1992, p. 192).

Transforming this experience might incorporate politically focused lessons on the economic causes of irresponsible hazardous waste disposal, government regulation of pollution, the physical and genetic effects of chemical exposure, and the cultural and economic politics underlying the disproportionate dumping of waste in poor and non-white communities. In this examination of the economic and social inequity that allows for and perpetuates such environmental destruction, the experience goes from merely a social action experience to a transformative one.

## Conclusions

The positive effects of service-learning on students and school structuring are many. Properly structured and implemented, students and teachers will benefit from the social interactions and teachable moments occurring from cooperative tasks and group reflection. From the social perspective, service-learning often has positive impacts on social relations in a school, such as enhanced interpersonal appreciation amongst and between students and the teacher. In a 1991-92 CSL experience of managing and running a community theater together in Springfield, MA, a group of middle schools students and their teachers reported realizing "a deeper appreciation of each other" and that it "enhanced their relationships", and that they began to know each other as "real

people.” This was evident not only in midst of the service-learning activity, but actually carried over into the classroom. Teachers subsequently reported raised expectations for their students, and fewer discipline problems (Kinsley, 1993, p. 56).

From an academic perspective, the teacher must understand that the reason for implementing service-learning as a teaching strategy is not simply to update outdated teaching methods, but to revolutionize the way students approach academic knowledge. Students recognize that there is no inherent worth in the simple knowing something. Rather, it is in the application of knowledge that students discover how to use their education for personal and community betterment. In the classroom, one will often hear frustrated and bored students asking “When will I use what you are teaching in real life?” Community service-learning dissolves the boundaries between traditional schooling and community life in the pursuit of an education that is directly applicable to real, local situations, thus integrating application and results into the curriculum. This has proven to be motivating and empowering to students more so than just grades and class rank. Service-learning projects, being multifaceted in their planning and implementation diversify the types of talents and intelligences students can use to accomplish work goals, so as to be more inclusive to those who haven’t been receptive to traditional lecture and classroom style learning. Students more concerned with learning life and work skills than academic knowledge will benefit from the hands on components of a stream cleanup, a Habitat for Humanity build, or a class initiated legislative action. In effect, “real life” becomes the classroom.

Service-learning is applicable to students of every age, ability, race, cultural background, and from every community. While service-learning may require a reshuffling of school schedules, it does not necessarily require any major increases in funding, so schools normally limited by inadequate funding can participate. The implementation of such a curriculum simply requires an issue to address and a teacher and student body who is willing. The types of projects are endless, and whether it is an urban beautification project, a peer tutoring program, an environmental pollution research and cleanup project, or reading to the elderly in a nursing home, there are always opportunities for students’ artistry and creativity to be incorporated into the act. This gives students

who come from impoverished or disempowering home lives the freedom to assert ownership and a locus of control over their own accomplishments in the field.

While all community service-learning projects should be student centered and grow out of students’ interests and academic desires, proper and effective guidance is essential in creating a project which is helpful to students personally and academically, and which also benefits the community in some way. The teacher is the mentor, facilitator, example-setter and source of knowledge for students entering into a new and possibly intimidating experience, and thus should be careful to properly prepare students for foreseeable bumps in the road, as well as for likely successes. Truly successful community service-learning calls for a leveling of power dynamics between teacher, student, and community members. Input from all three must be taken into account and adequately valued.

As a school reform tactic, community service-learning is able to go a long way in influencing students to become active and effective citizens. Furthermore, transformative community service-learning asks of students not just to be active citizens working for social justice and social betterment, but to be critical of the methods of social change they engage in, and in the institutions they choose to support. Such transformative education requires that students examine their own lives, modes of thinking, and cultural influences, while gaining an understanding of society that goes beyond the thin and self contradictory myths of American justice, equality, and opportunity.

Transformative service-learning turns social-inequity on its head by discrediting the logic which perpetuates marginalization, oppression, and poverty. The resulting acquisition of critical thinking and personal reflection skills will be useful to every student’s future pursuits. The contribution they’ve made to their community will be a source of pride and accomplishment, and the good they have done in their service learning will have positively affected their community and the lives of those around them.

### **Recommendations For Practice**

Though each community service-learning project is as unique as the participants and the issues they address all have the basic underlying structure of preparation, action and reflection. For the purposes of this section, Masucci and Renner’s (2000) Critical Service-learning model (CSL) will be used as the framework, with

Table 2: Step-by-Step: Designing a Transformative Service Learning Experience

Steps	Description
Pre-project planning	Gain the support of fellow teachers and supervisors. A teacher must have the infrastructure and backing to take on such an intricate and demanding task. Be ready with a list of materials, transportation requests, and potential logistical issues that must be addressed by supervisors. Offer co-workers the opportunity to take advantage of interdisciplinary opportunities presented in their classes.
Find an issue	Involve students and community members/institutions in researching what is already going on in the community. Allowing students a voice in the process strengthens efficacy and commitment, and their genuine interest and input will be a major component of the success of the project. Good places to begin looking might be a local soup kitchen, the head-start program in an elementary school, the local Habitat for Humanity, or the YMCA Earth Service Corps. Local institutions can offer a specific need that requires the type of manpower that several dozen high school students can provide, and with a basic framework already in place.
Frontload, research, and explore	Once a project begins to come into focus, the teacher must begin to frame the project in intellectually and emotionally engaging ways. There should be a buildup of anticipation within the students stemming from discussions and critiques of social justice, community empowerment, and grass-roots activism. Students should be shown that their contributions will be having a real and concrete effect on their community and thus they must be prepared to take the activism seriously. This is also the time to discuss possible obstacles, probable roadblocks, and how to deal with contentious situations arising from interactions. Give students a clear understanding of why they are there, a mission statement, and ground rules to follow regarding conduct, interactions, and what to do when problems arise.
Taking action	Plans, time frames and specific tasks should be completed at this point. Specific goals must be established, and clear expectations should be discussed for the teacher, students, and community partners. Student assessment criteria and rubrics should be developed and provided to students and the community partners. Permission slips and letters must be sent home to parents explaining what the project is, where it will be taking place, and who is involved. When in the field, the teacher must act as a motivator and mediator for and between the students themselves, and the community partner. Cooperation is the goal, not charity. Field evaluation begins at this stage through reflection, discussion, writings assignments, etc. This should provide the opportunity for teachers, students and community partners to participate in the evaluation process.
Reflection	The final stage of the project is also the most intellectually engaging. Students and teacher should lead discussions debriefing the experience, making connections between learned concepts and actual experiences, and a wrap-up assessment activity can be given. The discussion must be safe and non-judgmental as students may have unresolved or sensitive issues to discuss based on their experiences. This discussion and any corresponding assignments can also be used in evaluation of the project, students' performance, teacher's performance and input, and the community partners' participation.

modifications, for outlining the steps in constructing a community service-learning project. As summarized in Table 2, prior to beginning any activities with students, the teacher must confirm the support of the principal

and supporting or cooperating staff. The involvement of the principal in his or her willingness to allow a teacher and class the somewhat risky undertaking, their involvement in the project itself and in community outreach

and public relations can have a large influence on the degree of success of a community service-learning experience (Kinsley, 1993, p. 53). Teachers other than the community service-learning coordinator should be encouraged to integrate the service experiences into their own curriculum both to enhance the breadth of experience for the students, and take advantage of the common first-hand experiences of the students (Kinsley, 1993, p. 54). While these cooperating teachers occupy an academically supportive role for the hands on portion of the project, these other angles broaden the legitimacy of a community service-learning experience, and provide students an opportunity to translate their service experiences into such basic skills activities as writing, logic and scientific application (Kinsley, 1993, p. 54).

The first step in developing the project is allowing the community a voice in articulating their needs and the talents they bring to the process (Kinsley, 1993). This community perspective informs the students about needs and possible directions in undertaking a project. It is essential in this first stage to hear the voices and wishes of all of the participants, teacher, community, and students (hooks, 1994). This stage, called "pre-reflection", is useful to the classroom by allowing students to academically and emotionally prepare for the community service-learning experience. Masucci and Renner (2000) describe the effects of pre-reflection in one classroom: "The pre-reflective stage allowed for the examination of pre-conceived assumptions and prejudices. In addition, it helped participants to challenge and expand these notions by fostering a dialogue, ...among those from diverse experiences" (p. 39). This practice should include discussing the historical roots of injustice, brainstorming approaches, predicting obstacles and outcomes, and questioning methods and motivations. Pre-reflection activates student's prior knowledge and experience and begins to connect the social issues to students' lives. This stage provides the teacher the opportunity to foreshadow outcomes and potential lessons.

The second step in the process according to Masucci and Renner (2000) is a discussion of theory surrounding the social relationships they will be encountering during the project. This discussion should focus on power relationships, social inequality, hegemony, some basics of capitalist economics, and the role of community service-learning in their education. In doing this, students gain a basic framework for socio-

political and economic critique, as well as an understanding of the ways in which they are to learn from experience and "real-life." For references on social justice and radical theory, teachers can look to authors such as Michel Foucault, Michael Parenti, Noam Chomsky, Miles Horton, Antonio Gramsci, Michael Alpert, Robin Hahnell, Paulo Freire and bell hooks. This step also provides an opportunity for the teacher to assess the political orientation, open mindedness, commitment level, and particular skills of students. Throughout the course of the pre-reflective stage, the teacher should keep in mind Dewey's thoughts on the value of student discovery of knowledge, and the importance of giving students the proper research, organization and analysis tools to draw reasonable conclusions about social issues (Landau, 2004).

The third step in creating a successful community service-learning project is the physical undertaking of the task. First, the teacher must assess community resources, dialogue and carefully plan the action with community partners, and establish specific expectations regarding involvement of all participants. The action itself must be guided by specific goals, timeframes, roles, and expectations set forth in the pre-reflective stage by the students, teacher, and community. Assessment criteria and goals of the project must be clear to the students so as to give them a sense of accomplishment. Above all, the teacher must be diligent in watching for and addressing any conflicts or contentions that arise between students and the community. The nature of the project is cooperative; Achieving and maintaining respect must be of highest importance.

Reflection is the final formal stage in the community service-learning project, and the most important in determining students understanding of the overall experience, although Halsted (1999) correctly notes that simple check-in style reflection should be occurring at every stage of the process. The reflection stage gives students the opportunity to debrief, synthesize and explore how the experience has affected their outlook on community, society, power and privilege and their own role and responsibilities. It is essential that the reflection portion be held in an intellectually and emotionally safe space to allow students to speak freely, support and disagree with each other, have a critical dialogue and articulate as a group the larger meanings of the experience (Masucci & Renner, 2000). Yates and



Youniss (1999) have found that reflection helps to reinforce a sense of group cohesion as student's reactions were validated by one another. In students' reflective essays, the discussion process also proved to compliment and help elaborate students' analysis of their experience.

In setting clear goals and learning targets for a particular community service-learning project, teachers must keep in mind the limitations of the impacts that the project can have on the community and the realistic expectations of student gains in political awareness, social skills, critical thinking, and understandings of the inner workings and influences behind their community and broader society. Community service-learning shouldn't attempt to cure social ills, but to empower students to incorporate the value of service into their schema, and give them the tools to continue working for social justice and equity while directly impacting their community (Wade, 2000).

Ultimately, the most effective community service-learning experiences will come from a district wide incorporation of community service-learning. This incorporation would support beginning projects early in the students' school career and would continue through graduation. Just as one learns math and language in developmental stages, students arriving at high school should be prepared through prior experiences of increasing levels of engagement and sophistication to begin undertaking CSL projects which are more theoretically and physically complex, increasingly demanding of the students' intellectual capacity, and continuously more progressive, toward the ultimate goal of being transformative (Kinsley, 1993). It is important to note however, that while the district should provide the infrastructure and monetary support for the projects and teacher trainings, the most effective projects are those that students and teacher initiate together in classrooms (Nathan and Kielsmeier, 1991).

Those districts, including the teacher, principal, and administrators who choose to integrate community service-learning into their curriculum, must recognize that community service-learning projects have complex theoretical frameworks and agendas as well as practical applications. Implementing a community service-learning pedagogy without reflecting on and deliberately guiding the values that are communicated to students and the community is irresponsible. Clause and Ogden ask the essential question of "In service of

what?" In other words, are we consciously transferring to our students values of community empowerment, cross-cultural and inter-gender respect, global anti-poverty and anti-racism, and local control over decision making and resources? Or are we allowing the status-quo values of materialism, white privilege, misogyny, and individualism to pervade public education. Indeed, what is taught through public education is inherently political in its messages and through its approaches, but exactly what politics are learned depends upon the values emphasized by the instructor and pedagogy. It is the politics of community empowerment and justice that must be emphasized through community service-learning in creating effective, responsible and fair citizen-students.

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Aimee Beth Leggett

## **A Transformative Multicultural Education in the Visual Arts**

*This paper explores the possibility of socially, culturally, and democratically responsive teaching in the visual arts through a transformative multicultural art education. Research and scholarship support students' better understanding of our multicultural, multilingual nation through a transformative art education that focuses on multiculturalism and institutionalized oppression. Transformative art education can give students opportunities to form identities in opposition to the forces of inequity. This paper highlights how transformative teachers interrogate the culturally exclusive canon and Eurocentric values behind notions of art and draw on history and social studies to contextualize art in the real world. This can reinforce interdisciplinary content and possibly improve test scores in other subjects by creating a learning environment conducive to students' multiple intelligences and learning styles.*

The American school generally mirrors the world of White, middle class America. It reflects middle class, Eurocentric values, language, and traditions on all school participants. When students of color, low socioeconomic status (SES) students, sexual minority students and language minority students do not see themselves in the reflection of their school's priorities, they consequently are not seeing themselves reflected in their nation's priorities (Tatum, 1997). The lack of diverse representation in school curricula and policies has been a correlating factor in social marginalization and exploitation (Banks, 2001; Shannon & Bylsma, 2002; Tatum, 1997; Vavrus, 2002). There is a need for commitment by educators, administrators, and representatives to advocate for a pedagogical reform with equitable educational opportunities for all students (Banks, 2001; Vavrus, 2002). This paper addresses the need for equity by advocating for a transformative multicultural educational reform. A transformative educational reform goes beyond adding multicultural materials to an established pedagogy. It begins with reforming the school-based ideology and practices that have been used to perpetuate inequity and institutionalized racism (Banks, 2001; Vavrus, 2002). To be most affective, a transformative multicultural pedagogical reform would be system wide but can have a strong impact even without systemic support. Individual classroom teachers can adopt transformative approaches. This paper targets the contributions of art educators and the possibility of socially, culturally, and democratically responsible teaching in the visual arts.

Art education in the public schools is in dire need of reform. Its status as a subject of study is being jeopardized by the growing dependence on standardized testing and the effects of No Child Left Behind (NCLB) (Chapman, 2004). Two major reform criteria must be met. First, art education must challenge the culturally exclusive canon and the Eurocentric values that are deeply imbedded in the common treatment of art education (Cahan & Kocur, 1996; Lippard, 1990; McFee, 1995). Second, it must provide more meaningful, holistic educational opportunities for *all* students (Cahan & Kocur, 1996; Freeman, 1995). This paper describes three research supported domains that can be used as the underpinnings of a transformative art curriculum. The first domain focuses on contextualizing art and its history in the culture, time, and place of the artist. The second domain focuses on critically analyzing Eurocentrism in art and the structures of cultural supremacy in the United States that enforce its presence. The third domain asks that teachers draw on examples of U.S. contemporary multicultural artists as well as artists from around the world to foster cultural competence and an understanding of the diverse nature of the United States.

Art education, criticism, and value in the United States is often reliant on a Western lens dependent on a Eurocentric biases and patriarchal domination. In the common treatment of art education, the lens of the West excludes the possibility of genuine multicultural representation. It subjects the value of all art to the aesthetic choice of a single culture (Cahan & Kocur, 1996; Lippard, 1990; McFee, 1995). Breaking down the Western lens and establishing a multicultural lens can present art education

within a cultural and historical context as well as assist students in learning the skills necessary in seeing art as a primary source of experience (Freeman, 1995; Lippard, 1990). Transformative art education draws on the history, society, period, and conditions of the artist. This provides a window into history and social studies through the artworks, protests, and journals of artists. Viewing art as a working, changing aspect of humanity can give students a greater understanding of historical events and multiple perspectives on what it means to live in our multicultural, multilingual nation (Cahan & Kocur, 1996). Providing students with a solid knowledge base in the structures of racism and awareness of cultural identity through art can give students the opportunity to more critically examine themselves and their place in the cycle of inequity and marginalization in the United States (Banks, 2001). Without this knowledge base students are robbed of the many paths possible for social action. They are restricted to the path of the status quo. A transformative multicultural art education can offer students the choice of forming their identity in opposition to social injustice and racism.

Lastly, this paper addresses the possibility that a transformative multicultural art education, through its interdisciplinary nature, can reinforce knowledge in subjects like history and social studies. Learning school subject matter in an interdisciplinary manner can build students' comprehension by contextualizing learning in the real world. History and social studies learned through the unique perspective of the visual arts can activate different parts of the brain and create a more stimulating learning environment for students, especially those who may benefit from visual/spatial or kinesthetic learning (Gardner, 1983). These factors may contribute to higher test scores and improve the status of the visual arts in the school.

### **Reform Models: Assimilationist, Pluralist, and Multiculturalist**

There have been several school reform models based on different ideologies (Banks, 2001). The assimilationist ideology proposes that all U.S. citizens should be unified under one banner and one culture. The assimilationist proposes that people of various ethnic backgrounds should conform or assimilate into mainstream America. Advocates of the assimilationist ideology "believe that ethnic attachments and affiliations harm the goals of a modern nation-state. Ethnicity...promotes

division, [and] exhumes ethnic conflicts" (Banks, 2001, p. 113). Through the perspective of the assimilationist, ethnic attachment is a threat to national unity (Banks, 2001). An advocate of the assimilationist model would propose that all ethnicities should surrender their prior attachments and pledge allegiance to an over-reaching culture, a *single* culture of America. In regards to school policy, the assimilationist believes that the school should remain neutral in matters regarding ethnicity. This part of students' lives, if they choose it, may be supported outside of the public forum (Banks, 2001). Banks criticizes this theory:

When assimilationists talk about the common culture, most often they mean the mainstream national culture and are ignoring the reality that most Western societies are made up of many different ethnic and cultural groups, each of which has some unique cultural characteristics that are part of the shared national culture. (2001, p. 116)

Historically, this has been the approach for immigrants entering America (Banks, 2001). The idea of the "melting pot" has been relatively successful in terms of assimilating other White cultures into the dominant Anglo group, but has proven problematic when the concept of race is involved (Banks, 2001). Many people of color have sacrificed their ethnic identity in order to partake in the mainstream culture and share the benefits of the "culture of power" (Tatum, 1997). Even with the abandonment of their ethnic attachments they are not fully assimilated because of their race (Banks, 2001).

Pluralism, another ideological framework, puts the maintenance of cultural group identity at the center of pedagogical as well as societal reform. The pluralist ideology takes an opposite stance to the assimilationist. The pluralist argues that each ethnic group is in competition, championing its own economic and political interests (Banks, 2001, p. 111). Advocates of pluralism suggest that all cultural groups remain separate and there should be no attempt to desegregate America (Banks, 2001). Instead, each culture group should work together and function as a self-sustaining unit. Regarding school reform, the pluralist believes that each ethnic group has different educational needs and those needs should be accommodated with culture specific learning materials that teach skills necessary for empowerment and reinforce commitment to one's cultural group (Banks,

2001). Although a pluralist ideology emphasizes the importance of group identity, Banks comments on the exaggeration of difference between and among groups. Banks also feels that inadequate attention has been given to the fact that "most members of ethnic groups in modern societies participate in a wider and more universal culture than the ones in which they have their primary group attachments" (Banks, 2001, p. 116). Because of these reasons in combination with the drawbacks of the assimilationist ideology, a multicultural ideology was devised. Multicultural theorists describe a multicultural ideology as,

[n]either separatism (as the pluralist does) nor total integration (as the assimilationist does) as ideal societal goals, but rather envisions an open society, in which individuals from diverse cultural, ethnic, and social-class groups have equal opportunities to function and participate. (Banks, 2001, p. 117)

Within the multicultural ideology individuals would be able to express their ethnic group identity as well as work toward a unified national identity under a banner of justice, equality, and human dignity (Banks, 2001).

An effective multicultural pedagogical reform must be "transformative," meaning it must be a systematic effort to work against prejudice and inequity (Vavrus, 2002). It must include not only curricular overhaul but also teacher and administration attitudes (Banks, 2001; Vavrus, 2002). Transformative multicultural reform brings issues of marginalization to the forefront of education and "interrogates political conditions of educational practices that obstruct the goals of equity" (Vavrus, 2002, p. 16). In other words, a transformative multicultural education approaches societal issues that affect the quality of life and/or education of its students in the classroom. Transformative multiculturalism is dedicated to "opposing inequity not just celebrating diversity" (Ladson-Billings as cited in Vavrus, 2002, p. 37). This means that students would be taught tools to actively advocate for democracy in their school, community, and larger society.

All members of the school community, dominant group included, need a forum to communicate about social issues like race, language, sexuality, gender and SES. Not allowing students the opportunity to understand

the effects of these issues as well as the effects of privilege denies them the opportunity for action against this type of marginalization. When no one is willing to have meaningful discussions about race, the problems of race are perpetuated. Vavrus (2002) addresses this cycle:

A silence around racism reduces opportunities to create a dialogue about why these topics can cause discomfort... This form of tacit censorship confounds the difficulties for addressing racist legacies and their contemporary educational manifestations that impact the life experiences of young people in a culturally diverse society. (p. 74)

In other words, to avoid the topic of race because it causes discomfort will likely provide future discomfort and allow the silence to impact the educational and life experiences of students.

### **Methods of Art Education**

Prior methods of art education have done a disservice to the legitimacy of art in the classroom. Asaro (1991) explains:

It is apparent that the reason art has been devalued in schools is at least partially due to the way teachers have approached and presented it. Art education, when portrayed as a meaningless appendage to the school curriculum leads to budget and program cuts. (p. 103)

The common art education curriculum is often taught as though art is isolated from life. The few lessons on art history are often taught as static periods of style exemplified by token artists. This alone is not enough to keep art in our schools especially with the threat of NCLB and the loss of funds. The standard art curriculum needs more academic value and relevance to students lives (Asaro, 1991). The following section exemplifies three art education methodologies: Creative Self-Expressionism, Discipline-Based Art Education, and attempts to incorporate cultural diversity into Discipline-Based Art Education. By comparing these examples, an educator can more clearly understand the shortcomings and successful traits of each method.

### **Creative Self-Expressionism**

During the 20th century a large emphasis was placed on studio arts or the art production aspect of art education. Through this model creative

self-expression is the primary curricular focus (Walling, 2000). Although personal experience is a very important component of art and it as a curricular focus is inclusive of all students, it is not enough to maintain community support for the arts when school budgets are being squeezed (Walling, 2000). Art education, as only an interpretation of self-expression, is isolated from societal and historical perspective. Creative Self-Expressionism and its lack of content has jeopardized the place of visual arts in the public schools.

### **Discipline-Based Art Education**

The Discipline-Based Art Education (DBAE) founded by the Getty Center for Education in the Arts, was created in an attempt to reverse the stigma of art education's novelty class status. It focuses on four disciplines of art: aesthetics, art history, art criticism, and art production or studio arts (Greer, 1997). Through these four disciplines art is studied with vigor and seriousness. DBAE expanded the curriculum and added to the value of art education in many classrooms. Greer (1997), a professor of art at the University of Arizona, was one of the forerunners of DBAE. He wanted to see art as a "basic" subject of study in schools. He explained,

The placement of art in the general curriculum changes the previous "elective" understanding of the place and value of art learning. It says, instead, that the study of art is to be viewed in the same manner--and must carry the same expectations--as other basic disciplines, which extend the traditional 3 R's. (p. 4)

Greer and the others involved in DBAE were attempting to more deeply involve the arts in the curriculum of the public school. Advocates of DBAE saw art as a complete subject of study far beyond the concept of self-expression. Although DBAE emphasized a more meaningful art education, it offers little in the realm of cultural inclusion or multicultural exposure in the arts (Cahan & Kocur, 1996). In fact, DBAE relies on the Eurocentric cannon to explain art and its value (Jagodzinski, 1997).

### **DBAE and Cultural Diversity**

The Getty Center for Education in the Arts (1992) held a seminar to review the compatibility of DBAE and cultural diversity. Sleeter (1996), an attendant, described the majority of examples of culturally diverse art to be "materials

conceptualiz[ing] multicultural art as the study of folk art around the world (and usually 'long ago')" (p. xvi). Sleeter observed a lack of multicultural art that represented race relations, multiple American sociocultural groups, or social justice (p. xvii). Sleeter's observations extended to many of the educational philosophies represented at the seminar, including Ellen Dissanayke's (1992) "Species-Centrism." Dissanayke (1992) believes that art can be best understood through an underlying human quality. She believes that with an emphasis on the underlying humanity, despite their ethnic, religious, gender, and racial differences an individual would be able to understand the art (Dissanayke, 1992). DBAE and its models of multicultural compatibility such as "Species-Centrism" often remove emphasis from the unique and different culture from which the work evolved. Although understanding that all cultures share the same human heritage is a positive and important aspect of multiculturalism, it leaves out the aspect of racial, economic, and linguistic disparities prevalent in the lives of individuals from marginalized groups (Vavrus, 2002). Racial, economic, and linguistic difference cannot be minimized or taught as though it is a past phenomenon. These differences impact the lives of students on a daily basis (Cahan & Kocur, 1996; Tatum, 1997).

Creative self-expression based curricula, DBAE, and Species-Centrism leave out aspects that are necessary to truly embody a multicultural art curriculum. A meaningful multicultural art education must provide a culturally inclusive and responsible environment, awareness of the Western lens and its implications, a contextualized approach to viewing art and its history, and a forum for discussion, critical thinking and action.

### **Transformative Multicultural Art Education**

A transformative multicultural approach to teaching the visual arts could provide a means to regain its credibility as a meaningful content area, while creating a culturally inclusive education (Banks, 2001; Cahan & Kocur, 1996; Vavrus, 2002). The curriculum would be philosophically based around a pedagogy of cultural inclusion and incorporate societal issues of marginalization and injustice into the art classroom (Vavrus, 2002). Research supports three domains of a transformative art education that can be critical in creating awareness of institutional oppression. The first domain focuses

on studying art within a cultural and historical context (Cahan & Kocur, 1996; Freeman, 1995; Lippard, 1990; McFee, 1995). Within a cultural and historical context students are provided with a means to understand the work of art through the unique culture, time, and place of the artist. Contextualizing art history can be used as a platform for knowledge in history and social studies. The second domain is providing students with an understanding of Eurocentrism and its effect on art critique and production. Understanding Eurocentrism allows students to look critically at how we view art and with that understanding question culturally exclusive values and U.S. societal norms (Cahan & Kocur, 1996; Lippard, 1990; Minor, 2001). The last domain is the integration of examples of multicultural artists both from around the world and contemporary examples from the United States. With an understanding of cultures around the world a student can better understand the cultures that influence the artists of his/her nation. Through understanding the struggle of marginalized artists in the U.S. students have an opportunity to determine their level of commitment in combating these systems.

### **Art Education within a Cultural and Historical Context**

Many art educators believe that they are teaching a multicultural curriculum but are only adding multicultural material to a traditional curriculum. This is problematic. The *additive approach* does not dismantle the traditional Western lens and patronizes the culture in which the art was created by pulling it from its original context (Banks, 2001; McFee, 1995).

Formalists believe that the most effective way of evaluating a work of art is outside of its cultural context (Clifford as cited in McFee, 1995, p. 182). They assume that when a work is free of culture, it may be assessed purely on its aesthetics. Viewing non-Western art through a Western aesthetic framework essentially determines its value based on taste. This perspective devalues the original concept and culture of the artist. It holds the piece of art to an Eurocentric standard of beauty and aesthetics (Minor, 2001, p. 212). Geertz warned of the danger when approaching cross-cultural material with cultural expectations. He states, "[I]f we... look for ways they [the producing culture] are inferior...[we] miss ways they may excel. But if we assume we are all equal, we may look for likenesses and miss differences" (as cited in McFee, 1995, p. 172). In order to approach art

education from a multicultural lens, the viewer must have a knowledge base in the culture of which a work of art was produced (McFee, 1995). McFee (1995) describes the need for understanding the historical and social context when viewing art cross-culturally. She states,

If we try to understand the artist's message from another culture without some comprehension of the artist as a person, and in some relation to a culture or cluster of cultures, we can hardly interpret the artist's message or respond to the cultural traditions of artistic form. (p. 181)

In other words, a multicultural art curriculum needs to have a strong base in social and ethnic understanding. Art cannot *simply* be viewed cross-culturally. This is often a signature of an additive approach. Art must be learned in the context of the people, culture, and time of its production (McFee, 1995).

In a transformative multicultural art curriculum students would be challenged to examine what factors drive change in art history (Eisner, 1984). The artist is often an indicator of social change and change can be examined through art. Freedman (1995) comments on changes in art education and all other social change being a cultural and historical issue where "change emerges within a historical and cultural structure that provides the possibilities, vehicles, and limitations" (Freeman, 1995, p. 88). Art is evidence of these structures. Previous models of change involved with the arts have viewed social reform as linear and immediate. These models avoid attending to the complex social interactions between and during changes (Freeman, 1995, p. 88). Viewing change in art through a model reliant on its historical and cultural structure can foster critical thinking. When viewing art from a world perspective or contemporary U.S. examples of multicultural art, students can be challenged to hypothesize what changes provoked the work, who was viewing the art, and what the artist wanted to evoke in the viewer. In this model, art can be seen as the oldest form of documentation. People have been representing their lives through art for 30,000 years. From this perspective art education can be a valuable cultural and historical resource (Asaro, 1991, p. 103).



### **Eurocentrism and the Western Lens in Art Education**

Eisner (1984) observed the "covert lesson" taught in public schools as a "rule-governed view of learning; there is a correct answer, and the student's task is to get it right" (p. xi). Eisner (1984) sees the educational message being one of uniformity. This inhibits personal interpretation, a skill imperative to the development of critical thinking. In a transformative multicultural pedagogy students are encouraged to interrogate the "covert lesson" and question the societal implications enforcing its teaching. Questioning the "covert lesson" in art can lead students to question the Eurocentric norms and aesthetic values many artists take as fact.

In evaluating the controversial topic of the 1984-85 Museum of Modern Art exhibit, "Primitivism' in Twentieth-Century Art: Affinity of the "tribal" and the "Modern," a student with critical thinking skills may observe the inappropriate use of the Western cannon to assess the value of culturally diverse art. The theme of the exhibit was to show the "affinity" or kinship between "tribal" or "traditional" artists and the artists of the "Modernist movement." James Clifford objects that

nowhere...does the exhibition of catalogue underline a more disquieting quality of modernism: its taste for appropriation or redeeming otherness, for constituting non-Western arts in its own image, for discovering universal, ahistorical 'human' capacities. (Clifford as cited in Minor, 2001, p. 211)

Clifford's comment is directed at the attitude of cultural supremacy exhibited by the modernist artists. The modernists perceived the "primitive" artistic style as a resource to appropriate (Minor, 2001). Decontextualizing, or separating the tribal art from its cultural context, and then holding it to the standards of the European "high arts" has been referred to as a form of rape (Minor, 2001). Clifford concludes that there is not "any essential affinity between tribal and modern or even a coherent modernist attitude toward the primitive but rather the restless desire and power of the modern West to collect the world" (as cited in Minor, 2001, p. 211). To suggest a form of affinity or essential sameness between the "primitive" and the "modern" is to suggest "primitivism" is a barbaric state of "modernism." In contrast to this suggestion, the modernists did not further develop the tribal form of abstraction;

they only pulled it from its context and profited from its "new" (to the West) aesthetic (Minor, 2001).

The Museum of Modern Art's exhibit that describes the similarities between "primitive" art and "modern" art as an affinity is an example of the European aesthetic that "transcends boundaries" (Lippard, 1990) or is universal. It holds the "primitive" work against an ethnocentric rubric of beauty (Minor, 2001). It is imperative for students to be aware of the cultural subjectivity of aesthetics. There is no universal rule of good art. Lippard (1990) discusses the Eurocentric notion of *quality* or *good art*. She states:

Ethnocentrism in the arts is balanced on a notion of Quality that 'transcends boundaries'-- and is identifiable only by those in power. According to this lofty view, racism has nothing to do with art; Quality will prevail; so-called minorities just haven't got it yet. (p. 7)

Art education is riddled with the Eurocentric idea of *quality*. These notions promote themes of cultural superiority. From this perspective it is implied that there are different levels of art, and at the pinnacle is the *high arts*. The traditionally European, male dominated *high arts* exclude art forms such as *craft*, *tribal*, and *primitive* assigning them lower status (Lippard, 1990). Students of a transformative multicultural art education would be encouraged to challenge the cultural supremacy underlying these values as well as be aware of artists who have challenged these notions.

### **Incorporating World and Contemporary U.S. Examples in Art Education**

It is important to incorporate both a worldview of multiculturalism as well as a contemporary view of U.S. multicultural art. A worldview of art isolated from contemporary examples promotes a sense of *Otherness* or distance from the artist and culture from which it was created (Cahan & Kocur, 1996; Sleeter, 1996). When U.S. contemporary art is viewed without any world knowledge, the political and cultural significance can be lost (McFee, 1995). Banks (2001) describes the final two stages of cultural identity as "reflective national identity" and "globalism" (pp. 127-142). A strong connection to contemporary artwork that reflects the experiences of people from diverse cultural groups can promote a better understanding of our

multicultural society. This may assist students in developing a positive national identity within a multicultural, multiethnic, multilingual country (Banks, 2001; Cahan & Kocur, 1996). With "cross-cultural competency within their own nation" a student can approach global information with empathy and understanding (Banks, 2001, p. 137). An understanding of world art can also promote a sense of appreciation for the cultural evolution that takes place in the work of U.S. multicultural artists. Both aspects of multicultural art should be incorporated into the curriculum in order to illustrate the continuous nature of art and history being an evolutionary process.

*Contemporary Art: Understanding Identity in the U.S.* Cahan and Kocur (1996), advocates for contemporary art education, state the importance of educating students in contemporary art. They claim it is "helping to build students' understanding of their own place in history and emphasizing the capacity and ability of all human beings, including those who have been culturally degraded, politically oppressed, and economically exploited" (Cahan & Kocur, 1996, p. xxiii). Issues of social injustice and discrimination are prevalent in contemporary art (Cahan & Kocur, 1996). For example, James Luna (1996), a Native-American artist, attempts to "incorporate cultural traditions from both the Native and contemporary societies in which [he] live[s]" (p. 138). He believes that "[w]e are today a product of both cultures and need not be one or the other" (p. 138). In his 1990 exhibition, he criticized the museum's treatment of Native-Americans as a past culture or collection of artifacts. In his performance piece, *The Artifact Piece*, a Native American laid motionless in a display box as an artifact of the Luiseno Indians (Cahan & Kocur, 1996).

Many contemporary artists in the U.S. exhibit a "transnational identity" by feeling attached to two or more national heritages (Cahan & Kocur, 1996). Luna reveals his transnational identity as both Native and mainstream societies (Cahan & Kocur, 1996). Other artists, such as Faith Ringgold (1996) share this experience. Ringgold is an African-American female artist; her identity as female, African, and American is important because to her "art is a discipline which is communicated out of experience" (p. 146). Her paintings are presented as quilts, a traditional *women's craft*. Ringgold's work intentionally challenges the White male status of the *high arts*. Ringgold's piece, *Dancing on the George*

*Washington Bridge*, is an image exemplifying African-American women as powerful and creative as they stand up to the looming presence of the bridge (Cahan & Kocur, 1996, p. 89).

*Contemporary Artist Groups: Power of Collaboration.* Studying contemporary art leads students to make connections between their "lives inside and outside of school within a framework of social and historical analysis" (Cahan & Kocur, 1996, p. xxv). Collaborative artist groups such as Tim Rollins and the Kids Of Survival (K.O.S) are excellent examples of students examining society. Rollins, the teacher of a group of students categorized as *learning disabled* and *emotionally handicapped*, began K.O.S. with a mission of "educating kids in the South Bronx about the world outside and educating the world outside about the South Bronx" (as cited in Garrels, 1989, p. 39). K.O.S. created the *Amerika* series in protest of the failure of the educational system in the lives of the participating students (Garrels, 1989). The *Amerika* series consisted of several large-scale paintings of abstract, imaginative golden horns. The inspiration was derived from the words of Kafka: "If you could be a golden instrument, if you could play a song of your freedom and dignity and your future and everything you feel about *Amerika* and this country, what would your horn look like?" (as cited in Garrels, 1989, p. 47).

The success of collaborative artist groups is not isolated to K.O.S. There have been many other groups for instance, the Epoxy Art Group, founded by six artists from Hong Kong and China. They came together with the common goal of artistic opportunity (Cahan & Kocur, 1996). The name Epoxy was chosen to signify "the strong chemical bonding power of cross-cultural adhesion" (Epoxy Artist Group, 1996, p. 121). In the installation *Tactics*, they analyzed the relationship between Chinese military texts and images of recent history. They incorporated proverbs written in Chinese and English.

Students need to be exposed to successful collaborative artist groups such as the Guerrilla Girls, a feminist artist group dedicated to exposing the Eurocentric, male dominated lens of Western art criticism. Another example, Group Material, takes an active role in creating modern culture by organizing exhibitions addressing socially relevant themes (Group Material, 1996, p. 124). The Border Art Workshop (1996) is a binational group of men and women creating art from the events

surrounding the Mexico/America border and challenging high schools students "to confront their involvement in institutional racism" (Cahan & Kocur, 1996, p. 60). Collaborative art can be a tool for students to express their feelings about their school, community, and the nation. Without this kind of exposure students can fall victim to the belief that art is a solitary act created in isolation from the experiences of others.

*World Art: Global Knowledge.* To view the art of transnational and multicultural artist in the U.S., it is important to have a knowledge base in the cultures influencing their work. Masami Teraoka (1996), a contemporary transnational artist, focuses on the past and present of both Japan (where she was born) and U.S. where she resided. She combines the styles of "American Pop Art" and Japanese *Ukiyo-e* woodblock prints (p. 159).

To understand Teraoka's work, a viewer would benefit from knowledge of *Ukiyo-e* or "art of the floating world." *Ukiyo-e* originated in Edo (common day Tokyo) Japan during the Tokugawa Period (1615-1868). The works of this period are unified under the common characteristic of the shogunate or warlord government's oppression of the *chonin* (townspeople). This was a period of extreme change in Japan (Kuwayama, 1980) that produced artists like, Hokusai, Yoshitoshi, Kyosai, Kuniyoshi, Kiyochika, and Kunichika. The Tokugawa shogunate maintained social order through "the many sumptuary and other laws directed against them [the *chonin*][that]... limited their dress, housing, and innumerable other aspects of their life" (Kita, 2001, p. 29). Because of strict censorship laws many of the *Ukiyo-e* artists painted Kabuki actors, fantasy or mythic figures, or historical samurais, but nothing directly reflecting the social climate of Japan. Many artists, Kyosai for example, acquired a language of subliminal satire in their work (Clark, 1993). Kyosai's 1877 woodblock triptych, *Elegant Picture of the Great Frog Battle*, was a satire of the shogunal army's chastisement of Choshu fief (Kita, 2001, p. 21). The characteristics and historical context of *Ukiyo-e* can be seen in Masami Teraoka painting "Vaccine Day Celebration" from the AIDS Series. This watercolor piece utilizes the stylistic character of traditional Japanese woodblock. The piece shows two figures dancing and flying a kite at the sea in celebration as small rectangles (condoms) are discreetly blowing away into the wind. This piece reflects the artist's

contemporary concern, AIDS, through the *Ukiyo-e* style. With knowledge about the *Ukiyo-e* artists and their works, a viewer can better understand the social climate of Japan at an extremely influential time in its history. Linking this knowledge to viewing contemporary art such as Masami Teraoka can foster a better sense of cultural understanding and insight into the power of cross-cultural artwork.

Art cannot be separated from human society; world art is an inherent piece of the evolution of contemporary multicultural art. Learning world history through artistic examples can cause a student to make global connections and further develop their identity as member of a global community (Banks, 2001). With a strong knowledge base in both contemporary and global multicultural art a student can be equipped when facing future issues of societal inequity (Cahan & Kocur, 1996). Arming students with *cultural competence* or knowledge of peoples various cultural identities (Banks, 2001) can cause students to be aware of how individuals interpret the relationship of the multiple cultures within the larger U.S. society (Cahan & Kocur, 1996). It also offers them examples of individuals and groups that have been successful in proactively drawing attention to salient issues of injustice (Cahan & Kocur, 1996; Garrels, 1989).

#### **Multicultural Art Education and NCLB**

A transformative multicultural reform in high school visual art instruction can offer support in school subjects chosen by No Child Left Behind (NCLB) for high stakes testing (Chapman, 2004). With the increasing emphasis on standardized tests in school and their importance to students' graduation requirements, many teachers feel pressure to "teach to the test" (Chapman, 2004, p. 4). "Teaching to the test" is constricting class subject matter to outlines of what may appear on the tests (Chapman, 2004). It is likely that emphasis on subjects like art and music will continually decrease (Chapman, 2004). In June 2004, 3 out of 4 public schools failed to meet their Adequate Yearly Progress in the state of Florida that resulted in a loss of funds. What this means for most art programs is strict budget constraints or even withdrawal of programs. Trends are pointing to less time in art class and vague attempts of incorporating art into the core curriculum (Chapman, 2004).

Before art education becomes an appendage to the three R's, the possibility of a transformative multicultural art education should be considered. The purpose of a transformative

multicultural art education is to address the historical and contemporary inequities in the public school by challenging the current systemic racial, ethnic, and economic exclusion through the visual arts. In doing so, multicultural art education takes on an interdisciplinary approach (Jagodzinski, 1997). In a transformative multicultural art curriculum all aspects of art can be viewed through a multicultural lens within historical and cultural structures of change (Freeman, 1995). This can enable history and social studies as well as other school-related subjects to be viewed through the unique perspective of the arts. It brings the core subjects and the arts together within the boundaries of their shared history.

Many students gravitate to the arts because it is an alternative to sitting at a desk passively (Gardner, 1983). A transformative approach gives students who prefer or work better through different learning styles an additional chance to retain tested subject matter through the visual arts. This can be especially effective when teachers work collaboratively and the lessons in art coincide with lessons in social studies or history. Theories of multiple intelligences suggest that students achieve greater proficiency and have higher comprehension when processing through different parts of the brain (Gardner, 1983). Gardner's theory implies that students can learn more efficiently through different methods of learning. Gardner (1983) comments on spatial intelligence:

Central to spatial intelligence are the capacities to perceive the visual world accurately, to perform transformations and modifications upon one's initial perceptions, and to be able to re-create aspects of one's visual experience, even in the absence of relevant physical stimuli. (p. 173)

A student with a particular talent in the realm of spatial intelligence may feel more engaged and have a clearer comprehension of historic materials when it is learned in the context of visual arts. Teachers can provide interactive perspectives on tested materials and allow students to process this material in new ways. Psychologists have argued that visual/spatial imagery is a primary source of thought (Gardner, 1983). From this perspective, a transformative multicultural art education may support school test results, and relate art to the achievement goals of the school.

A transformative multicultural art education can be the answer to the failing credibility of art in school. In addition to creating a culturally inclusive environment and an equitable experience for all students, it also provides a framework for interdisciplinary team teaching. This provides advantages for students who may retain knowledge more effectively through a visual, or contextual approach (Gardner, 1983). Analyzing art history and production through a multicultural ideology lends itself to the development of critical thinking skills and reflection of personal civic duty.

### Conclusions

The evidence of inequity in the public schools is represented by an overwhelming achievement gap. Correlating factors to low achievement in schools include race and SES (Shannon & Bylsma, 2002). Educators must take action in order to create an equitable learning environment and school experience for all students. Educators need to take responsibility for helping their students succeed. This paper suggests that a transformative multicultural reform can challenge the systems of inequity by exposing students to a multiculturally infused curriculum (Vavrus, 2002). Based on the research provided, this paper concludes that there are three major domains that a transformative art educator can utilize to promote social awareness and disclose institutionalized oppression through the visual arts. The first, contextualizing art and its history, is based on the rational that the value of art comes from culturally interpreted messages. With no reference to the culture from which the work was spawned, its value becomes based on superficial, culturally exclusive aesthetic taste (Freeman, 1995; McFee, 1995). The second domain focuses on an understanding of Eurocentrism in the arts. A transformative art education would examine the Eurocentrism and supremacy rooted in the idea of a *transcendent* good or *quality* (Lippard, 1990; McFee, 1995). Understanding Eurocentrism in art should not be a means to an end. It must be extended to an understanding of its effects on the larger society. Finally, examples of world artists and U.S. contemporary artists should be integrated into the curriculum. World art is an emotionally charged and interesting way to build cultural competence and empathy for difference. It can act as a bridge for understanding contemporary artists and the often-provocative social issues addressed in their work.

By attending to these three domains in art, an educator can offer historical and cultural experiences of artists by contextualizing the work in the time, place, and culture of the artist. Understanding Eurocentrism helps to provide students with the reality of inequity in contemporary U.S. society. Institutionalized oppression can be an elusive advisory. It is hard to identify because it is imbedded in our everyday way of life. The visual arts can be a vessel understanding. With a degree of cultural competence and an understanding of Eurocentrism students can be emotionally prepared to empathize and understand the reality of provocative issues in contemporary multicultural artworks such as racism, sexism, homophobia, classism, and AIDS. By covering these three domains educators can give students tools needed in order to view the world with empathy and critical attention. It is not a teacher's job to make any decisions about student identity, but a teacher should feel responsible to provide information and choices for identities that are formed in opposition to inequity.

A transformative multicultural curriculum, in its essence, needs to be planned from the bottom up on a foundation dug deep in the multicultural and multilingual realities of our nation (Banks, 2001; Vavrus, 2002). This means teaching styles would need to adapt to the needs of diverse traditions, norms, values, and languages as well as reflect through the curriculum that diversity is a part of the history and evolution of America (Banks, 2001, Vavrus, 2002). Understanding the multicultural reality of our nation and social privilege can provoke critical dialog about identity, antiracism, gay-straight alliances, and activism. Multicultural pedagogy creates a space for action. A transformative art education gives students a forum to understand social issues and a means to express their learning and emotions through the unique lens of the visual arts.

This paper has also explored how building an equitable education on a foundation of diversity can possibly improve test scores, activate multiple intelligences, and foster pride in the diversity and richness of the United States. A transformative multicultural art education can offer students the choice to consciously declare their place in cycles of inequity. These students can have the opportunity, if they choose, to identify in opposition to social injustice.

#### **Recommendations for Practice**

The findings of this paper, supported by peer-reviewed research, conclude that a trans-

formative multicultural art education can benefit from attending to the following three domains: (1) contextualize art and its history within a cultural and historical framework, (2) challenge the Eurocentrism infused in the common perspective of *quality* and the *high arts*, (3) provide examples of art from cultures around the world as well as U.S. multicultural examples and use them as a platform to discuss culture, identity, and injustice.

#### **Contextualizing Art and its History**

A teacher of a transformative multicultural art education must challenge the formalist, decontextualized manner of viewing a work of art. The artwork and the artist must be represented by a culture, time, and place. In this way, art is directly linked to history and social studies, connecting art to the lives and experiences of others. Art and its history is an important aspect of social change. In the classroom it must be treated as no less.

#### **Critiquing Eurocentrism and the Western Lens through the Visual Arts**

Teachers of transformative art need to interrogate the realm of the *high arts* and the Eurocentric notion of *quality*. Eurocentrism is infused in our societal norms; this extends to the visual arts. The European aesthetic must not be taken as transcendent or universal. Students and teachers need to be encouraged to challenge these notions by critiquing the social structures that support these beliefs.

#### **Incorporating World Art and Contemporary Multicultural Art into the Classroom**

Teachers must not underestimate the importance of world and contemporary U.S. art. World art offers an understanding of cultural difference as well as sameness. By studying art from around the world students are exposed to the possibilities of artistic expression and can form a more complete frame of reference for understanding the culture of the United States. This can promote greater empathy among students and assists them in building cultural competence when viewing contemporary U.S. multicultural art. Contemporary multicultural artists can be used as a platform for discussion on provocative issues like race, SES, sexuality, gender, and linguistic rights. When viewing provocative subject matter through art, students should be encouraged to explore their own identity and how they have felt privileged/unprivileged by who they are.

### Topic Examples

The following are examples of transformative visual arts topics.<sup>1</sup> These examples of transformative topic ideas respond to the three research supported domains specified in this paper: contextualize art and its history, interrogate Eurocentrism in art, and use examples of contemporary U.S. artists as well as world art.

*Cultural Appropriation in Art and the Larger Society.* Teachers can guide students to understand the relationship between racism and cultural appropriation by examining the relationship between the Modernist movement and primitive or tribal art. Teachers can show examples of Modernist artists such as Pablo Picasso and the abstracted style of African tribal art. Further exploration can examine the role cultural appropriation plays in today's home décor and fashion. Students can examine elements of their homes, catalogs, or events that may have been inappropriately taken from a cultural context and sold as a commodity. Examples of cultural appropriation might include repainting a totem pole to match a person's house, getting a tattoo of a Hindu deity that "looks cool," or using a Muslim prayer rug as an entry mat. Teachers would want their students to be able to (1) observe the discreet forms of racism that prevails in today's society, (2) connect cultural appropriation to the modernist movement, and (3) make connections between the historical and contemporary presence of racism and how cultural appropriation supports ideas of cultural supremacy.

*Collaborative Art and its Role in Social Change.* Teachers can lead students to examine the role collaborative artists have played in provoking and responding to social change. Students can view work by collaborative artists groups, analyze the message being conveyed, and research any response to the work. Teachers can use examples such as the Kids of Survival (KOS) (Garrels, 1989), Border Art Workshop (Cahan & Kocur, 1996), and Epoxy (Cahan & Kocur, 1996), which have been successful in drawing attention to inequity in the U.S. Students can be required to create a piece of art collaboratively with a consensual message to convey. Students would be required to record their progress in journals as well as complete the project. Teachers would aim for students to (1) become familiar with the historical presence of collaborative art and its relationship to social

change; (2) identify the benefit of working collaboratively and how to mediate any difficulties; (3) understand that art is not exclusively a solitary act and that art production, in many cases, can be more effective when done in partnership; and (4) understand that collaborative art can be a powerful tool in conveying emotionally charged messages to others.

*Culturally Inclusive Principles of Design and Aesthetics.* When teachers teach the principles of design, they need to be conscious of the notion of *quality* and aesthetic choice. Students can be lead to examine the extent in which Eurocentrism dictates how we assess art. Examples of how different cultures around the world utilize the principles of art should be incorporated. A pre-assessment in the form of a guided journal entry can create awareness of students' preconceived notions of aesthetics. A discussion on the concept of taste and quality must be addressed. Examples like the Affinity of the Tribal and Modern exhibit, as noted earlier in this paper, can be used to support such a discussion. This exhibit decontextualized the work of historical tribal artists and described their relationship to the Modernist movement as an "affinity" or kinship. The "affinity" refers to the artistic style of abstraction. Formalists believe that these two forms of art can be assessed based on the principles of design without acknowledgement to the very different cultures the artworks were created in. The lesson can conclude with a post-lesson free write that addresses the difference between taste and quality and clarifies any prior misconceptions the student had. The learning objectives teachers would want students to know would be to (1) demonstrate a clear understanding of what the elements of design are and their function; (2) become familiar with the formal vocabulary of art; and (3) understand the notion of aesthetics, the relationship between aesthetics and Eurocentrism, and how they influence peoples view of quality.

Implementing classroom strategies and philosophies such as these recommendations can take students' education to a higher level of multicultural awareness, reflection and action. These are the values cherished by the philosophies of a democratic society. Schools should take the steps necessary to provide training in these values in order to create a fair, equitable society for all members. A

transformative multicultural education in the arts can serve this purpose.

#### Note

<sup>1</sup> For more examples of transformative art education topics teachers are encouraged to consult Cahan and Kocur's (1996) *Contemporary Art in a Multicultural Education*.

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## **Disabling Fears: Addressing General Education Teachers' Concerns Regarding Classroom Inclusion**

*This review provides general education teachers with information to facilitate inclusion of students with special needs in their classrooms, as required by the Individuals with Disabilities Education Act (1997). According to the studies cited, the primary barriers to inclusion have been teacher's fear and lack of teacher education. Recommended strategies include communication and collaboration with special education teachers and paraeducators, implementing accommodations in both the physical environment and instructional methods, using cooperative learning and peer tutoring, and becoming familiar with the students education goals and needs. These strategies increase teacher confidence and academic achievement for both special and general education students.*

The issue of education for students with special needs in public school settings is a relatively new advance in academics. Prior to the civil rights movements of the 1960s, students, particularly students with special needs, were not considered citizens with rights under the laws of the land. Promoters of the common school movement characterized public education as being for all children; that is all children who met certain criteria that over the years have included traits such as being white, male, and educable (Franklin, 1994). Among those who were not considered to have the ability to be educated were children with learning and behavior problems. Around the beginning of the 1880s school reformers, with the support of women's groups, established various social service programs to address the needs of students that were "difficult to teach and often troublesome to manage" (Franklin, 1994, p. 5). Special schools were opened to serve the needs of students with clearly defined and recognizable physical disabilities as well as those with less definable abilities, including mental retardation, who were considered backwards and incorrigible. These schools were purported to help the students, when in fact they segregated children by abilities because teachers were unwilling to accept students with special needs in their general education classrooms because it was believed that the presence of "backward children" hindered the education of "normal children" (Franklin, 1994, p. 28). Compulsory attendance and child labor laws, enacted in all states by 1912, increased the number of undesirable student enrolled in public school. Widespread usage of the Binet Intelligence Test in the 1920s enabled the schools to establish a mental age of these undesirable children, and

those who were considered severely retarded were excluded from any form of education and sent to state institutions. Parent groups primarily led the reform efforts during the years between 1930 and 1960. Following the 1954 U.S. Supreme Court decision, *Brown vs. Board of Education*, students with disabilities began to be recognized as a group that had experienced discrimination, and various school boards and state legislatures began to acknowledge the need to provide an education for students with special needs.

### **Literature Review**

Under the Johnson administration, numerous federal legislative acts and Supreme Court rulings addressed the educational needs of the students who were *educationally deprived*, building a foundation for the current laws and policies. In 1975, the Education of the Handicapped Act (EHS) was amended and renamed The Education for All Handicapped Children Act (EAHCA); also known as the Mainstreaming Law, this act required states to provide free and appropriate education (FAPE) for all students with disabilities in the *least restrictive environment* (LRE). The Individuals with Disabilities Education Act (IDEA) of 1990 replaced The Education for All Handicapped Children Act (EAHCA) and included provisions for bilingual education. In 1997, the Individuals with Disabilities Education Act of 1990 was reauthorized and expanded, defining *least restrictive environment* as the general education classroom where special needs students are entitled to receive their education with their general education peers to the greatest extent possible. The changes made to the IDEA directly affected general education teachers by mandating

that they include special needs students in their classrooms.

Prior to 1975, general education teachers had minimal contact with students with special needs. Although special education services were available in public schools, many of these students received services in separate, self-contained classrooms with limited participation or visits to *mainstream* classrooms. This has all changed with the *inclusion* movement mandated by IDEA of 1997 (Mastropieri & Scruggs, 2004). General education teachers are now responsible for serving students with special needs in their classrooms.

Most teachers are resistant to serving special needs students through fear of the unknown (Furney, Hasazi, Clark/Keefe, & Hornett, 2003), because they find them socially unacceptable (Peltier, 1993), or because they feel they are not adequately prepared to teach students that have diverse needs (Hoffman, 2002). Many public school buildings have physical barriers that are not accommodating to special needs students as required by the Americans with Disabilities Act (ADA) of 1990 (Pivik, McComas, & LaFlamme, 2002). One of the first steps to overcoming these barriers to inclusion is through teacher education. Although many states are now requiring that preservice teachers receive introductory level special education coursework (Turner, 2003), studies have shown that nearly two-thirds of general education teachers received little or no training for serving the exceptional children in their classrooms, and were not confident modifying curriculum to meet the students' needs (Hardin & Hardin, 2002). Acquiring strategies for working with students with special needs would benefit the teacher's ability to address the learning needs of all students within the classroom (Peltier, 1993).

The strategies recommended for accommodating students with special needs include collaboration with special education teachers, either through a shared classroom or frequent communication, modification and adaptation of the classroom setting and instructional methods, and creating cooperative learning activities, which makes use of peer mentoring and tutelage. These various strategies have demonstrated significantly positive outcomes for both general education and students with special needs (Jenkins, Antil, Wayne, & Vadasy, 2003).

Another source of support for the general education teacher is the paraeducator assigned to working in the classroom with students with

special needs. Although paraeducators customarily work under the supervision of the special education teacher, within the general education classroom they are the teacher's assistants. Establishing a good working relationship with the paraeducator begins with communicating the critical areas in which the paraeducator can best assist the entire class (Vaughn, Bos, & Shumm, 2003).

The focus of this paper is to provide information for general education teachers to become more comfortable meeting the educational needs of exceptional students that will be receiving the majority of their services in the general education classroom. The suggestions and strategies discussed in this study are mutually inclusive for both students with special needs and general education students, and are methods used for creating a fair and equitable democratic classroom that encourages all students to learn to the best of their ability.

### Historical Overview

Historically, students with special needs were served in segregated state institutions removed from the general population, with little attempt to educate them (Franklin, 1994). The first investigation on the placement of exceptional students in segregated schools and institutions occurred at the White House conference on Child Health and Protection in 1933. This report noted the wide range of students labeled as backwards and mentally retarded. When made public, this report started the effort to reform education for children with special needs. It was not until after the 1954 U.S. Supreme Court case *Brown vs. Board of Education* that legal action to guarantee educational rights addressed the educational deficits of students with special needs.

Numerous federal legislative acts and Supreme Court rulings built the foundation for current laws regarding the education of students with special needs, including the Civil Rights Act of 1964 and the Elementary and Secondary Education Act of 1965 (Yudorf, Kirp, & Levin, 1992). President Johnson's War on Poverty in 1964 created funding for the educationally disadvantaged under Title I, specifically in low-income communities. The 1965 amendments to Title VI authorized the National Advisory Committee on Handicapped Children to review U. S. Office of Education programs for the handicapped. The findings of this committee resulted in the passage of the Education of the Handicapped Act (EHA) in 1970. EHA guaranteed that all students would receive

services. States receiving federal funding were required to comply with the minimum requirements of EHA and provide educational services for handicapped school age children. The Vocational Rehabilitation Act (VRA) (Public Law 93-112, Section 504) of 1973, defined *handicapped person* and *appropriate education*, and required public school districts to provide a *free appropriate public education* (FAPE) to students with disabilities. The Educational Amendments Act of 1974 granted students and families the right to due process in special education placement, and provided the first federal funding of programs for exceptional learners who are gifted and talented. In 1975, EHA was amended and renamed The Education for All Handicapped Children Act (EAHCA), also known as the Mainstreaming Law because it first defined *least restrictive environment* (LRE), which entitled students with disabilities to be educated with their non-disabled peers to the greatest extent possible (Mastropieri & Scruggs, 2004). It also required states to provide FAPE for all students with disabilities, ages five through eighteen, and requires an *individualized education programs* (IEP) for all students receiving services. The IEP identifies the qualifying categories, the specific learning needs and mandated appropriate services, and the short- and long-term goals and learning objectives for the student (Mastropieri & Scruggs, 2004). In 1986, the Education of the Handicapped Act Amendments (Public Law 99-457) extended FAPE services to children with disabilities ages three through five, and established early intervention programs for infants and toddlers with disabilities ages' birth to two years. The Americans with Disabilities Act (ADA) of 1990 prohibited discrimination against people with disabilities in the private sector, protected equal opportunity to employment and public services, and required public accommodation provisions that eliminate physical barriers to equal access to buildings and services. The Individuals with Disabilities Education Act (IDEA) (Public Law 101-476) replaced EAHCA of 1975, to establish *people first* language when referring to individuals with disabilities. People first language requires using the individual's identifier before their category, such as "student that is blind" rather than the "blind child." It extended special education services to include social work, assistive technology, and rehabilitation services, included due process and confidentiality provisions for students and parents, and added two new

categories of disability; autism and traumatic brain injury. It also required states to provide bilingual education programs for students with disabilities and educate students with disabilities for transition to employment and develop individualized transition programs by the time the student reach the age of fourteen. The individual transition plan is the process of preparing the student for transition from school to vocational training, college, or employment. It also includes transfer to social or vocational services (Mastropieri & Scruggs, 2004). In 1997, IDEA was reauthorized and expanded to include that students with disabilities have access to the general education curriculum in the *least restrictive environment* (LRE). It also allowed special education staff to work with general education students in the mainstream classroom, required the general education teacher to be a member of the IEP team, required proactive behavior management plan be included in student's IEP if the student with disabilities had behavior problems, and required students with disabilities to take part in state-wide and district-wide assessments (Vaughn et al., 2003).

### **Barriers to Inclusion**

Historically, the greatest barrier to education of students with disabilities has been teachers who were not interested in making accommodations for children they considered low achieving. Many feared having children with learning difficulties in contact with *regular* students in their general education classrooms (Franklin, 1994). This attitude resulted in the development of special schools and institutions for children as early as the 1880s. This "educational apartheid policy" (Siegel, 1969, p. 1) effectively denied a specific population an equitable education; thus, "the educators' attitude that exceptional is unteachable is the fundamental barrier to mainstreaming" (Stephens, Blackhurst, & Magliocca, 1982, p. 28). The term *mainstreaming* originated with EAHCA in 1975 in the definition of least restrictive environment (LRE). The term implied that students receiving special education services visited general education classrooms, but continued to belong in a special program for the majority of the school day. The term *inclusion* is more appropriate for describing the movement to fully serve students with special needs in general education classrooms (Mastropieri & Scruggs, 2004). Today, teachers continue to express a reluctance to serve students with even mild learning challenges in their regular education

classes and resist the implementation of the inclusion policy (Furney et al., 2003). Some resist because they find these children socially and behaviorally unacceptable (Peltier, 1993), and others because of their perception of the extra work and effort required meeting the students' needs (Hardin & Hardin, 2002).

Many teachers feel they are not professionally equipped to both manage an inclusive classroom and adequately teach their regular education students (Hoffman, 2002). According to a U.S. Department of Education report in 2001, (Boyer & Mainzer, 2003), of the ninety-six percent of general educators that have students with special needs in their classrooms, only one-third feel they are well prepared to teach them. Statistics show that thirty-three percent of first year teachers are assigned difficult-to-place students in their class load, especially ones that are challenged behaviorally, because more experienced teachers are unwilling to work with students with special needs in their classrooms (Williamson, 1998). Other teachers are concerned that they are not trained to handle various health issues of their special needs students (Shultz & Carpenter, 1995). Teachers also complain of a lack of professional support within the classroom because spending cuts in recent years have reduced the number of paraeducators available to assist in classrooms (Hoffman, 2002, McLeskey & Pacchiano, 1994). Additional research found that some teachers resent students with special needs and resist placement in their classrooms (Peltier, 1993). Often, these teachers will assume little responsibility for the learning of the students with special needs (Weiner, 2003). They make no adaptations to the general education curriculum to accommodate the students' individual education program and their learning needs, and make no effort to include the student with special needs in groupwork activities (Wolfe & Hall, 2003). The attitude of the teachers is also reflected in the general education student population because teachers discourage interaction in classrooms and in social events, creating an additional social barrier to the student with special needs' full participation in the education process (Weiner, 2003).

In addition to the general education teachers' intentional and unintentional attitudinal barriers, students and parents participating in a survey said the physical environments of many public school buildings are not accommodating. Although there may be handicap stalls in restrooms, they are poorly designed. Doorways

and the few available ramps are too narrow, doors are too heavy to open and do not have automatic door buttons. There is often no desk space available in the classrooms that would accommodate a wheel chair, or the students are shifted off to a corner of the room out of the way where they are unable to see the board, and isolated from their classmates (Pivik et al., 2002). These physical barriers are in direct violation of the ADA law of 1990 that stipulates that all public buildings, including public schools as stipulated in IDEA, provide reasonable accommodations and "guarantee of access to educational services" (Alexander & Alexander, 2003, p. 249).

### **Teacher Education and Professional Development**

One of the first steps to accommodating students with special needs is through teacher education. In 1996, the National Commission on Teaching and America's Future reported a direct correlation between students' learning and teacher education (Boyer & Mainzer, 2003). The findings of a survey reported in Peltier (1993) showed that teachers with Master's Degrees expressed greater confidence in their ability to teach students with special needs, "indicating those with a broader knowledge base are better able to adjust" to inclusive classrooms (Peltier, 1993). Studies have determined that pre-service general education teachers need to be better prepared to serve the needs of a wide range of students, and that districts need to develop continuing education programs for the experienced teachers that are dealing with a new population of students in their classrooms (Furney et al., 2003; Peltier, 1993). The National Council for Accreditation of Teacher Education (NCATE) requires that all new teachers be prepared to contribute to the education of exceptional children. Although the level of preparation varies from state to state (Turner, 2003), and may not be sufficient, nearly two-thirds of general education teachers express that they received little or no training for teaching exceptional children and did not feel confident modifying curriculum for the students in their classrooms (Hardin & Hardin, 2002).

Many general education teachers' fears regarding students with special needs can be alleviated through greater knowledge of the specific disability and more personal interaction with the students (Turner, 2003). Teaching strategies, which general education instructors can incorporate into their curriculum, include

scaffold instruction, curriculum based assessment, and use of visual aids; these all work well for students receiving special educational services as well as benefit the entire classroom (Peltier, 1993). General education students often gain from these effective and inclusive teaching methods. Data on inclusion indicates the positive impacts on academic achievement for both students with special needs and students in general education, despite the limited preparation and poor attitudes of many educators in the field (Wallace, Anderson, Bartholomay, & Hupp, 2002).

### **Collaborative Teaching Model**

One method that has proven to make inclusion a success is collaboration between teachers. The Regular Education Initiative (REI), attached to IDEA under the Reagan administration, has made the education of students with special needs a shared responsibility between the general and special education teachers (McLeskey & Pacchiano, 1994). Communication between special education and general education teachers is paramount to the success for inclusion of special needs students. One series of research discovered that at the secondary level some general education teachers did not know which students in their classrooms had individualized education programs (IEP), nor did they have any contact with special education teachers (Vaughn et al., 2003). Collaboration between general and special education teachers ensures the curriculum planning is supportive of the students with special needs IEP goals and objectives, and integrated into the general classroom curriculum. Traditionally, mainstreaming of students with special needs has consisted of providing the student social integration with the general school population, although it was of little educational value or benefit if no learning accommodations were implemented (Wolfe & Hall, 2003). General education teachers are more confident of their teaching of students with special needs when collaborating with special education teachers and their confidence increases the learning of all their students (Weiner, 2003). In addition, collaboration ensures that the student with special needs receives the additional support needed on a regular basis. The general education teacher can communicate with the special education teacher when potentially difficult projects are to be assigned so the special education teacher can anticipate how to modify

and assist the student in completing the assignment (Mastropieri & Scruggs, 2004).

Communication is the key to successful collaboration. There are three stages in planning for effective collaborative instruction. In the preplanning stage, the general education teacher examines the lesson plans and determines what the key components of the lesson are, and what mode of instruction to teach the lesson. The second stage entails sharing this information with the special education teacher who can determine, based on the students' IEP, how the students' goals and objectives can be addressed by the particular lesson, what adaptations and modifications are required for the different students, and how best to support the general education teacher. The third stage brings the teachers together to discuss the plans, and determine how the students' learning will be assessed (Wolfe & Hall, 2003). With national educational reforms such as No Child Left Behind (NCLB) focusing primarily on general education, special education reform and goals have taken a back seat. One practical method of aligning the two areas of public education is through grade level expectations (GLE). Special education teachers are experienced in preparing learning objectives for IEP and can advise general education on planning to meet these standards-based requirements and make accommodations for students with special needs (Furney et al., 2003). "Inclusion works best when teaching involves other reform initiatives, such as standards-based instruction and best research-based practices for all students" (Weiner, 2003, p. 16). The best practice methods of teaching that are effective for students with special needs are also advantages for students in general education.

Another form of collaboration between the general education and special education teacher is team teaching or coteaching. There are numerous models of coteaching including; alternating direct instruction; station teaching, in which students are divided into smaller groups; alternative teaching, in which teachers utilize different learning strategies to teach the same content to students of various abilities; and actual team teaching, where the responsibilities of teaching the class are shared (Mastropieri & Scruggs, 2004). Educators who work together to meet the needs of all students "in classes where inclusion is a success...attests to the flexibility and cooperation of the two teachers involved" (Harwell, 2001, p. 3).

### **Accommodation**

The term accommodation is often, though erroneously, used interchangeably with modification. The term accommodation is also used in reference to assistive technology such as books on tape, Braille text, switching devices, alternative or augmentive communication, and other input/output devices listed on the IEP (Lewis & Doorlag, 1999). However, in the special education field, accommodation most often refers to assessment accommodations. The Washington State Assessment for Learning (WASL) includes an appendix that lists the accommodations allowed during the state standardized testing for students with special needs and allowed if the students' IEP specifies that testing accommodations are needed. (See Table 1 in Recommendations for Practice.) The reason for assessment accommodations is to eliminate some of the barriers to obtaining a fair and accurate measure of the students' learning (Vaughn et al., 2003).

### **Modification**

Modification, according to the definitions from The Vocational Rehabilitation Act (VRA) (Public Law 93-112, Section 504) of 1973, refers to changing or modifying the curriculum and assignments to accommodate the students learning needs *to provide a student opportunities to participate meaningfully and productively in learning experiences and environments*, indicating that using different instructional and assessment models is not just a suggestion, but required by law, and indicates substantial changes in what a student is expected to learn and to demonstrate. Changes may be made in the instructional level, the content, or the performance criteria. Such changes are made to provide a student with meaningful and productive learning experiences, environments, and assessments based on individual needs and abilities, as specified by an IEP.

### **Teaching Strategies**

There are numerous strategies a teacher can learn to accommodate students, just a few of which were previously mentioned, such as; scaffold instruction, direct instruction, curriculum based assessment, and instructional alignment (Peltier, 1993). Cooperative learning and peer tutoring are other strategies that have been effective for including students with special needs in the general education population. According to Cohen (1994), when students work together for group goals they are more likely to

bond with each other and influence each other's learning and also increase positive behavior. Cooperative learning removes the teacher from the role of prime motivator and encourages students to work for peer approval (Mann, Suiter, & McClung, 1992).

One study surveyed twenty-one general education teachers about their cooperative learning experiences with students in both special education and remedial classes and concluded that the overall results were significantly positive for both groups (Jenkins et al., 2003). Over seventy percent of the teachers surveyed reported that they adopted cooperative learning because it increased academic learning, encouraged active participation, and offered increased opportunity for social learning. The teachers also made statements such as "cooperative learning increases comprehension and knowledge" and "it affects their general overall speed of learning" (p. 2). The authors state that teachers' adoption of cooperative learning is "helping a wide range of struggling learners overcome obstacles they might not overcome working alone and gaining access to challenging curricula" (Jenkins et al., 2003, p. 2).

Other techniques that encourage positive peer interaction and increase academic achievement are peer assistance and peer tutoring. Peer assistance is pairing up students that need support with hands-on tasks or projects, such as in science or home arts classes. However, Mastropieri and Scruggs (2004) warn that assistants should only be assigned when necessary, to allow students with special needs to learn to work independently as much as possible. Peer assistants and peer tutors both require training in how to support and help specific students with special needs in the manner that facilitates the most learning. Peer tutoring has been found to be beneficial on many levels. Not only is the peer tutor available to give the student with special needs assistance and feedback, but the tutee also benefits in learning, and in self-esteem, while assisting the student with special needs (Hardin & Hardin, 2002). Levin, Glass, and Meister (1984), as cited in Mercer and Mercer (2001), examined academic outcomes from peer tutoring, and found that in math and reading, the achievement increased twice as much as in computer-assistance programs, and also increased the academic gains of the tutee. Tutee's can also facilitate transference of non-targeted learning (Collins, Hendricks, Fetko, & Land, 2002). Non-targeted learning information is that which students acquire in specific learning

environments that is not taught directly, such as when to keep their voice down, when to raise their hand and to ask questions, and other socially acceptable behaviors that students with special needs may not be as sensitive to. Other non-targeted learning objectives include conveying information that may not be part of the lesson, but without the understanding of particular details, the lesson is incomprehensible. This would include additional vocabulary building, how to use resource materials, explanation or repetition of sequential steps, and other information that expands the lesson (Collins et al., 2002). Another highly effective way of transmitting non-targeted learning objectives is through the assistance of an instructional aid or paraeducator.

### **Working with Paraeducators**

Nearly 40- 60% of the special education staff is comprised of paraeducators who spend nearly half of their time in general education classrooms (Boyer & Mainzer, 2003). Paraeducators' duties range from escorting students in the hallways, pushing wheel chairs, to working one-on-one with students needing extra academic support. In many cases, the paraeducator is more familiar with the student with special needs than the special education teacher, moving from grade to grade with the student (Marks, Schrader, & Levine, 1999). In other cases, the paraeducator receives a class schedule and a list of students' names, with little or no introduction to the student or the IEP goals and objectives (Carroll, 2001). Just as communication and collaboration with the special education teacher is important in successfully meeting the academic needs of the students, the same is equally true with the paraeducator. In some instances the paraprofessional may have worked in the school district longer than the general education teacher and has assumed the bulk of the responsibility of modifying and adapting curriculum in general education classes for the students with special needs (Marks et al., 1999). In other instances, the paraeducator has little experience or training and requires more instruction in assisting students and teachers (Mann et al., 1992). The Regular Education Initiative (REI), in addition to making it a shared responsibility between the general and special education teachers, also allows the special education personnel to work with general education students; a position that many of the experienced paraeducators may not be aware (McLeskey & Pacchiano, 1994). This places the paraeducators in the classroom directly under the

general education teacher's supervision. In either case, the general education teacher needs to establish a good working relationship with the paraeducator assigned to the class or students with special needs in the class. Communication begins with establishing the needs of the students and identifying the critical areas where the paraeducator can best assist the teacher in the classroom (Mann et al., 1992; Vaughn et al., 2003). This can be achieved through an orientation process in which the general education teacher shares an information packet that includes classroom rules and expectations, philosophy statement, course curriculum and general lesson plans, and daily class schedule. The packet should also include an IEP summary sheet on each student, with goals and objectives related to the class content, and the teacher's expectations of how the paraeducator can help align the students' learning (Carroll, 2001). Another effective way of communicating with paraeducators is to create a schedule using an agenda board aligned with the weekly lesson plans that will enable the paraeducator to anticipate preparation and make suggestions for accommodating students (Carroll, 2001; Vaughn et al., 2003). The success of students with special needs in a general education classroom is achieved through full inclusion in classroom activities and participation in overall curriculum (Marks et al., 1999). The paraeducator can assist in this through facilitating social interactions between students, managing small and large groups, and teaching appropriate behavior and communication skills (Carroll, 2001). The practice of segregating and isolating students with special needs within the general education classroom by the paraeducator should be discouraged and paraeducators should be instructed to include all students in their assistance of the classroom teacher (Marks et al., 1999). Establishing a good working relationship with paraeducators, with clear guidelines and open communication, is one way to increase the learning for all students in the classroom.

### **Conclusions**

The literature reveals that not only is inclusion a civil rights issue that is long overdue, but also that it can be successfully implemented through teacher education and using methods that increase learning for all students. The traditional barriers to inclusive education of special needs students have primarily been due to fear and lack of teacher education. Through teacher education and professional development,

educators can modify their instructional practices to accommodate the individual learning needs and styles of all their students.

Open communication and collaboration with special education teachers is one method that ensures the curriculum planning is supportive of the student with special needs IEP. Without effective and regular communication and collaboration between the general education and special education teachers, the success of the inclusion program is limited and incomplete. Flexibility on the teachers' part includes learning to make adjustments to both the learning environment and the instructional methods to accommodate the students with special needs, which are also means of increasing the learning of all the students. Arranging the classroom so that it is accessible to students in wheelchairs and providing areas for small group projects or activities is one simple change to the environment that both includes students with special needs and increases learning for all students through cooperative work. Providing clear directions and accessible goals, breaking large assignments into smaller steps, monitoring students' progress, and teaching mnemonic strategies for remembering new material are other strategies that can be incorporated for use with all students, as well as varying presentation formats that tap into various learning styles and increase students' involvement with their own learning. Specific accommodations that students with special needs require are included on the IEP. These accommodations are not only to assist learning, but are required by law to ensure that meaningful and productive learning will occur. Familiarity with each student's IEP goals, objectives, and accommodations, and regular collaborative communication with the special education teacher is necessary to ensure the IEP is being appropriately followed.

Other teaching strategies that are successful in supporting students with special needs in the general educational setting are student cooperative learning and peer tutoring. The studies indicate that these strategies are not only effective in meeting the educational requirements of the special needs students but also increases academic achievement and self-esteem of general education students.

One tremendous resource for the general education teacher is the paraeducator. Although paraeducators are part of the special educational staff, they are also an instructional assistant to the general education teacher and are to assist all

students in the classroom. Establishing a good working relationship with paraeducators begins with clear communication of the teacher's expectations and assistance needs from the paraeducator. Providing the paraeducator with a packet of classroom rules and expectations, philosophy statement, course curriculum, general lesson plans, and daily class schedule are effective ways of setting a foundation for working together that can be followed up with a daily or weekly lesson plan that enables the paraeducator to anticipate preparation and collaborate with accommodation techniques for various students. Paraeducators can also assist general education teachers through facilitating interactions between students to ensure that inclusion is beneficial to all students. Successful inclusion occurs when the learning environment is collaborative, cooperative, and accommodating, for all students of all needs and backgrounds.

### **Recommendations for Practice**

The first step in successful inclusion of students with special needs in general education classrooms is teacher education. Even educators that have had little or no formal training in working with students with special needs can meet the educational needs of the students through learning to know each student. This may require that the general education teacher become proactive in seeking out the special education teacher and making the initial step in establishing communication and collaboration.

The next step is implementing accommodations in both the physical environment and instructional methods to increase the student's success in the general education classroom. Most successful teachers have learned that the adaptations they make for students with special needs are also advantages for general education students and are not difficult to utilize. Although the terms accommodations and modifications are sometimes erroneously interchanged, in the special education field they are distinctly different. Accommodations are provisions made to allow a student to access and demonstrate learning. Accommodations do not change the instructional level or the content of the general education curricula (see Table 1). Modifications are substantial changes in what a student is expected to learn and demonstrate (see Table 2). The changes may be made in the instructional level, the content, or the amount of work



Table 1: Suggested Accommodations for Inclusion of Students with Special Needs in General Education Classroom

Accommodations	Example
Adapt the physical environment	Arrange student desks and learning materials in an accessible manner for students in wheelchairs, and to encourage cooperative learning.
Provide distraction-free environment	Arrange seating away from doorways, pencil sharpeners, and windows to prevent visual and auditory distraction. Some students are highly distracted and may need a quiet corner out of traffic area without visual stimuli.
Model organization	Create specific places for books, reference materials, art and leaning materials, lunches or backpacks, and completed assignments. Encourage students to keep desks, lockers, and binders organized.
Structure daily routines and schedules	Although variety seems more interesting, students respond better when they can anticipate what is expected of them. Create a routine of what is expected at the beginning and end of each day or class period. Provide clear schedules and instructions when changing tasks.
Teach study skills	Study skills include note taking techniques, using a daily planner, and accessing learning strategies for memorizing or learning specific facts.
Adapt instructional delivery	Provide additional instruction, structure practice activities to master a skill, modify task requirements such as listening rather than reading or answering orally rather than writing responses. Group students together that can assist each other remember and follow instructions.
Alter setting and scheduling or time for test	Allow student to take test in quiet setting, and over extended period of time or spread test over several shorter time sessions.

required. These changes are made to provide a student with meaningful and productive learning experiences, with assessments based on the individual needs and abilities. Modifications include varying evaluation procedures to assess students in a fair and accurate manner that reflects their learning and IEP goals and objectives. When standardized tests are administered, the general education teacher needs to be aware of the various accommodations permitted with the specific testing format, and if the student's IEP stipulates particular accommodations, or if the student is

exempt from standardized testing according to their IEP.

The most important factors for successful inclusion of students with special needs are knowing the students and building a strong cooperative working relationship with the special education teacher, support personnel, and families. As inclusion becomes the expected standard, it is important to realize that this is a process of change that requires time, training, collaboration, acceptance, and compassion. This process is not always easy; it requires us to look beyond preconceived notions, resistance to change decreases with greater awareness and

Table 2: Suggested Modifications for Inclusion of Students with Special Needs in General Education Classroom

Modification	Example
Prioritize objectives	Select objectives appropriate for the student rather than trying to cover all objectives.
Adapt learning materials	Reduce reading, writing, and language requirements, and simplify worksheets to meet the needs of the students. Shorten assignments, or break down into shorter tasks.
Adapt instruction	Use clear, organized presentations, provide concrete and meaningful examples and activities, and incorporate frequent reviews. Provide written instructions for student to refer back to, limit number of verbal directions and encourage independent thinking.
Adapt assessment	Use individualized tests, portfolio evaluation, tape or video recording, use test formats that group similar items in progressive order of difficulty. Use multiple-choice or matching tests instead of full recall. Use study guides. Use oral testing.
Use specialized curriculum	Use alternative curriculum at the student's learning level.
Give student options of success	If attendance is a problem, adjust level of work so student can feel successful and not feel they are falling behind or failing. Demonstrate welcoming environment when student is present.

understanding. Inclusion requires a partnership between teachers, students, parents, related service providers, and community members. This collaboration will result in a positive learning experience for every student.

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## Using a Multiple Intelligence Approach to Meet the Learning Needs of All Students

*The theory of Multiple Intelligences developed by Howard Gardner has been adopted by many educators and has positive implications for modifying teacher instruction for improved student learning. Educators have long known that students learn in different ways. As student populations continue to diversify, teachers are looking for ways to expand traditional instructional methods to reach all students. This review draws from research studies and testimonials from educators at schools incorporating strategies based on Multiple Intelligences theory published in peer-reviewed journals. The implications from the research include: (a) improved student learning resulting in higher test scores, (b) improved student motivation, (c) deeper understanding of concepts with improved critical thinking skills, and (d) increased access to academic success for all students.*

As schools, teachers, and students are facing increasing pressure to perform and are being held accountable for their performance through norm-referenced, standardized test scores, educators are re-examining their roles and how to effectively teach all their students. Questions about intelligence, how students learn, and how students' abilities can be improved are being raised against the backdrop of the educational reform movement (Presseisen, 1990). The answers to these questions are not only important for meeting government mandates, but are essential for adapting teaching methods in order to meet the needs of all students.

Schools are becoming increasingly more diverse and teachers are realizing that conventional teaching methods fail to reach a large portion of their students. Effective teaching no longer entails relaying bits of information from a textbook and expecting the students to show what they have learned through a pencil-and-paper test. Many educators have turned their attention to teaching critical thinking skills, along with promoting the mastery of basic skills and knowledge. Teachers have begun to examine their own views about what intelligence is and how students learn in an attempt to create learning environments that meet the needs of students. Educational researchers and developmental psychologists have continued to support this inquiry into understanding cognitive development, following two general directions: (a) intelligence as a fixed, unitary capacity with a single information-processing mechanism, or (b) intelligence as a fluid, multitude of competencies or cognitive abilities.

Traditional views of intelligence as a singular, fixed capacity determined at birth have

led to the wide spread acceptance of IQ testing as a valid measure of intelligence (Gardner, 1996). Teaching methods based on this idea have been successful for students who have been perceived to be intelligent by conventional standards which focus on linguistic and logical-mathematical abilities. However, many students who have strengths in other areas have been ill-served by this limiting perspective (Presseisen, 1990). The Theory of Multiple Intelligences, hereafter referred to as MI theory, offers an alternative, dynamic approach for educators. MI theory, developed and popularized by Howard Gardner along with colleagues at Harvard University, suggests intelligence is a plurality of capacities, and that everyone has varying degrees of strengths in the different intelligences. This view allows teachers to consider their students' individual strengths and needs, and differentiate instruction accordingly. MI theory can increase a teacher's ability to help students access learning (Gardner, 1991).

Gardner does not propose that MI theory is the all-encompassing answer to educational reform, but that it can serve as a valuable tool when educators define their educational goals to teach for understanding (Gardner, 1997). Teachers can help students master core knowledge through an MI approach, while developing critical thinking skills and an understanding of their own learning which can transfer to their life beyond school. Research has supported the effectiveness of using MI theory to improve student learning, which has also resulted in increased standardized test scores. However, it is not clear if the increase in scores is a result of using a MI approach alone, or from a combination of MI and other methods schools

have also adopted, such as incorporating the arts and supporting teacher collaboration (Hoerr, 2004; Kornhaber, 2004).

Educators can either facilitate or inhibit students' learning and growth through the learning environment they create. For teachers, the debate about whether intelligence is a single or multiple capacity is not as important as deciding which perspective provides the optimal environment for learning (Presseisen, 1990). The implications of MI theory have the potential for raising test scores in schools, improving student motivation, reaching a deeper understanding of the knowledge identified by state standards as important for students to learn, and increasing access to academic success for all students.

### **Traditional Views of Intelligence**

The question of what intelligence is and how we develop it has played a significant role in education and psychology. Intelligence is a word we have used "so often that we have come to believe in its existence, as a genuine tangible measurable entity, rather than as a convenient way of labeling some phenomena that may (but may well not) exist" (Gardner, 1983, p. 69). Traditionally intelligence has been thought of as a general capacity, often referred to as *g*. This general capacity is presumed to have a fixed, inheritable quality that individuals receive in varying degrees at birth, which remains constant throughout one's life. This view assumes intelligence is a measurable property (Gardner, 1983).

Tests to measure the amount of intelligence we possess and to predict our intellectual achievement have been used since the early 20<sup>th</sup> century. Intelligence tests developed by French psychologist Alfred Binet and his colleague Theodore Simon, have become a generalized measure of intellectual ability. Binet however, believed that his scale did not allow for an actual measurement of intelligence. He maintained that intellectual qualities are not superposable and cannot be measured in a quantifiable way like linear surfaces, but can be classified into a hierarchy among diverse intelligences (Gould, 1996). Known today as an IQ test, Binet's scale and similar tests are used by some researchers and educators who continue to pursue a single capacity model of intelligence despite Binet's belief to the contrary. Other researchers, like Gardner (1983, 1991, 1996) and Sternberg (1988), are exploring a multifaceted model of intelligence. Gardner's (1996) hope is to replace standardized tests with more sensitive ways of

assessment that reflect an individual's natural and acquired strengths.

### **Gardner's View of Intelligence**

Relying on biology and cross-cultural anthropology, as well as building upon ideas from his own research in the arts, developmental psychology, and neuropsychology, Gardner questioned the traditional view of general intelligence (Gardner, 1983; Kornhaber, Fierros, & Veenema, 2004). Gardner proposed if *g* was the governing principle of brain function, child prodigies ought to excel in all abilities; and autistic savants or stroke victims would have weak capacities in all areas (Gardner, 1983; Kornhaber et al., 2004). Rather than focusing on mental tests, Gardner began to look at intelligence as a psychobiological potential to solve problems in a cultural context. Though he acknowledges that intelligence tests have been shown to be an accurate predictor of success in school, Gardner (1983) points out that they have not proven effective in describing one's abilities outside of the school context:

The problem lies less in the technology of testing than in the ways in which we customarily think about the intellect and in our ingrained views of intelligence. Only if we expand and reformulate our view of what counts as human intellect will we be able to devise more appropriate ways of assessing it and more effective ways of educating it. (p. 4)

Intelligence tests may be measuring other factors besides intellectual capacity, such as learned strategies, cultural content, or reading ability. Studies have indicated clear individual differences exist in children's strategy choices, which may be a reflection of the fit between a child's approach to the test and the test requirements (Seigler & Campbell, 1989; Seigler, 2004). Sternberg (1986, 1996) asserts that flexibility is an important element of intelligence, so intelligence is reflected in one's ability to adapt to the environment, and traditional intelligence tests do not measure adaptive skills.

### **Intelligence and Standardized Testing**

Gardner (1983) believes that IQ testing and studies using standardized, norm-referenced tests to categorize student abilities, perpetuate a focus on logical or linguistic problem solving, without acknowledging biological factors. To clarify the

Table 1: Gardner's Criteria to Identify Intelligences

Criteria	Description
Potential Isolation by Brain Damage	The experiences of stroke victims as well as evidence from individuals suffering from brain injuries point to the distinctive autonomy of an intelligence.
The Existence of Savants, Prodigies, and Other Exceptional Individuals	There are individuals who have exceptional abilities in some areas, yet have significant impairments in others, such as people with autism.
An Identifiable Core Operation or Set of Operations	This refers to the existence of one or more basic information-processing operations that can deal with specific kinds of input. Examples include nearly automatic mental processes like distinguishing between different pitches when listening to music, or making sense of facial expressions in interpersonal encounters.
A Distinctive Developmental History and a Definable Set of Expert "End-State" Performances	This describes a distinct developmental trajectory of an intelligence that individuals move along from infancy to adulthood, and from novice to master in a specific domain.
An Evolutionary History and Evolutionary Plausibility	An intelligence ought to have some basis in evolutionary biology, meaning that its roots reach back into the history of the species, evidenced by its presence in other members of the animal kingdom; bird song or social organization among primates are examples.
Support from Experimental Psychological Tasks	Using experimental tests, psychologists have been able to investigate particular abilities and demonstrate how different neural structures help support different kinds of mental processing. Also, evidence for a particular intelligence can be seen in experiments where subjects are taught a skill and then have not been able to automatically transfer that learning to a different domain.
Evidence from Psychometric Findings	Looking at scores from standard intelligence tests, Gardner suggests that a lack of correlation between scores on verbal, spatial and numerical abilities indicates the relative independence of each intelligence.
Susceptibility to Encoding in a Symbol System	An intelligence should be captured in a symbol system, such as notations for math, language and music. Also included are gestures and facial expressions that represent moods, intentions, and ideas.

Adapted from: Armstrong, T. (2003). *The multiple intelligences of reading and writing: Making the words come alive*. Alexandria, VA: Association for Supervision and Curriculum Development; Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

problematic nature of this approach, he uses an example of an individual who can lose his entire frontal lobes and is unable to solve new problems or show initiative, but may still continue to exhibit an IQ close to genius level. In this case an IQ test misrepresents an individual's cognitive abilities. Since conventional tests focus

on "inert academic intelligence", they represent only a small segment of one's cognitive ability, denying the malleability and modifiability of intelligence (Sternberg, 1996, p. 47). Intelligence tests do not reveal an individual's potential for further intellectual growth, nor do they accurately describe an individual's capabilities;

yet the desire to quantify intelligence and group students by ability remains a common practice (Gardner, 1983).

Though the use of intelligence tests in public schools is more restrictive than it was throughout most of the 20<sup>th</sup> century, schools still use IQ tests as one measure to place students in special education programs, including both gifted and remedial classes (Finnegan, 1999). More prevalent is the use of norm-referenced standardized tests that have been used in schools nationwide to assess the academic achievement of students. School boards and legislatures require educators to teach a defined body of knowledge and ask students to demonstrate their mastery of that knowledge on a pencil-and-paper test. These pencil-and-paper tests reflect a teacher-centered educational philosophy and tend to produce students who have learned how to give the correct answer without necessarily understanding the material.

Developmental learning recognizes that students learn and use knowledge in a variety of ways, thus developmentally appropriate practices include individualized and varied instruction and assessment (Lazear, 1994). Gardner (1983) recognizes that standardized tests are currently an integral part of schooling, but maintains that individual needs ought to be addressed as well as the breadth of content mandated by state and national requirements. MI is a student-centered educational philosophy that turns educators' focus on the individual student and addresses the social, emotional, and physical needs of children along with their intellectual needs (Lazear, 1994).

### **Multiple Intelligences**

Gardner (1983) relies on biological research in determining the criteria for the different intelligences he proposes, yet he recognizes that the theory of MI is not an empirical, scientific fact. Gardner (1983) emphasizes that though multiple intelligences are not verifiable entities, they are "potentially useful scientific constructs" (p. 70). It is within this framework of a practical theory that educators have turned a theory of intelligence into a philosophy of education (Hoerr, 1994). This student-centered philosophy is useful for all students, not just those typically served by traditional teacher-centered schools.

Gardner (1983) defines intelligence as "the ability to solve problems, or to create products, that are valued within one or more cultural settings, a definition that says nothing about either the sources of these abilities or the proper

means of 'testing' them" (p. x). Given the wide range of abilities expressed in the context of specific tasks, Gardner (1983) developed specific criteria to identify areas of ability or intelligence (Kornhaber et al., 2004). In order to qualify as an intelligence, specific criteria (see Table 1) must be met. From these criteria, Gardner was able to identify eight intelligences. According to Gardner, the number of intelligences is not significant. It is more important that the idea of intelligence is a plurality of capacities rather than dependent on a singular capacity (Armstrong, 2003; Gardner, 1983; Kornhaber, 2004). Also critical for understanding and using the theory is the idea that individuals possess all of the intelligences, but the composition of those intelligences within the individual differ. Everyone has their own individual profile, with strengths in some areas and weaknesses in others; identifying an individual with a particular intelligence limits our perception of an individual's capabilities.

The intelligences are categorized as linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist. Table 2 offers a more detailed description. The typical distribution of intelligences for most people falls between a few highly developed areas, moderate development in others, and little development in the rest (Stanford, 2003). Schools traditionally emphasize the linguistic and logical-mathematical intelligences and standardized testing continues to focus on these abilities. Students with strengths in these areas easily succeed in school. MI theory offers students lacking strength in these areas an alternative path to success and provides the framework for educators to design a curriculum that meets the needs of all kinds of learners by focusing on students' individual strengths (Hoerr, 1994). MI has also been linked with increased student motivation (Finnegan, 1999; Janes, Koutsopanagos, Mason, & Villaranda, 2000).

### **MI and Motivation**

Since effective learning requires deliberate activity by the learner, motivation plays an important role in students' educational process (Gardner, 1983; Stipek, 2002). Intrinsic motivation theorists claim that humans are innately inclined to engage in learning-related activities based on natural inclinations (Stipek, 2002). Using an MI approach can improve students' intrinsic motivation and interest in learning by tapping into those natural



Table 2: Multiple Intelligences

Intelligences	Description
Linguistic	An understanding of phonology, syntax, and semantics of language, which allows individuals to communicate in spoken and/or written forms. Professions that rely on skills in this area include poets, writers, lawyers, teachers, and public speakers.
Musical	Ability to understand and express components of music and sound, including melodic and rhythmic patterns. Examples of high levels in this area are seen in composers, musicians, singers and percussionists.
Logical-Mathematical	Enables individuals to recognize, use and analyze logical structures. Mathematicians and scientists primarily apply this intelligence in their reasoning and investigations. Computer programmers, statisticians, and philosophers also demonstrate strength in this capacity.
Spatial	Allows people to perceive the visual/spatial world accurately, to transform the information, and recreate visual images from memory. Blind people depend on this intelligence to create mental maps of their environment. Artists, architects, and surveyors represent examples of people with heightened spatial intelligence.
Bodily-Kinesthetic	Ability to use all or part of the body to solve problems or create products. Rock climbers, actors, athletes, and dancers highlight this intelligence through precision, agility, and control of their bodies.
Interpersonal	Capacity to recognize the feelings and intentions of others, and to use this information to persuade, influence, mediate or counsel individuals or groups toward some purpose. Successful salespeople, therapists, and effective political leaders, all rely on strong interpersonal intelligence.
Intrapersonal	Ability to access one's own emotional life through an awareness of inner moods, intentions, and motivations, and apply these understandings to help one live one's life. It is reflected in an accurate mental model of oneself, often made apparent by appropriate life choices or demonstrated in autobiographies.
Naturalist	Essential to farmers, botanists, zoologists, and meteorologists, this intelligence allows people to problem solve by classifying and using features of the natural world. It describes the ability to care for or interact with living creatures or whole ecosystems.

Adapted from: Armstrong, T. (2003). *The multiple intelligences of reading and writing: Making the words come alive*. Alexandria, VA: Association for Supervision and Curriculum Development.; Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

inclinations and individualizing instruction for students' different needs (Campbell & Campbell, 1999). In a study comparing MI methods and traditional instructional methods, an analysis of variance (ANOVA) for motivation indices revealed significant differences with students in

the MI group showing higher levels of motivation to learn (Finnegan, 1999). Stipek (2002) asserts, "Giving students choice usually results in students becoming engaged in activities that are more personally interesting, and thus doubly support their intrinsic

motivation” (p. 241). Though using MI theory has been shown to have positive effects on student learning, MI theory alone is not an all-encompassing remedy for low student achievement.

### **MI and School Practice**

MI theory is not an end in itself, nor does it guarantee excellent schools. Though Gardner has worked directly with educators, he does not advocate a particular curriculum (Campbell & Campbell, 1999; Mettetal, Jordan, & Harper, 1997). Rather than offering a comprehensive solution to problems that students and educators face, MI serves as a tool or a partner in developing a student's potential. Schools and teachers interested in MI must first state their larger educational goals, and then explore how MI can be useful in pursuit of those goals (Gardner, 1997). MI theory encourages educators to reflect on their teaching methods and expand their range of techniques and materials to reach a wider and more diverse student population (Stanford, 2003). The Key School in Indianapolis (Blythe & Gardner, 1990; Campbell & Campbell, 1999) and the New City School in St. Louis (Hoerr, 2004) have successfully incorporated MI theory throughout their schools, reporting positive results in student development, improved standardized test scores, a stronger sense of collegiality among teachers, and increased parental and community involvement.

Despite the substantive benefits shown in these school communities, many educators and administrators still question the validity of MI and resist adopting new curriculum and teaching methods that may compromise students' achievement and mastery of scholastic skills (Shearer, 2004). Incorporating subjects such as music and art provides another avenue for learning, which does not necessarily compromise traditional academic subjects, but rather has been shown to support scholastic achievement. Thomas Hoerr (2004) head of the New City School states:

Using MI does not mean lowering expectations, vitiating curriculum, or allowing students to pass through school without learning how to read, write, and compute. The scholastic skills are important and we have a responsibility to help every child master them, but the scholastic skills are not the sum and total of what we should teach or how students can learn. (p. 43)

The New City School has expanded their goals for students to include more than being able to pass a pencil-and-paper test. Students do succeed on tests, but they also focus on real-world problem solving, create products, and enjoy learning. Hoerr (2004) recognizes that student success is not solely the result of MI, but basing instruction on the theory has been an integral part of creating a successful learning community.

Testimonials from individual practitioners promoting the benefits of using MI in schools has led to research studies that examine if MI instruction enhances learning and results in improved student achievement (Shearer, 2004). Educators have acknowledged that the traditional focus of schools on linguistic and logical-mathematical intelligences has left some students behind (Kornhaber et al., 2004). In their attempt to better serve these students many educators have eagerly adopted the use of MI theory. In her investigations over ten years, Mindy Kornhaber (2004), a researcher with Project Zero at Harvard University's Graduate School of Education has focused on: (a) why teachers use MI given the lack of structure to support its implementation, (b) if teaching practice really changes once MI is adopted, and (c) what is happening in practice when educators claim MI is working.

Data analysis of interviews revealed a well-defined set of reasons for why teachers adopt MI in their classrooms (Kornhaber, 2004). MI validated educators' opinions that people learn in a variety of ways and enhanced educators' existing philosophies such as the importance of educating the whole child. MI theory aligned with some practices that educators already used, including project-based curriculum, arts-integrated approaches, thematic units, and learning centers. Educators also reported that MI provided an organizational framework for their practice and helped extend their practice (Kornhaber, 2004). However, many teachers have misinterpreted the theory, failing to use MI as a tool for understanding cognitive abilities. Instead teachers have turned it into a tool for curriculum development, which entailed creating extensive, multi-layered lesson plans. They have mistakenly divided their curriculum into different *intelligence* lessons, leading to superficial activities that sacrifice some of the substance of the instructional content. For example, in a unit about archaeology teachers might ask students to create a song about the objects they found on an archaeological dig activity at a local beach (Kornhaber et al., 2004).

To test if anything does change in practice

when educators adopt MI, Kornhaber (2004) conducted a study using interviews from a subsample of three schools. Based on a null hypothesis that MI makes no difference in practice, researchers looked for changes in the curriculum, pedagogy, assessment, and school structure. In all three schools, they discovered a positive association between adopting MI and a change or extension of existing practice in two or more areas.

### **SUMIT Study Findings**

To identify specific school and teaching practices associated with MI and reported improvement in student learning, Kornhaber, Fierros, and Veenema (2004) undertook a national study of forty-one diverse schools over a period of three and a half years, called The Project of Schools Using MI Theory or (SUMIT). Thirty-nine schools were public and served diverse student populations. Before the study began, all the schools associated MI with benefits for students and had been using MI in the classrooms for at least three years. The initial phase of the investigation revealed positive association between MI and four outcomes: (a) nearly 80% reported improvements in standardized test scores, with nearly 50% of schools associating the improvement with MI, (b) 80% reported improvements in student behavior, with more than 50% associating it with MI, (c) 80% reported increased parent participation, with 60% associating the increase with MI, and (d) 80% reported improvements for students with learning disabilities, with all but one associating the improvement with MI (Kornhaber, 2004).

The second phase of the study focused on collecting data samples from 10 noncharter, nonmagnet public schools, which were selected to represent as a group, a large diversity in student populations. Kornhaber, Fierros, and Veenema (2004) observed classroom practice, interviewed teachers, and documented examples of student work. SUMIT's analysis of interview data and school observations produced a set of six organizational practices, named Compass Point Practices, that were commonly used throughout the diverse set of schools. These Compass Points serve as directions for schools and classrooms to aim toward in order to engage students' multiple intelligences (Kornhaber et al., 2004). See Table 3 for a summary of these practices. Some of these points, like a supportive school culture and teacher collaboration, are common to school reform movements and

generally seen in good school practice. Controlled choice that provides students different options for learning and the significant role of the arts are both distinguishing practices that set these schools apart from common educational practices (Kornhaber, 2004). When these practices are in place providing a general framework within the whole school, both teachers and students are supported in their efforts to produce high-quality work.

Kornhaber, Fierros, and Veenema (2004) have distilled the findings from the SUMIT project research and share specific examples of classroom practices that teachers can use to promote student learning. These different methods are used to study the same topic from different starting points or perspectives, described by Gardner (1991) as Entry Points. These entry points are like different doors leading to the same room; one could access a subject using narrative, logical-quantitative, aesthetic, experiential, interpersonal, or foundational approaches (Gardner, 1991; Kornhaber et al., 2004). Kornhaber states:

The use of multiple entry points allows students to gain different perspectives on the same topic. By having a range of perspectives, students' understanding is deepened: they become more able to go beyond rote recall and to find new ways to represent and apply what they have learned. Rather than being left with one static idea of a topic, they are more likely to transfer information about the topic from one context to another. (p. 8)

Detailed examples can be found in *Multiple Intelligences: Best Ideas from Research and Practice* (Kornhaber et al., 2004). The value of this framework is in its alignment with common educational goals for students to develop higher order thinking skills and develop genuine understanding.

### **Assessment of Understanding**

Understanding is not synonymous with factual, textbook knowledge and basic skills. To illustrate this, Wiggins and McTighe (1998) show how students can perform the correct computation on a mathematics problem, yet give the incorrect answer, failing to understand what the question is asking. For example, with a math problem asking how many buses are needed to transport 456 students on a school field trip to the museum if each bus can carry 48 students, a

Table 3: Compass Point Practices

Practice	Description
Culture: a supportive environment for educating diverse learners	The school environment is notable for a belief in students' strengths and potential, care and respect, joy in learning, and educators' hard work.
Readiness: awareness-building before implementation	There are efforts to introduce and explore MI and other new ideas prior to calls for implementing them in classrooms.
Tool: MI is a means to foster high-quality student work	MI is used as a route to promote students' skills and understanding of curriculum, rather than as an end in itself or as an additional piece of the curriculum.
Collaboration: informal and formal exchanges	In informal and formal exchanges, educators readily share ideas, provide constructive suggestions and complement their own areas of strength by drawing on the knowledge and strengths of others.
Controlled Choice: meaningful curriculum and assessment options	Educators provide students with options for learning and for demonstrating their knowledge that are meaningful both to the student and in the wider society.
Arts: a significant role in the life of the school	The arts are used to develop students' skills and understanding within and across disciplines.

Adapted from: Kornhaber, M. L., Fierros, E. G., & Veenema, S. A. (2004). *Multiple intelligences: Best ideas from research and practice*. Boston: Pearson/Allyn & Bacon.

student answering 9.5 would have calculated correctly, but would have given an incorrect response to the question. Similar examples can be found in all subject areas. The challenge for teachers is to utilize frequent checks for understanding and modify their instruction accordingly.

Finding adequate assessment measures for all types of students is of utmost importance for educators. For Gardner (1991) a test of understanding involves the appropriate application of concepts and principles to new questions or problems, not the rote-recall of information or repetition of mastered skills as found in most standardized tests. Pencil-and-paper tests offer only a small piece of information about students' knowledge. Assessment needs to be on-going, including observations and dialogues, performance tasks, and projects, along with traditional quizzes and tests (Wiggins & McTighe, 1998). If students are asked to explain what they know, rather than simply recall information, they are asked to link facts with larger ideas that are connected to their

life and result in deeper understanding (Lazear, 1994).

### Conclusions

Though no formal studies have been conducted between MI teaching practices and students' abilities to transfer their knowledge to other contexts, research supports the use of MI to cultivate academic as well as personal success for all types of students (Gardner, 1983). Though factors such as motivation and a pedagogy of student-centered learning influence the success of an educational program, research findings support the implementation of MI practices in schools and classrooms. A list of benefits identified by research follows:

- Improved student learning
- Improved standardized test scores
- Improved mastery of core knowledge
- Improved learning for students with learning disabilities
- Higher student enjoyment and increased motivation
- Improved student behavior

- Improved teacher enthusiasm
- Improved collegiality among teachers
- Increased parent participation

There is a dearth of quantitative research that assesses the effectiveness of MI methods. Additional research would be needed to isolate MI practices from other factors to determine the correlation between MI and student achievement. Factors such as improving teacher enthusiasm and student motivation through a MI approach ought to be examined more closely. Further physiological research into how MI supports cognitive development and long-term memory would most likely support initial findings and the theoretical basis of a multifaceted model of intelligence.

### **Recommendations for Practice**

Foundational knowledge and competency in reading, writing and mathematics are important, but higher order thinking based on Bloom's taxonomy of behavioral objectives, includes analyzing, synthesizing and evaluating knowledge to understand and participate successfully within the broader context of the learner's community. Cognitive research has suggested that students have learned only when they can transfer that learning to situations beyond the formal school setting (Lazear, 1994). They need to be able to make connections between subject areas as well as aptly use their knowledge in the appropriate context (Lazear, 1994; Wiggins & McTighe, 1998). Gardner's (1983) definition of intelligence recognizes that effective problem-solving ability is an interaction between the individual and the cultural context in which the individual acts. Students therefore, need to be explicitly taught how to transfer their thinking skills across disciplines.

To develop these skills, students need practice in real-world problem solving across a wide range of disciplines. An individual's success and quality of life can be significantly affected by how well one solves these problems, especially problems requiring skill in the personal intelligences (Campbell & Campbell, 1999; Hoerr, 2004). Schools tend to reward a narrow range of skills and as a result often discourage students from pursuing those things they do best (Sternberg, 1996). To educate the whole child, educational practices need to incorporate methods that foster development in all areas, helping the student move beyond dutiful acquisition of textbook knowledge to

making sense of that knowledge through active reflection (Wiggins & McTighe, 1998).

To advance our understanding of differences in individual performance, the goal of psychological research, cognitive models need to identify the common factors across general performance (Siegler & Campbell, 1989). Educational research builds on these models to "determine which educational interventions are most effective in allowing individuals to achieve their full intellectual potentials" (Gardner, 1993, p. 32). The absolute truth of a theory is not of primary importance if the empirical truth describes a useful model. Though the existence of multiple intelligences may not be a proven fact, the tools offered by MI theory are closely connected to common educational goals. MI is a practical intervention that provides a foundation upon which schools and educators can design their framework and modify their practices to encompass the wide range of students' individual strengths, abilities, and interests. Gardner (1983) does not see MI as a replacement for school curriculum, rather MI is a tool that supports students in their efforts to produce high-quality work and enriches their vision of themselves as learners. To successfully use MI, educators need to aim their efforts at engaging all learners. They need to differentiate instruction to individual student's needs, offer different entry points to increase student's access to content knowledge, and utilize frequent assessment to check for understanding. Schools can support teachers efforts by adopting the Compass Point practices and conveying an inclusive attitude that respects all students and appreciates their differences. Academic learning is important, but it must be able to transfer to a student's life beyond school to sustain long lasting value.

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## The Importance of Recess in Schools

*Unstructured playtime helps facilitate a variety of cognitive and behavioral developments in children, including heightened independent decision-making and decreased symptoms of ADHD. Attempts to remove unstructured playtime are threatening to negate these potentially positive effects. Bullying behavior is a prevalent concern for recess opponents, due to the backdrop recess can provide for bullying. Assessing the bully/victim cycle demonstrates the importance of identifying victims and distinguishing types of aggression perpetrated on them. Classroom models that de-emphasize the gender-constructed framework of aggression can help facilitate more healthy use of unstructured playtime.*

The current American school climate appears to be adjusting to the recent legislative demands placed on it by the No Child Left Behind Act of 2001 (NCLB). As evidenced by similar measures in the United Kingdom (*Every Child Matters*), increasing competition between schools is a subsequent result (Blatchford, 1998). With heightened emphasis on normative test score performances and national curriculum, a variety of school components are being called into question for their educational validity. The existence of recess is becoming a more commonly questioned aspect of school life. In fact, nearly 40% of America's 16,000 school districts have either eliminated recess or are considering such measures (Kieff, 2001).

These two powerfully entrenched forces have combined to strengthen a preexisting anti-recess movement (Blatchford, 1998). Recess opponents seek to limit or outright abolish recess activity. They believe that it takes away valuable class time that could be devoted to learning. Additionally, many schools are concerned with playground injuries, since lawsuits can render them responsible if recess is deemed mandatory (Young, 2004). Highly publicized instances of recent school violence are regularly attributed to bullying behavior, which most widely occurs during unstructured playground time (Boulton, 1999). All of these factors have instigated a strong push to eliminate recess.

Proponents of unstructured recess believe that it allows for the development of profound social and cognitive behaviors. They believe that it facilitates life skills like conflict resolution, communication, and cooperation. It is also believed that recess helps students focus on learning and hone their attention. These pro-recess advocates believe that the anti-recess movement is largely based in political rhetoric

that ignores these social and cognitive behaviors. Their belief in the positive results of recess can be rooted in the idea that it burns excess energy, and sometimes that structured class time loses its novelty, thus necessitating unstructured activity to regain focus (Sindelar, 2004).

Given the strong divergence of opinion relating to matters of play, it is apparent that additional probing of relevant research should belie all policy decisions. Furthermore, play as an empirically based study is still in a stage of relative infancy (Pellegrini, 1995). It is utmost important, therefore, that careful attention is paid to relevant literature in existence.

To make policy decisions while ignoring the importance of developmental playground socialization could have long-term effects upon American students. Recess is being widely removed and limited nonetheless (Young, 2004). The institution of unstructured play has been a component of American schools since their inception (Walvin, 1982). Therefore, since school life without recess is a relatively new development, more study is necessary before making decisions that have previously unmeasured behavioral implications.

The scope of research in this review is limited by a variety of potential confounds. A cross-cultural limitation may exist, due to the prevalence of research from the UK. Perhaps unmeasured cultural variables are skewing the features of playground behavior in the UK. Additionally, many studies were conducted solely within the context of single schools. These studies, therefore, yield results that may be difficult to generalize in other settings. Also, as mentioned earlier, the initial base of empirically based playground research is in itself a new entity. Therefore, this component demonstrates limitations of potential generalization over time.

Additional research is necessary to negate said limitations.

### Literature Review

Until recently, scant empirical research has been produced regarding the importance of recess in the lives of students. It was never a professional consideration. This relative infancy is revealed by a 1989 national survey conducted by the National Association of Elementary School Principals (Pellegrini, 1995). Though 90 percent of respondents' school districts had some form of recess, the noteworthy element of this survey is that prior to its circulation, no such school data existed. Considering the relative infancy of recess-related data, it is important to note some current and potential educational developments that have lead to considerable pressure from anti-recess advocates to diminish or outright abolish recess from school curriculum (Young, 2004).

No Child Left Behind has mandated an extensive list of standards-based requirements to which schools must comply. This act is the most recent and perhaps most pervasive piece of recess-implicated measures. NCLB's widespread standardized curriculum has fostered an environment of competition between and within schools. Most educators feel that NCLB is the largest contributing factor to the removal of school programs, including recess (Sindelar, 2004). Recess has been deemed a barrier to competitive testing by many educators and politicians. In fact, 40% of America's 16,000 school districts have either eliminated recess or are considering such measures (Sindelar, 2004). Atlanta has abolished recess entirely, and is now building grade schools without playgrounds.

Much of these sentiments have already been studied in the UK. The same effects came about as a result of England's *Every Child Matters* legislation (Blatchford, 1998), which has similar competitive ideologies to NCLB. The prevalent public opinion surrounding breaktime (recess) was a generally negative one. This view led to a subsequent reduction in lunch and breaktime, with more monitoring of said time. This marginalization of recess-related activities has been viewed as a result of covering the UK's National Curriculum and its resultant increase in competition between schools (Blatchford, 1998).

Perhaps evidence of the need for recess-related study was first witnessed by the emerging anti-recess sentiments of the 1980s. Pellegrini (1995) describes:

First, it is argued by the antis that recess detracts from needed instructional time in an already crowded and long school day. Further, antis argue that recess periods, often arbitrarily placed in the school schedule, disrupt children's sustained work patterns. The second anti-recess argument commonly advanced is that recess encourages aggression and antisocial behavior on the playground. (p. 3)

These concerns highlight the anti-recess assumptions that educational efficiency and safety are undermined by the existence of recess (Blatchford, 1998). The argument fails to view recess in positive terms, particularly given a standards-based climate that facilitates scrutiny for use of school time.

In the absence of recess activities, many American school districts have accepted mandatory physical education as an adequate substitute. Such a replacement neglects the potential nonphysical effects of unstructured play (Graham, 2001). This inappropriate lumping of physical education and recess ignores the research of playground activity as a distinctly valued school component (Kraft, 1989). It stems from a belief that recess benefits children solely due to its exercise. The resultant climate removes the opportunities for social and cognitive interaction in a relatively non-structured environment.

To speak out against the potential for similar U.S. sentiments, Judith Young, Vice President, Programs for the American Alliance for Health, Physical Education, Recreation, and Dance, National Association for Sport and Physical Education made a statement at a hearing before the Subcommittee on Education Reform in which she urged for the retention of unstructured physical activity (2004). Her careful delineation between this unstructured time and Physical Education (PE) time is rooted in the social importance of such play. She highlights recess activity as its own entity. Advocates for the continuance of recess should be cognizant of important differences between the two activities. While PE certainly has been shown to develop a host of physical gains, it remains a highly structured activity. It does not, therefore, foster the development of independent social decisions among children (Chandler, 1999) like unstructured playtime does.

Pro-recess advocates have articulated many positive aspects of play experience. They most popularly believe that students need to relieve



surplus energy accumulated during typical class time so that more sedentary tasks can be effectively achieved (Blatchford, 1998). Though classroom alertness and performance have been shown to increase (Ridgway, Northup, Pellegin, LaRue, & Hightshoe, 2003) as a function of recess, it is unknown whether or not decreasing surplus energy is the causal factor.

Surplus energy theory is closely tied with the notion that length of confinement in the classroom impacts behavior. Studies of lengthened classroom duration have shown that students were more active at recess the longer they had been confined within classrooms. A lengthened duration of playtime, on the other hand, has been shown to significantly lower the level of inappropriate behavior in children with Attention Deficit Hyperactivity Disorder (ADHD). These findings (Ridgway et al., 2003) have also applied to the student population that does not have ADHD. This finding supports the idea of a novelty theory, in which student activities eventually lose their novelty, thus necessitating new tasks that lack structure and provide novelty (Sindelar, 2004). It appears as though anxiety increases largely as a function of classroom confinement, and resultant decreases occur when children are allowed to play.

Assessing the importance recess can have on cognition and socialization is another important arena of study. Psychological research has traditionally considered playground behavior to be more of an “outcome variable than an interest in its own right” (Blatchford, 1998, p. 15). This pays little respect to the separate culture that has and continues to exist among playground inhabitants (Blatchford, 1998). A separate playground culture is not a new development. Its 19<sup>th</sup> century existence is described by Walvin:

...they belonged to an independent cultural world of childhood which owed allegiance only incidentally to the world of adults. Furthermore, these games were played by both sexes and all classes. For most children it was the informal games of the street and field which provided the enjoyments of childhood and which, though they did not realize it, linked them to the pastimes of generations past and others yet unborn. (1982, p. 89)

This separate playground culture of children has always sought to develop its own rules divorced from the adult world. Removing the opportunity for children to develop such a culture assumes

that it has no redeeming cognitive and social qualities (Towers, 1997). Since empirical study of this unstructured culture lacks long-term results, its social and cognitive effects cannot be known for certain. Without attempting to understand the function of such a culture, policy decisions regarding recess may neglect a vital component to childhood socialization.

Anti-recess advocates also take issue with the lack of safety and accountability during recess time (Kieff, 2001). Due to cutbacks many schools have shifted from certified staff to classified staff, which has given responsibility to those with less formal training (Nelson & Smith, 1995). This weakens the quality of recess supervision by lowering the training time given to recess supervisors. These factors make it difficult for many educators to realize what goes on in their playgrounds. This has a potentially detrimental effect on general playground safety, which is certainly a major public concern. It has been shown that playground mishaps are a highly prevalent source of injury and the leading killer of children (Heck, Collins, & Peterson, 2001). This leads to the possibility of liability lawsuits.

The anti-recess camp pushes for recess removal due to this lawsuit potential (Young, 2004). Recreational-user statutes make it possible to hold schools liable for injured children if injuries are sustained during mandatory recreation time. The instances of injury that can hold schools legally accountable are open to interpretation, but the implications are profound. Schools may judge that it is simply not worth the costs to deem any sort of recreational activity mandatory (Young, 2004). These recess implications are exacerbated by the kind of “moral panic seen in views about childhood, current among many politicians, media commentators and other public figures...bound to affect teachers’ and parents’ views on children’s social lives” (Blatchford, 1998, p. 163). This panic and potential for lawsuits gives anti-recess advocates more reasons to push for the removal of recess.

In recent years, anti-recess sentiments have focused mainly on bullying behavior. These people see recess providing the backdrop for such behavior. The impetus for much of this study has been fervor over recent school-shootings, particularly Littleton, Colorado (Assessment of Bullying, 2004). To shed light on the issue, the U.S. Secret Service conducted an interview of 40 boys involved in various school shootings. It was subsequently found that many

of these children were humiliated and harassed by peers over long periods of time (Assessment of Bullying, 2004). Having ascertained that the bullying-cycle is an important characteristic in violent behavior, social scientists have done much to pursue the subject. Therefore, it is important to specifically look at this component of social behavior in children.

A series of studies were conducted (Blatchford, 1998) at schools that had been particularly proactive in rejecting aggressive solutions to conflicts. In these schools, the pupils were much more prone to avoiding such aggression. This demonstrates that schools can be agents in student behavior. Such influence can have a number of uses through the eyes of educators. Intervention strategies have continually been employed to try and minimize the tide of bullying behavior. Several strategies have been employed.

One study noted the negative behavioral effects that occurred within schools that punish more frequently than reward (Stafford & Stafford, 1995). The behavioral standards were substantially lower in these punitive institutions. This data leads to the logical conclusion that children should be allowed to be part of the resolution of their problems. It is certainly not possible to know the feelings of such students without directly asking them (Stiggins, 2005).

Despite the positive findings, however, merely attempting to employ a positively rewarding climate has not necessarily been proven to diminish the bullying cycle. The use of collaborative group work and cooperative tasks has not consistently been proven as an anti-bullying intervention modality (Menesini, Melan, & Pignatti, 2004). Additional programs of adult modeling behavior are necessary to facilitate gains in prosocial behavior. This will be discussed later, but initially, studying the bully/cycle is more important in making decisions (Assessment of Bullying, 2004). All possible correlating variables need to be examined by those seeking intervention strategies to bullying.

Several findings have demonstrated a variety of parallels of pathology amongst bullies and victims. Pellegrini (1995) has noted that boys' rough behavior "negatively predicted their popularity" (p. 156), which goes along with the cyclical view of bully/victim held by researchers. It would stand to reason, then, that bullies have themselves been victims of bullying. An understanding of this dynamic holds much

potential for framing the strategies of potential bully interventions in school.

As a word of caution, it is important for observers of playground environments to be able to decipher whether the behavior in question is bullying or benign teasing. There has been shown significant lack of clarity between the two behaviors (Stafford & Stafford, 1995), and it is therefore easy (Boulton, 1999) to mistake such teasing for bullying. It was found that playground observers are likely to have an inflated view of the extent to which students fight (Blatchford, 1998). In addition, these observers often underestimate the willingness students have to take necessary steps to cooperate on a daily basis. Thus, fights are consistently and effectively avoided without the aid of adult intervention. The subtle steps taken to facilitate this avoidance are difficult to measure. This willingness to coexist in creating a peaceful playground climate is a component that could use further study.

In spite of the findings of several playground-related researchers, many educators are unwilling to accept culpability for fostering a climate where bullying can take place. In fact, a national survey in the UK found that the majority of teachers attributed declines in recess behavior to more individual students with behavioral problems (Blatchford, 1998). Such sentiments fail to penetrate the surface of student behavior and do not recognize the various factors that lead to changes in behavior. Teachers who hold such superficial notions of playground activity would benefit from a review of related research.

Further distinction between teasing and bullying appears in the relationship between the parties involved. Friends are able to communicate in ways that might be unacceptable amongst strangers. A variety of factors influence the inter-relationships that playgrounds foster. Studies have pointed to the importance of an audience on the occurrence of teasing (Maccoby, 2002/2004). Witnesses have a heightened impact on playground teasing prevalence. This audience effect, coupled with the tendency of boys to cluster together in larger groups, leads observers to witness more Rough & Tumble (R&T) behavior in the male population of schools. The presiding adults can easily misperceive the highly pervasive teasing as real aggression and conflict (Blatchford, 1998), given that it has additionally been shown that boys choose to spend less time around adults with increased levels same sex play (Maccoby, 2002/2004).

In addition to this potential misperception, some say (Blatchford, 1998; Pellegrini, 1995) that teasing is not necessarily a negative component of recess. In fact, they say it may have a potentially positive social behavior. Blatchford (1998) discusses this in writing that “a number of studies show that these experiences, often centered on the playground, can contribute to the development of language skills and the assimilation of pupils into playground life” (p. 131).

In addition, it is also quite possible to confuse bullying with R&T behavior (Pellegrini, 1995). R&T and aggression are two entirely different things. Aggression involves closed-hand, not open-hand hits, and by hard, not soft contacts...it is unilateral, not reciprocal in roles” (Pellegrini, 1995, p. 101). It has been thus demonstrated that bullying is both physical and verbal, but not necessarily the equivalent of similar physical and verbal behaviors. Verbal abuse is more likely to be modeled by both male and female student populations, while physical aggression is a more typically male behavior (Bandura, Ross, & Ross, 1961/2004).

It is important to realize that bullying is often the result of students patterning their behavior after adult models. Recess specialists must understand that many parents encourage the displacement of their kids’ aggression onto their peers. This has proven difficult to alleviate. With that in mind, the pervasive misperception of bullying and benign behavior can affect both the physical and the verbal domain of playground life. It is important to move beyond the more harmless forms of play and determine what indeed constitutes bullying behavior.

Bullying involves a repetitive pattern of actions (Menesini et al., 2004) between victim and victimizer. A number of common characteristics have been found amongst the two categories involved. It is important to denote the patterns of both participants. It is clear, though, that the emphasis of research on bully/victim behavior has been focused on the bullies and not the victims. Addressing both is paramount for accurately assessing playground dynamics. One assessment of supervisors in the UK found their concern to be primarily focused with the bullies (Boulton, 1999). Additionally, though, the non-aggressive behaviors of playground interaction were studied. These pathological components seem useful in the guidance of intervention programs (Boulton, 1999). It is for this reason that victims need to be examined as much as bullies.

Some features common to potential victims are that they display qualities atypical of their gender and age group. For instance, it has been shown that females typically prefer to socialize in “dyads” (groups of two), while boys prefer to exist in larger groups (Boulton, 1999). Within these larger groups, boys have tended to participate in more group projects and activities (Maccoby, 2002/2004) than their female counterparts. It is perhaps for this reason that prevalent pathology finds socially isolated boys occupying the category of most likely victimized. This behavior is seen as atypical, and, is compounded by the paucity of potential help from a group (Pellegrini, 1995). There are various views, though, with regard to whether or not a large group can serve as a buffer for potential victims.

Additional evidence (Boulton, 1999) suggests that children who acquire the victim label may be continually bullied regardless of group size due to their previously determined victim status. The difference between chronic victims and participants in isolated incidents are important to note. In addition, children consistently victimized during the instances of instrumental aggression were not the same as those who were victimized during bullying episodes. Bullies paid additional attention to children’s personal characteristics when their goal was to dominate or harass them (Menesini et al., 2004). These boys that were continually picked by bullies shared non-aggressive characteristics and appear highly unlikely to fight back. Once this behavior was demonstrated, the bullying pattern continued.

The gender differences that are viewed from the aforementioned dynamic have a completely different effect on comparable girls. Girls who display collaborative characteristics within dyads are considered to be popular (Maccoby, 2002/2004). Such behavior is considered the norm, and therefore its female inhabitants are less likely to be singled-out as potential victims (Pellegrini, 1995). It is also significant that victims of overt aggression are typically male. The majority of overtly aggressive bullying behavior that is displayed occurs within-gender (Boulton, 1999). Some see this within-gender bullying as a result of male hormones and the stereotyped treatment of pre-adolescent and adolescent boys. Certainly more R&T has been found amongst boys (Pellegrini, 1995). In addition, the hormonal component has been further addressed through the study of both male and female children who were exposed to male

hormones in utero. In both cases, a sharply heightened prevalence of hypomasculine behavior was observed. Thus, many believe that male hormones predispose boys to more vigorous behavior. This hypomasculine behavior is another topic that could use more study, as it appears to be a substantial research claim.

Studying the fantasies of girls and boys has yielded a distinct gender divergence between the two groups. Boys are more interested in heroism, conflict, and winning. Girls, on the other hand, value family and themes of nonviolence (Maccoby, 2002/2004). Having observed that girls engage in a more cooperative brand of small group play, Pellegrini (1995) postulates that this socialization prepares girls for latter childcare duties. This is evidenced by the prevalent inclusion of younger children into the occurring play scenarios. This attempt to explain the typical differences in make up between female and male victims considers that girls also participate less predominantly in vigorous exercises than do boys. This, along with operating in large peer-groups can predispose girls for being targeted as victims (Pellegrini, 1995).

Many studies, though, have failed to account for something called relational aggression, which is "harming others through purposeful manipulation and damage of their peer relationships" (Crick & Grotpeter, 1995/2004, p. 224). Girls are much more relationally aggressive than boys, and are thus roughly equivalent in overall aggression scores when this is taken into account. In addition, these relationally aggressive students were more disliked by their peers. Their levels of isolation and loneliness were higher than those of overtly aggressive students.

With regard to dyads vs. group socialization, the bully/victim cycle has been viewed as dependent largely upon dyads that recognize the reciprocity of a partner dynamic. This has perpetuated a vicious cycle of collusion and reinforcement of complementary bully/victim behaviors (Menesini et al., 2004). This vicious cycle seems to be partially a product of context. In this case, the context is the repetition of previous playground results.

Another area of interest for bullying behavior is the potential affects of adult modeling behavior. Studies have confirmed that aggressive behavior is directly correlated to exposure of an adult modeling agent. Students appear to model their perceptions of adult aggression that surrounds them (Bandura et al., 1961/2004).

When carried out in school, this aggression very closely resembles that displayed by the modeled adult. Given the strength of adult modeling behavior, it is important that educators model positive ways for their students to interact during playtime. This modeling behavior has been shown to facilitate less aggressive solutions to conflict amongst students (Assessment of Bullying, 2004). Schools can use these programs to create playground climates of increased safety.

Interestingly, this effect is seen in descriptions of girls given by predominantly female elementary school teachers. Assessments for neurotic students indicate that girls who were typically labeled neurotic were the same girls who were labeled popular by their peers. The girls were observed to participate in more sedentary activity than boys, but it was a predominantly social brand of sedentary activity. Boys have been noted to participate in more nonsocial sedentary activity, which many believe to be resultant of a female bias in schools (Pellegrini, 1995). Though the predominance for female teachers and staff in elementary settings are frequently referenced in the literature, it would be important to further address the potential research on this female bias.

It is also important that observers not misread the situation regarding the compartmentalization of student groups. Without a proper review of the research, it could be easy to make false conclusions about what may or may not transpire during recess. The difference between healthy and unhealthy group dynamics can appear vague to educational observers, given the likely situational effect of student interaction (Blatchford, 1998). Students have been observed to pursue shared interests during unstructured recess time, which reveals a more apparent separation between groups. Interventionists might misinterpret these natural group nuances and the potentially positive effects of such interaction (Tatum, 2003). These groupings, racial or otherwise, have been viewed as a developmental response to outside stressors. The response is seen by many as vital to socialization of gender, race, age, and sexual orientation (Boulton, 1999). Students in schools that take the lead in facilitating socialization dialogue have been observed to keenly understand this dynamic. The outwardly racist appearances are viewed as the cohesion of common social threads (Blatchford, 1998). Perhaps more study of the racial makeup of recess settings is in order, but for the purposes of this review, the race

component is to be viewed in context of the larger group dynamic of recess.

Despite the bounty of reasons for intervention into recess behavior, many theorists (Blatchford, 1998; Boulton, 1999; Pellegrini, 1995) favor a more laissez faire approach to recess culture. The structure and history of playground life is real, and any activities imposed on students will likely be rejected (Blatchford, 1998). Furthermore, the reduction of recess time omits opportunities to develop skills of social and relational management with peers. Furthermore, important cognitive findings show that “children who choose to interact with peers are more sophisticated, on a number of cognitive measures, than children who chose to interact with adults” (Pellegrini, 1995, p. 83). It has been further evidenced that peer interaction positively relates to achievement, and activities directed by adults negatively relate to achievement (Pellegrini, 1995).

It is difficult to generalize much of the research findings of recess observations because they are prevalently conducted in single schools. This brings out a variety of confounds for studies including; age, race, gender, and socioeconomic status of the participants, as well as the policy toward recess-related behavior from that school (Boulton, 1999). In addition, much of the research has been employed in the UK, which may present additional cross-cultural confounds. Further study into the different cultural makeup of the playground participants would perhaps minimize some of these potential confounds.

The underlying views of the anti-recess vs. pro-recess climate can be boiled down to a struggle between an emphasis on greater control of student behavior, on one hand, and the perceived value of student independence on the other (Blatchford, 1998). Within this struggle are varying emphases about what kinds of control should be employed, if they are to be in place. This dichotomy between the two divergent views appears to be deeply rooted, and therefore does not appear to be diminishing in the near future. There is certainly potential, though, for a balance that refrains from removing the age-old institution of recess altogether.

### **Conclusions**

The empirical study of unstructured recess is a relatively new field of research. In spite of this assertion, though, there are legitimate findings that highlight the positive effects of unstructured play (Blatchford, 1998; Pellegrini, 1995). Its participants have shown a variety of positive

cognitive and behavioral effects. These positive effects could become largely unrealized in the future, due to the wide-scale recess removal currently happening in US schools. Approximately 40% have eliminated recess or considered doing so (Graham, 2001).

It has been found that length of classroom confinement is positively related to playground activity levels (Pellegrini, 1995). The length of time spent at recess is conversely resultant in lower levels of activity. Another positive behavioral implication is that children with ADHD have demonstrated lower levels of inappropriate behavior after engaging in recess time (Ridgway et al., 2003). Children without ADHD have similarly been shown to exhibit less inappropriate behavior due to recess time.

Many anti-recess advocates fear the results of liability lawsuits (Young, 2004). Poor supervision may add to this fear. Certified recess staff has largely been shifted to classified staff and thus weakened supervision (Nelson & Smith, 1995). Furthermore, there has been demonstrated a significant danger of playground mishaps (Heck et al., 2001). This danger yields more reason for anti-recess groups to push for the removal of recess.

Much of the push for recess removal comes from its backdrop for the occurrence of bullying. Bullying was found to be a major component in the tragic school shooting in Littleton, Colorado (Assessment of Bullying, 2004) and has thus been a widely researched topic ever since. It has been found that schools that emphasize punishment over rewards, with respect to bullying, have students who demonstrate more negative behavioral effects (Stafford & Stafford, 1995). Though this points to the avoidance of merely punishing bullies, there has not been a clearly demonstrated solution to bullying. Collaborative groupwork settings have not always been shown to alleviate the effects of school bullying (Menesini et al., 2004).

Many characteristics of the victim/bully cycle have been demonstrated. The most widely predictive characteristic has been students who have themselves been victims of bullying. Furthermore, it is highly predictive for victims to demonstrate behavior considered outside of their gender group norm (Boulton, 1999). Size of selected friend groups (dyads vs. large groups) is a large predictor of who will become a playground victim. Given that girls tend to interact in dyads and boys in larger groups, to do otherwise would constitute behavior outside of

the gender norm, thus increasing bullying (Maccoby, 2002/2004).

It is important to distinguish, however, between bullying behavior and benign forms of teasing or R&T. Adults have been shown to have an inflated view of schoolyard fighting (Blatchford, 1998). In addition, the female observer bias of elementary schools (Pellegrini, 1995) has demonstrated that certain behaviors may be over-reported or misinterpreted in schools. Boys are generally over-reported, with respect to aggressive behavior on the playground. The abundance of female teachers in primary grades has an impact on the depiction of boys as overly aggressive. The converse of this overrepresentation of boys is an under-represented female bullying force. Despite this assertion, it has been shown that when relational aggression is accounted for, girls are roughly equivalent to boys in bullying behavior (Crick & Grotpeter, 1995/2004).

#### **Recommendations for Practice**

A variety of behavioral implications of recess have been demonstrated. The majority of their results point to the positive impact of unstructured play. It equips students with tools to deal with conflict resolution amongst each other. Removal of such unstructured time would eliminate opportunities for students to act upon their social environment. Playtime allows for the acquisition of self-regulating skills that are difficult to learn strictly from adults. This point is particularly true, given the fact that children who prefer to spend their time with adults have shown inadequate social skills within their peer groups (Boulton, 1999). Children must be given opportunities to alleviate social conflict without constant monitoring of adult figures. This conflict resolution, though, can be facilitated through adult modeling programs that allow playtime to function healthily while adults are not present.

Several specific findings have demonstrated the positive effects of playtime. The behavioral gain of students with ADHD (Ridgway et al., 2003) is a particularly important finding, given the bounty of students diagnosed with the disorder. The long-term effects of maintaining recess are tantamount to these findings. Less recess time will likely correspond with heightened negative behavioral qualities, and more administration of unnecessary pharmacological treatment.

While recess has long mediated these behavioral effects, it has also served as a

backdrop for their appearance. Unfortunately for students, their behavior is often misinterpreted by supervising adults. Harmful aggression is over-represented in the school findings, particularly that of boys. This may reflect a female observer bias in elementary schools (Pellegrini, 1995), due to their statistically representational majority. Additionally, the fear of tragic events similar to those of Columbine High School (Assessment of Bullying, 2004) may also be influencing the way playground behavior is observed. The types of aggression that are examined must expand beyond physically overt aggression, and include relational aggression (Crick & Grotpeter, 1995/2004) so that an accurate assessment can be made.

It is of utmost importance to have systematic methods for identifying the bully/victim cycle and acting accordingly (Nelson & Smith, 1995). Many methods focus too much on the bullies and fail to recognize what constitutes the typical victim pathology. The knowledge that the bully is almost always a victim can enable educators to move beyond the simplistic philosophy of punishing behavior, which has been shown to be ineffectual (Stafford & Stafford, 1995).

A modeling program of recess behavior that emphasizes empathy with the victim can facilitate rewards over punishments. This can equip students to more adequately seek out advantageous solutions to playground problems. It has been shown that a strong predictor of victims is a disposition that demonstrates qualities deviating from typical gender norms (Boulton, 1999). Therefore, educators must understand the different forms of aggression (overt, relational, and R&T) to assess which students are truly being bullied. This knowledge allows them to set up classrooms that are less structured in typical patterns of gender-stratified socialization. Since deviating gender behavior makes students targets, and girls typically socialize in dyads and boys in larger groups, it is advantageous for educators to adjust these patterns within the classroom. This modeling behavior can carry over to unstructured recess time and negate some of the effects of bullying by preemptively limiting some powerful attributes of victimization.

The overall impact of recess is a fostering of proactive social decision-making within the student dynamic (Blatchford, 1998). Its removal would likely result in an increasing dependence on adult authority to mediate issues that are clearly within the control of the child. The ideal

of facilitating the development of critical and independent thinkers must allow for the practice of such independence. Though playtime is an imperfect entity, students need its existence to achieve the autonomy of a functional community. The proper modeling of a classroom community can allow this to happen.

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## **No Child Left Behind: History, Accountability, and Implications**

*This review examines some of the historical influences and debates that shaped the No Child Left Behind Act (NCLB, 2001), while focusing primarily on issues of state-to-state variation, assessment, determining Adequate Yearly Progress (AYP), and implementation. The research in the review suggests that individual states perform at different levels, use different methods of assessment, and face unique variables while advancing toward the 2014 date of national proficiency established with NCLB. The findings indicate that effective and judicious measurement of states' AYP, overall performance in education, and ultimately national performance in education, hinges on the usage of agreed upon best methods of assessment and the accurate reporting of results through each State Department of Education (SDE).*

This topic was approached in an attempt to explore the meaning of the No Child Left Behind Act (NCLB, 2001). This review starts by examining the trends and general climate of educational policy leading up to the law and displays some of the core issues with NCLB. The scope of this review focuses primarily on the assessments and state-to-state comparability that determines Adequate Yearly Progress (AYP) and the implications therein.

At the turn of the century, former Secretary of Education, Rod Paige (2000), informed us that one of his predecessors, T.H. Bell, under President Reagan, assembled a commission to assess the status of the United States' public system of education. Paige (2000) stated, "That the commission's report, *A Nation at Risk*, made us aware of the shocking and unwelcome truth that our country had become complacent toward mediocrity and failure in our public schools" (p. 2). Secretary Paige (2000), proclaimed that the report, "sparked an educational awakening" (p. 2). However, this review looks not only at the suggestions of Secretary Paige, the work of Diane Ravitch (1995) and Lee Bowsher (1989, 2001), whom support that stance, but offers a counter argument seen in the work of David Berliner and Bruce Biddle (1993), and Michael Apple (1996, 2001). The latter three represent the body of researchers refuting the contention spurned by *A Nation at Risk* (1983), and suggest this was an inflated criticism designed to pave the way for a market-based school system.

In writing about the ethical and legal dimensions of NCLB (2001), Torres informs us that, "On the surface alone, the arrival of this mandate symbolizes a concerted effort by the United States government to hold school systems

accountable for student results." He further states, "the threat of sanctions, which is undoubtedly the hallmark of accountability, is believed to create the conditions for student performance" (2004, p. 250). Congruent to Torres' (2004) statements this review identifies accountability as a core element of NCLB, and focuses on research which sheds some light on the dimensions of accountability and assessments.

The work of Robert Linn (2003) suggests different criteria for the measurement of AYP from state to state. Kathryn McDermott (2003) attempts to isolate reasons states react differently when enforcing the sanctions required by NCLB for schools failing to make AYP. The work of LiShing Wang, Wei Pan and James Austin (2003), calls for a consensus as they describe a problem of multiple assessment methodologies, in the overall measurement of performance. These levels of variation require address in order for judicious enforcement of NCLB (Wang, Pan, & Austin, 2003). When comparing some of the current variations in school districts across the country, the geopolitical striations become apparent. These variations seem to intensify the fact that state-to-state performance assessment is highly variable.

In addition to the call for agreed upon best methods in measuring AYP (Hamilton & Stecher, 2004; Linn 2003a, 2003b; Wang et al., 2003), there is the idea that more qualitative research could help supplement the existing research (McDermott, 2004). Finally, there is the call for more open and fair reporting, in both the area of measuring state performance, and state spending on the tests designed to reflect overall state performance. The idea is that ethical

journalism can create a more accurate reflection of the whole picture (Hamilton & Stecher, 2004; Miner, 2005; Torres, 2004).

### Literature Review

No Child Left Behind (NCLB) of 2001, is the re-authorization of the Elementary and Secondary Education Act (ESEA) of 1965. As described by the Department of Education (2003), "In Amending ESEA (1965), the new law represents a sweeping overhaul of federal efforts to support elementary and secondary education in the United States. It is built on four common-sense pillars: accountability for results, an emphasis on doing what works based on scientific research, expanded parental options, and expanded local control and flexibility (p. 2). Although the intentions of NCLB are clear, with a reform of this scope there is room for misconception as to the purpose, administration, and practical implications. This review seeks to examine several components of the NCLB debate. This sampling of literature focuses mainly on the following contentious discussions; (a) accountability, (b) assessment methodology, and (c) practicality implications, while also framing the historical context through which NCLB has evolved.

In order to more completely understand accountability, assessment, and the practicality of NCLB, it is important to examine the historical context. The three tiers that contribute most to the historical framework of NCLB are The Elementary and Secondary Education Act of (1965), *A Nation at Risk* (1983), and Goals 2000.

President Johnson signed the Elementary and Secondary Education Act (ESEA) on April 11, 1965, in Stonewall, Texas, in a one-room schoolhouse (Spring, 2005). One of its major design components was the infusion of federal funds into the national public education system (Spring, 2005). According to Hochschild and Scovronick (2003) the background of ESEA (1965) was the Civil Rights Act of 1964. They indicate that ESEA initially provided over one billion in federal funds for schools with large populations of poor students (Hochschild & Scovronick, 2003). ESEA was described as an extension of the War on Poverty, an agenda of the Johnson administration, which sought to eradicate the growing divisions that existed between the wealthy and poor. The ESEA (1965) demonstrated a federal disposition geared toward the backing of education legislation through increased funding.

In addition to heavy increases in the funding of public schools, the ESEA (1965) sought to increase the usage of standardized norm-referenced achievement tests. The aim was to set the minimum requirement for statewide testing in schools, which according to Ravitch (1995), emerged throughout the 1970s. She states, "standardized achievement testing became securely entrenched because the law required regular testing in schools that received federal funding through Title I. So the tests, always important, gained an institutional foothold and became a mandated element in a large portion of public schools" (Ravitch, 1995, p. 178). This marked a shift in the use of testing as a federal tool to monitor the effectiveness of the investment in national education. However, increases of funding came under criticism in the early 1980s, as some believed the results of public education were not meeting the demands of the workplace.

Although mostly an appeal to the national leadership, the National Commission on Excellence in Education's report, *A Nation At Risk* (1983), represents an ideological reaction often cited in relation to NCLB. There was a growing sentiment that public education was not producing students with the skills needed for the changing workplace (Bowsher, 1989, 2001; Hochschild & Scovronick, 2003; McDonald, 2004; Ravitch, 1995; Spring, 2002, 2005).

Jack Bowsher, former head of IBM's department of education, represents the feeling of the pro-business faction demanding more from the education system. Bowsher (1989) quotes the report, *A Nation at Risk*, "Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being challenged by competition throughout the world" (p. 153). There was an expressed sentiment that our national workforce was not meeting the demands of the globalizing market place, and that American public schools were producing only marginally literate and marginally functional workers. Concern from the business community about the apparent decline in the quality of education made *A Nation at Risk* (1983) instrumental in bringing to attention the failure of public schools, while calling for business minded education reform (Bowsher, 1989, 2001).

In examining the publication *A Nation at Risk* (1983), Diane Ravitch (1995) claims it was the cause of much public concern about the quality of education, which she contends prompted many schools to raise graduation standards. She

indicates that during this time, led by California's public education system, there was a reconstructing the state curriculum, an influence of higher standardization in the national textbook production, and an increase in the quality of state testing (Ravitch, 1995).

Joel Spring (2005) indicates a different motive and result of the publication than both Ravitch (1995) and Bowsher (1989, 2001). Spring (2005) suggests that the attempt was to further develop the relationship between the state and federal departments of education, while allowing the decline of local school board control. This claim is supported by McDonald (2004) who added the postulate that *A Nation at Risk* served to build a platform which supported a climate of acceptance for free market schools. He claims the influence of *A Nation at Risk* was also a starting point for standards-based reforms and cannot be thought of merely as encouraging market-based schools. McDonald (2004) indicates that because of the report's emphatic call for reform, especially for criterion-referenced testing over aptitude testing, it could even be considered a root cause, in addition to a stimulant of the standards movement. Importantly, Berliner and Biddle (1995) conclude that the severity of the report on the education system was overstated and that the claims were inherently fraudulent. In an examination of test score data, as reported by the National Assessment of Educational Policy (NAEP), they determined that there was no significant decline in national test scores. They contend that in the years surrounding *A Nation at Risk*, data was reported inaccurately and facilitated a movement towards the privatization of the public education system (Berliner & Biddle, 1995).

In the 1990s the administration of President George H. W. Bush responded to content of *A Nation at Risk* with *Goals 2000*. The measure outlined achievement targets for the upcoming century and the future of American public schools. Both Ravitch (1995) and Spring (2002), say that part of the implied agenda of *Goals 2000* was the promotion of more standards-based curricula. Unlike Ravitch (1995), who views *Goals 2000* as primarily an increase in the standards initiative, Spring (2005) interprets it as a plan to increase parental choice incentives, and create market driven schools. This dimension is further supported by Tyack (1995), who talks about the introduction of New American Schools Development Corporation and the emerging attitude of creating schools that function more

efficiently under the market forces. He concludes this approach to reform allows school management to adopt more business-like methods, especially in the area of planning and budgeting. The aim of these reforms seeks to transform an antiquated school system into a more efficient system (Berliner & Biddle, 1995; Tyack, 1995;).

The variances in the accountability systems at the state level signify one of the main areas of contention in NCLB. In 2001, according to McDermott (2003) there were multiple differences in states' combinations of assessments and accountability policies. She describes how thirty of the fifty states were identified as having overall failing schools. Of the thirty-four states having the power to mandate a take over of failing schools, or impose a re-staffing, only five actually enforced any takeover action. The aim of McDermott's (2003) work was to quantitatively examine some potential causes of the variables in the accountability policies between states. According to McDermott (2003) several key reasons that states may have variations in their policy were that; (a) states compete economically, (b) that they potentially learn through their neighbors the benefits or downside of a policy, and (c) states in close proximity may rely more heavily on each other for the diffusion of information than distant states. The some of the key variables used in the study were; (a) states' identification of failing schools, (b) states' power to reconstitute failing schools, and (c) states' power to replace school personnel. These variables were compared to state size, political identification, and NAEP achievement scores (McDermott, 2003).

McDermott (2003) found of the all the dependent variables used, the one which displayed the most consistent positive correlation to the independent variables was Democratic Party identification and was statistically significant at the  $p < .01$  level. McDermott (2003) states, "the model is telling us that states with more-Democratic leaning electorates have a greater likelihood of enacting policies that identify failing schools, that give the state power to take over, reconstitute schools, and that give the state the power to replace school staff." She claims comprehensive qualitative study would help in identifying states' political influence on reactionary school policies more conclusively (McDermott, 2003).

A challenge presently facing the implementation of NCLB comes from the standards setting procedures. In the study

conducted by Wang, Pan, and Austin (2003), the authors recognize, “a rich array of more than fifty standard-setting procedures” (p. 3). They attempt to draw a more complete picture of the challenges presented because of the NCLB guidelines. The passing rate may vary from high as 79% to as low as 29% depending on whether the standard is mapped to the observed-score scale or the latent-score scale (Wang et al., 2003). The authors call attention to three main areas needing address in standards setting: (a) lack of methodological guidance, (b) controversies in standards setting procedures, (c) and narrow focus on student outcome assessments (Wang et al., 2003). Their work demonstrates a consistent variation in outcomes and suggests a school could be rated as failing while having their scores mapped to the traditional observed score scale, but in using the latent score scale the same school’s results could increase to a passing score. However, even if every school mapped standards to the latent scale, there are still inconsistent passing results because of the observed-to-latent mapping procedures (Wang et al., 2003).

The authors conclude that though they proved high levels of inconsistency and confirmed previous studies, the findings should not be considered to the degree of unreliability. They do caution the usage of inconsistent assessments with high stakes results. Their conclusion calls for a congruent mapping procedure from state-to-state in order to eliminate the variation between the observed-score method and the latent-scale score. Their goal seeks to minimize the potential for legal controversy with unfair state-to-state comparisons. The final sentiments reflect a need for standardization and communication between the stakeholders, psychometricians, and policy-makers, to ensure a consistent process (Wang et al., 2003).

In a similar study Robert Linn contends that performance standards are indeed one of the most controversial topics related to educational measurement. He describes a situation of great variability in the definitions of proficient academic achievement from state-to-state and concludes that unless there is a reconciliation of these differences the measuring of achievement will lose meaning significantly (Linn, 2003a, 2003b).

The author points to the variability from which each state enters the tracking of progress before the 2013-14 deadline. He gives the example of Massachusetts in which 47% of

fourth grade students were reading at the NAEP level, compared to only 14 % of Mississippi’s fourth graders. His math example indicated the starting point ranged from 8% in Missouri to 79% of Colorado (Linn, 2003a). This confirms that states’ begin the process of moving toward national standards at very different levels of proficiency.

Linn (2003a) argues that norm-referenced assessments have more consistency because of the tighter definitions. He claims that in determining proficiency NCLB relies heavily on performance standards which wield substantial sanctions based on those standards (Linn, 2003a). Although a wide range of standards setting methods are used, he argues there are problems because no single method is used consistently. He continues by implying that performance assessments carry a high degree of human error as a result of judgment teams, and that a test could display passing rates having a standard error with margins as high as 26 points. He asserts that in the context of NCLB an error of that magnitude could have huge implications for schools (Linn, 2003b).

The questions posed by the research of McDermott (2003), Wang, Pan, and Austin (2003), and Linn (2003a, 2003b) provide a lens by which to view questions on variability in methods of assessment. What is similar in the above mentioned work, in relation to NCLB, is the fluctuation of assessment between states. It is essential to look more closely at the measurement of Adequate Yearly Progress (AYP).

In looking closely at the variability in the measurement of AYP, Finn and Hess (2004), mention a lack of distinction between in the subgroups of data. More specifically, schools can have upwards of 40 subgroups by which performance is measured. According to Finn and Hess, “there is no distinction between a school that failed to make AYP in 35 [of the subgroups] and a school that fell short in just one” (2004, p. 3). They claim successful schools can be marked as failing because of statistical fluctuations in test scores which mis-represent the true indication of the schools’ overall performance. They say that because each state determines its own course to meet the 2014 date of universal proficiency, there is an increased amount of flexibility across the states in terms of the standards. This admission is especially significant as Finn and Hess are both supporters of the accountability and standards reform.

Linn (2003b) asserts that some issues in the measurement of AYP are the labeling systems

which vary from state to state. He labels such as advanced, superior, and distinguished are used by various states for their highest levels of performance, and that states are using different assessment guidelines in creating those labels. Linn (2003b) goes on to provide examples of this point by making the distinction that the advanced standard in the states of Louisiana, Wyoming, and Massachusetts actually rests closer to the advanced cut (determined by the NAEP) than to the proficient cut (McLaughlin & Bandiera de Mello, 2002). Kansas, Missouri, and South Carolina lie almost directly in between the advance and proficient cuts (Linn, 2003b). This means the standards in Louisiana, Wyoming, and Massachusetts may be set higher than those of Kansas, Missouri, and South Carolina. In the case Georgia and New York both have labels exceeds standard that are closer to the proficient cut of the NAEP signaling a potentially lower standard than Louisiana, Wyoming, and Massachusetts (Linn, 2003b).

Linn concludes that it is necessary to use disaggregated data in determining AYP, however, he makes the distinction that there is currently a trend in reporting statewide from smaller districts and individual schools. He contends that too small a sample of students in the reporting of data causes statistically unreliable results (2003b). The significance of these preliminary findings suggests different states use very similar, however not precisely matched, methods of determining what constitutes AYP. This compounds the previously mentioned issue of states' starting points, and implicates a potential integrity issue on the part of NCLB to be an effective regulatory measure in the consolidation of a national standard.

After examining some of the implications of AYP, and some of the variations of measuring states' standards and assessments, it is important to look at those implications at the state level. There are characteristics which signal degrees of variation (Linn, 2003a, 2003b; McLaughlin & Bandiera de Mello 2002).

In order to design the Florida Comprehensive Achievement Test (FCAT), the Florida Department of Education (2001) created the Test Development Center (TDC). According to the Florida Department of Education, the TDC was initially composed of fifteen classroom teachers and an unspecified number of curricular specialists. Together they were assigned the responsibility of critiquing, revising, and validating thousands of test items, and eighty test formats (Florida Department of Education,

2001). These results of the teamwork to assemble agreed upon and valid test items comprised the content of the FCAT.

Washington State also utilized an integrated professional team to develop the Washington Assessment of Student Learning (WASL). According to OSPI (2005), the assessment content was determined by two committees at each grade level, comprised of classroom teachers and curricular specialists, that provided recommendations to a standardized test development company who created the assessment (Office of the Superintendent of Public Instruction, 2005; Orlich 2003). The cut-off score for passing the 4<sup>th</sup> grade WASL is likely different from that of Florida's FCAT (see Appendix for further comparative statistics).

This demonstrates that there are fifty procedures for determining proficiency standards and yet there is no agreed upon universal method or cut-off score for passing the assessments (Wang et al., 2003). Also, Linn (2003a, 2003b) substantiates this idea of various definitions in standards-setting procedures content variance is partly due to the human element of constructing these assessments. What is evident in comparing states' test development process is the complexity of the integration a committee experiences in the attempt to create a valid assessment. Considering the number people involved in creating an assessment, the quality and content of test items selected for each assessment, and fifty different processes, it is clear that real potential for imprecise results exists. There are degrees of variation involved in not only creating an assessment fit for a certain state, but in the coordination of those assessments results to national standards.

Another area of variation relates to socioeconomics and funding of schools across the country. The U.S. Department of Education increased spending risen 101% in twelve years, to roughly \$501 Billion in 2003-2004 (Department of Education, 2004). However, despite the increase in spending, reported state budget deficits have left many school districts in a shortfall (Pinkerton, Scott, Buell, & Kober, 2004). According to Pinkerton, Scott, Buell, and Kober (2004) in the two years following NCLB, some schools have failed to meet the NCLB provisions because of a lack of funding. Furthermore, in examining selected geographic areas there is a stratification of funding and/or socioeconomic status (SES) across the United States, which in contributes to variable standardized test performance (Department of

Education, 2004; NAEP, 2005; Pinkerton et al., 2004).

In Bloomfield School District in the Four Corners region of New Mexico, there were some unique issues with the NCLB. In the state of New Mexico, 51% of the students are of Hispanic decent, and 11% are Native American (NAEP, 2005). Ten percent of the teacher base had not met the highly qualified standards set by NCLB nor had 84% of the paraprofessionals. Although the district reported using Title I funding to reimburse the cost of tuition and books for those seeking to meet the standards, there were reported difficulties in luring teachers and paraprofessionals already having highly qualified credentials. Likewise, the district reported difficulty making the required AYP. In particular, troubles were indicated with students with disabilities and English Language Learners (ELLs). According to the NAEP (2005) 20% of the students in the state were enrolled in courses for ELLs.

The Cleveland School District, an urban setting with a demographic of largely African American students, reported a primary source of concern with the relatively high rates of poverty throughout the district (Pinkerton et al., 2004). It contrasts the demographic of the whole state which, according to the NAEP (2005) is reported 79% White and only 16% Black and 2% Hispanic. The Cleveland School District, bound by a budget deficit in the state of Ohio at the implementation of NCLB, reported not meeting the AYP for reading. Neither students with disabilities or ELLs received passing scores (NAEP, 2005). The district indicated that many parents opting not to utilize the choice option (the ability to relocate to a better performing school) preferring to stay at the nearest school, regardless of failing status (Pinkerton et al., 2004).

According to Pinkerton et al. (2004) the Collier County School District in Florida had reported extreme difficulties with retaining teachers in the rural areas of the county, as many teachers reported being drawn to the coastal beaches and higher SES student populations. In addition to the 6% of the teachers not meeting the highly qualified designation of NCLB, 90% of the paraprofessionals are out of qualifications compliance. Interestingly, most of the ELLs demonstrated an acceptable number of earned credits, yet a large number of ELLs failed to graduate because they did not pass the exit examination. However, according to the NAEP (2005), only 0 graduate because of failure to pass

the exit examination. However, according to the NAEP (2005), only 8% of the states' student population received support instruction for Limited English Proficiency indicating a potential lack of service by the state.

The situation in Alaska provides insight into a different set of challenges for forging compliance with the implications of NCLB. On the matter of budgeting, Pinkerton et al. (2004) report fluctuations in the Kodiak Island Borough funding that have weakened or eliminated programs for that district and similar districts. While the districts are trying to comply with the new demands of NCLB, the cuts in funding are seen as problematic. According to NAEP (2005) Alaska spent \$9500 per student in the 2001-2002 school year, the Kodiak School District reported a unique problem in teacher retention. The district faces a turnover rate of roughly 30-50% yearly demonstrating constraints that effect student learning but are not related to the spending of adequate dollars per pupil. Compounding the situation, of the 178 teachers in the district, 74% do not match up to the highly qualified definition set by NCLB. Many of the teachers teach in small rural schools having both elementary and secondary students across multiple subject areas requiring higher skill dexterity in the practicing professionals. There is similarly a reported difficulty in finding institutions that offer a broad range of endorsement accreditation in geographic proximity to the district (Pinkerton et al., 2004). Another variable for the Kodiak District is the failure of ELLs to make Annual Yearly Progress requirements. It was indicated that in this district there are 16 different languages represented, and 14% (371) of the students are ELLs (Pinkerton et al., 2004). The sheer diversity of language in that region, as defined by the NAEP (2005) and Pinkerton et al. (2004) further distinguishes the Kodiak District from other districts.

In all of the described school districts there the common thread of variation of student performance on assessments. It is clearly indicated that ELLs play a key role in measuring AYP. Ironically, in the case of the Cleveland School District in Ohio, one of the causes of failure to meet AYP came from the ELL students in a state which overall contains only a very small number students receiving Limited English Proficient instruction. Comparatively, Florida has a higher population of students taking English language courses and yet indicated minimal failure to meet AYP (Pinkerton et al., 2004; NAEP 2005). Considering (a) geography,

(b) different state procedures and assessments (McDermott, 2003), (c) student populations, and (d) different passing scores for each states' measurement of AYP (Linn 2003a, 2003b; McDermott 2003), it is clear that variations are a severe challenge to the validity and functionality of NCLB as public schools move toward the 2014 date of universal compliance.

### Conclusions

In conclusion, the literature reveals common threads in the history and current implication of NCLB. In a historical examination of NCLB it is apparent that some components of the highly politicized public debates during the 1990s have continued, specifically, the contentions over the quality of education and the regard of education as a public domain. Yet, a recent area brought to light by the research is the variability, specifically in regard to accountability and assessment, inherent in NCLB.

Examining the state-to-state variability of NCLB, McDermott (2003) looked at how State Departments of Education (SDE) respond to the implementation of the regulations in NCLB. She determined there are sociopolitical factors that potentially influence the readiness of a certain state to enforce NCLB. She called for more qualitative analysis of SDEs so researchers could create a larger understanding of SDE role in implementing national policy.

Studies by Robert Linn (2003) and Wang et al. (2003) exposed the multiple methods available for the mapping overall state performance. Both similarly call for an agreed upon best method of assessment. In addition, Linn (2003a, 2003b) pointed out the relationship between states' measured standing in the progression toward 2014 proficiency as problematic. Since there are various criteria and definitions used by different states, comparisons between states create an inaccurate view of *proficiency* as a nation, rather there may be fifty different levels of *proficiency*.

This point was accentuated in the analysis of the construction of state learning assessments in two, Florida and Washington. The available literature depicted the large coordinating effort required to create an assessment and also indicated that information on state contractors, budgets, scoring methods is not widely distributed to the public. Hamilton and Stecher's (2004) research reiterates the need for open communication between SDEs and the public and it suggests that journalists should effectively act as liaisons. This increased relationship

between journalism, SDEs, and the public will open communications and foster create accountability in the coming years.

In exploring some of the practical implications of NCLB, Pinkerton et al. (2004) exposed some of the geographic and financial variation that highlight the difficulty with a national education reform. Showing some of the differences at the district level brings attention to some of the logistical issues involved in complying with NCLB at the district level. Accountability at the national level, according to Pinkerton et al. (2004) shows a types of variability that challenge some of the initial expectations of NCLB and the movement toward 2014 proficiency.

The research also suggests that the reporting and transmission of data is problematic, yet essential in creating an accurate national picture of standing. The dilemma stems from the NCLB mandate of testing and the inability to agree upon a general best method for the assessment of state wide performance has created multiple interpretations about the true meaning of state wide reporting data (Finn & Hess, 2003; Linn 2003a, 2003b; Wang et al., 2004).

In addition to looking at what may improve some of the accountability and assessment problems, the work of Stecher and Hamilton (2004) and highlight the significant relationship between journalists and SDEs and their role in shaping the public knowledge of NCLB. They noted that journalists spoke of difficulty receiving objective and complete information from State Departments of Education (SDE). This issue was compounded according to Stecher and Hamilton (2004) who indicated that often the information to journalists was devoid of a workable interpretation of the methodology used in the compilation of data. Thus, journalists spoke of the difficulty with accuracy in reporting that data. They indicated a call for either, the need for training in deciphering the assessment methodology or, better access to specialists the SDEs to facilitate, in a timely manner, the reporting of data. In short, there is a powerful relationship between the SDE, journalists, and the public which if strengthened could greatly increase accurate public awareness about the progression of schools in a given community. That relationship and awareness creation, together with an agreed upon set of best methods for the assessment of state performance, may perhaps seem like small steps but, could potentially result in an increased accuracy in the measurement of school progress.

Collectively, given each state's starting point, various methodologies used in determining student performance, the social and geographic differences at the district level, and the political history, variation is crucial when considering NCLB. The literature decisively reports some practical flaws of the NCLB legislation emerging in terms of accountability, constructing valid and reliable assessments, and measuring annual yearly progress. While there is also evidence to

suggest that each state has a range of challenges to address while adjusting to the *highly qualified* teacher standards, providing support to English Language Learners, and managing budget turbulence. The variation existing within the fifty state departments and their student assessments underscores the challenges inherent in this national reform movement.

## Appendix: Comparative Statistics of Florida and Washington

### Florida

#### School/District Characteristics

Number of school districts: 67\*  
 Number of schools: 3,529  
 Number of charter schools: 260  
 Per-pupil expenditures: \$6,540<sup>1</sup>  
 Pupil/teacher ratio: 17.9  
 Number of FTE teachers: 144,955

#### Student Characteristics

Number enrolled: 2,587,628  
 Percent in Title I schools: 37.7%  
 With Individualized Education Programs (IEP): 15.4%  
 Percent in limited-English proficiency programs: 7.5%  
 Percent eligible for free/reduced lunch: 46.0%

#### Racial/Ethnic Background

White: 51.3%<sup>1</sup>  
 Black: 24.3%<sup>1</sup>  
 Hispanic: 22.1%<sup>1</sup>  
 Asian/Pacific Islander: 2.0%  
 American Indian/Alaskan Native: 0.3%<sup>1</sup>

### Washington

#### School/District Characteristics

Number of school districts: 296\*  
 Number of schools: 2,251  
 Number of charter schools: N/A  
 Per-pupil expenditures: \$7,292<sup>1</sup>  
 Pupil/teacher ratio: 19.3  
 Number of FTE teachers: 52,824

#### Student Characteristics

Number enrolled: 1,021,349  
 Percent in Title I schools: 41.3%  
 With Individualized Education Programs (IEP): 10.8%  
 Percent in limited-English proficiency programs: 5.7%  
 Percent eligible for free/reduced lunch: 35.5%

#### Racial/Ethnic Background

White: 71.5%<sup>1</sup>  
 Black: 5.7%<sup>1</sup>  
 Hispanic: 12.3%<sup>1</sup>  
 Asian/Pacific Islander: 7.9%  
 American Indian/Alaskan Native: 2.7%<sup>1</sup>

\* Local school districts only (type 1, 2)

Source: Common Core of Data, 2003-2004 school year (non-adjudicated)

<sup>1</sup> Common Core of Data, 2002-2003 school year

FCAT: Reading, Grade 8 (scale: 0-500)

Year	National Average	State Average
1998	255	[261]
2002	261	[263]
2003	257	[261]
2005	256	[260]

WASL: Reading, Grade 8 (scale: 0-500)

Year	National Average	State Average
1998	264	[261]
2002	268	[263]
2003	264	[261]
2005	265	[260]

Source: National Center for Education Statistics. (2005). *2005 state profiles*. Retrieved, December 1, 2005, from <http://nces.ed.gov/nationsreportcard/states>.



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### **Bridging Culture and the Classroom: Advantageous Implementation of Culturally Responsive Pedagogy**

*This essay is a review of the attitudes, reflective practices, and understandings inherent to culturally responsive pedagogy for educators as a means to increase the achievement of students of color. Peer-reviewed journals, scholarly books, and research reports were consulted and analyzed for major findings and theoretical underpinnings. The paper begins by examining the achievement gap between students of color and their white counterparts in school that establishes the need for a pedagogical shift. Culturally responsive pedagogy is then presented as a legitimate option for that shift because it moves away from traditional practices that maintain the status quo of minority underachievement. The classroom and curriculum components of the theory are explored and recommendations for practice are made.*

I cling to my culture because it is my memory, and what is a poet without memory? I cling to my culture because it is my skin, because it is my heart, because it is my voice, because it breathes my mother's mother's mother into me. My culture is the genesis and the center of my writing, the most authentic space I have to write from, I am blind without the lenses of my culture. -Benjamin Alire Saenz

Saenz (2004) reminds us that we are nothing without our culture, that identity does not exist without culture, and that culture is the most authentic space that we can live and learn from. Ovando, Combs, and Collier (2003) describe culture as "complex, fluid, mysterious, and subtle" (p. 187). The complex and transcendent ebb and flow of sociocultural, political, and personal tides that simultaneously transmit and create culture for individuals and groups complicates any attempt to nail down a specific culture into a mechanistic, static set of behaviors or beliefs (Wlodkowski & Ginsberg, 1995). Despite this lack of specificity, culture has direct effects on almost every facet of human life and the human mind. Wlodkowski (1999) states that "social scientists today regard cognitive processes as inherently cultural" (p. 7). Despite evidence that learning and culture are intrinsically connected, mainstream methodology and practice appear to ignore cultural influences to the detriment of students of color. As a means to address the need for culture to have a significant place in contemporary education, this paper examines culturally responsive pedagogy.

Recent research has documented a gap in academic achievement between the majority and minority populations in the United States. Howard (2003) states, "An examination of school achievement along racial lines underscores clear racial divisions about who is benefiting and who is not" (Why Does Race Matter section, para. 1) There is evidence to

suggest that students of color are not the ones profiting (Howard, 2003; Ladson-Billings, 1992; Multi-Ethnic Think Tank, 2001). Despite the fact that minority populations are increasing in the public schools, it seems that the success of students of color in education depends on more than academics.

Performance in school is affected by a myriad of factors that include motivation and behavior. Wlodkowski and Ginsberg (1995) discuss motivational barriers that hinder minority success in school, such as traditional motivational systems that rely on extrinsic rewards and punishments. The behaviorist model currently in place in most schools can exclude minority students from achievement (p. 18). Further, this mechanistic orientation appears to penalize the values and behaviors of some minority groups.

Especially for African-American males, culturally and linguistically diverse behaviors often do not fit into the current educational system (Weinstein, Curran, & Tomlinson-Clarke, 2003, Dealing with Problem Behaviors section, para. 1). Webb-Johnson (2002) in a study of two urban elementary behavior/emotional disorder (BED) classrooms found that a disproportionate number of African-American males were placed in BED environments. She argues that "teachers don't know how to respond to behavioral tenets that are different from the socialized norm of public school settings" (p. 654). Behaviorist

motivational frameworks and disproportionate behavior referrals can be factors that contribute to the achievement gap.

Looking at the role of the teacher in the achievement of students of color is necessary in order to understand why researchers have recognized a need for a pedagogical shift. Teachers have a hand in whether or not a student is motivated, alienated, discriminated against, or recognized. Wlodkowski (1999) identifies a traditionally held view of motivation as individualistic. From a mainstream perspective, the responsibility for motivation rests on the shoulders of the student. Wlodkowski (1999) claims that there is a “rapidly growing theoretical force” that requires “understanding [student] thinking and emotions as inseparable from the social context” (p. 8). Despite the mounting viewpoint in psychology regarding motivation, it seems such a perspective is not dominant among educators.

Perhaps the desire to maintain the current power structure in U.S. society and its institutions has contributed to the “theoretical force” not permeating in the school. There is little racial diversity within the teaching profession, and “there have been serious attempts by whites to keep it that way” (Kailin, 1998, Anti-racist Perspective section, para. 5). The gap between the culture of the teacher and the culture of his or her students is made clear by Kailin (1998). She argues,

[Teachers must recognize] the often alienating impact of education on children of color who are robbed of their role models as they are taught by people who are usually divorced from or ignorant of their communities and lived experiences and who may entertain negative stereotypes about them. (Anti-Racist Perspective section, para. 6)

The lack of knowledge about the lives of culturally, linguistically, and ethnically diverse students or their communities on the part of schools and teachers may contribute to the poor achievement of minority populations. Howard (2003) argues that “the need to rethink pedagogical practices is critical if underachieving student populations are to have improved chances for school success” (Why Does Race Matter section, para. 3).

In the following literature review I begin by exploring the birth of culturally responsive pedagogy, which is followed by a more in-depth

discussion of the need for this practice. I go on to define and characterize culturally responsive pedagogy by utilizing a musical metaphor. A review of the attitudes, reflective practices, and understandings inherent to culturally responsive pedagogy follows. Finally, the culturally responsive curricular and classroom management components are outlined. Reviewing the research and methodology of culturally responsive pedagogy leads me to conclude that it is a legitimate and useful pedagogy that can increase equitable educational opportunities for all students and aid in the achievement of students of color in school.

### **Culturally Responsive Pedagogy**

Culturally responsive pedagogy is a teaching practice that moves away from traditional pedagogy and attempts to include the cultures, heritages, and experiences of students of color (Gay, 2000). Culturally responsive pedagogy is known by many names, including culturally *relevant, centered, sensitive, congruent, reflective, contextualized, mediated, and synchronized* (Gay, 2000). For the purposes of this paper, the phrase culturally responsive pedagogy is used. Pedagogy, as used here, is seen as “a process, not a technique. It is more a variety of two-way communication than a mode of one-way transmission or delivery...Pedagogic thinking, therefore, prioritizes the constitution of learning over the execution of teaching” (Hamilton & McWilliam, 2001, p. 18). The idea of pedagogy as a learning process and two-way communicative relationship is further emphasized when one considers pedagogy as it relates to cultural responsiveness. Culturally responsive pedagogy is defined as “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (Gay, 2000, p. 29). Thus, culturally responsive pedagogy puts culture at the center of education, and the culturally responsive teacher designs lessons and learning around the cultural orientations and understandings that their students bring with them to school.

### **The Call for Culturally Responsive Pedagogy**

Since its inception, the United States has had a diverse population, yet its policies and institutions have been shaped by the perceptions and values of the white Anglo-Saxon Protestant majority (Banks, 2001; Spring, 2005). This power structure has impacted the history of the

American school system. Thus, this history is peppered with uprisings by oppressed groups in public policy, including education. One of the most notable and influential of these upheavals was the Civil Rights Movement during the third quarter of the 20<sup>th</sup> century. During this period many minority groups, lead by the actions of African-Americans, “demanded more control over the institutions in their communities and also demanded that all institutions, including the schools, more accurately reflect their ethnic cultures” (Banks, 2001, p. 27). These pressures were the beginnings of the movement towards multicultural education.

The multicultural education movement, which gave rise to culturally responsive pedagogy, began in the 1970s. Gay (2000) explains that culturally responsive teaching methods’ “persistence is not surprising, since multicultural education originated in the early 1970s out of concerns for the racial and ethnic inequities that were apparent in learning opportunities and outcomes” (p. 26). Thus, culturally responsive pedagogy is still relevant 30 years later, due, in part, to it rising from genuine concern for the educational inequity that continues to negatively affect the opportunities of marginalized populations. By 1973 the focus on multicultural reform in education shifted towards inservice and preservice teachers in order for them to come to understand, appreciate, and utilize cultural, racial, and ethnic diversity in their curriculum and instructional practices (p. 28). Culturally responsive pedagogy, as a legitimate theoretical ideology that can help minority students achieve, rose from this attention in multicultural education on teachers and teacher preparation.

*Contemporary Context.* Despite the growing movement favoring a pedagogy that addresses the needs of students of color in education, it seems that many minority students face inequitable and harsh environments in the public schools. Kailin (1998) argues, “The current status of education for communities of color, in effect resembles a colonial type relationship whereby the rules, regulations, standards, structures and personnel are shaped by the group in power (whites)” (An Anti-racist Perspective section, para. 6). This researcher points to a trend in education, in which, it seems, the historical has become the contemporary. Minorities are facing a system of education not created by, made for, or reflective of their needs. This colonial system of governance in the schools

may be attributing to the poor academic achievement of minority students, and points to the need for a shift in educational practices.

The need to rethink pedagogy to increase the success of students of color has escalating significance when considering the growing racial, ethnic, linguistic, and socioeconomic diversity of America’s youth. Minority students currently make up 70% of students in the nation’s 20 largest districts, and by 2020 they will represent about 40% of the school children in the United States (Irvine & Armento, 2001, p. 3). Furthermore, maintaining traditional school practices can perpetuate educational inequity. Teachers may need to adopt a culturally responsive pedagogy to meet the needs of marginalized students, and in so doing they may narrow the achievement gap and improve the success of minority groups.

Schools continue to contribute to unequal opportunity when they neglect the issues of race, power, and culture in the classroom. Gay (2000) claims this neglect is because “too few teachers have adequate knowledge about how teaching practices reflect European American cultural values, nor are they sufficiently informed about the cultures of different ethnic groups” (p. 21). She adds, “Far too many educators attribute school failure to what students of color don’t have and can’t do” (p. 23). By neglecting the influence of culture, teachers are not likely to recognize cultural bias or have access to information regarding diverse cultures. Mainstream pedagogical practices view cultural differences as deficiencies, and this perception ultimately impacts the ability of diverse students to achieve.

Deficit thinking about students of color can be identified as problematic. Howard (2003) insists that teachers “acknowledge how deficit-based notions of diverse students permeate traditional school thinking” (Critical Reflection section, para. 3). Teachers need to recognize the impact of culturally bias views. In other words, he claims that teachers be “mindful of how traditional teaching practices reflect middle-class European American cultural values” (Critical Reflection section, para. 3). The alternative to awareness of culture is ignorance and/or silence that maintains status quo teaching practices that can alienate students of color. Gay (2000) explains that “if educators continue to be ignorant of, ignore, impugn, and silence the cultural orientations, values, and performance styles of ethnically different students, they will persist in imposing cultural hegemony, personal

denigration, educational inequity, and academic underachievement upon them” (p. 25). Mainstream pedagogical practices appear to sentence minority populations to perpetual failure. Thus, there has been a call for a new, culturally responsive pedagogy. Wlodkowski and Ginsberg (1995) advise, “Rather than trying to know what to do to students, we must work with students to interpret and deepen their existing knowledge and enthusiasm for learning...motivationally effective teaching is culturally responsive teaching” (p. 17). Research seems to suggest that teachers need to look at diversity among students, not as something to deal with or change, but as something to build on in their classroom.

*Meeting the Needs of Students of Color.* If, as research suggests, traditional methods that ignore cultural bias are not effective for students of color, then pedagogy that responds to culture can help minority groups. Research finds that culturally responsive teaching methods and texts will improve the academic achievement of historically marginalized students as well as increase teacher efficacy with those students (Ensign, 2003; Gay, 2000; Howard, 2003; Kailin, 1998; Vavrus, 2002). Irvine and Armento (2001) take it a step further by insisting that “culturally responsive pedagogy is, in fact, helpful to all students—mainstream and minority” (p. 13). Thus, culturally responsive pedagogy has the potential to not only help traditionally marginalized students, but majority students, as well.

School success, as previously discussed, is more complex than mere academics. Culturally responsive pedagogy addresses that complexity. Gay (2000) suggests that culturally responsive teaching methods go beyond academics and are “committed to helping students of color maintain identity and connections with their ethnic groups and communities; develop a sense of community, camaraderie, and shared responsibility; and acquire an ethic of success” (p. 30). It appears that culturally responsive pedagogy entails a great deal more than academic success and requires a commitment by educators to foster the growth of students and their communities.

Culturally responsive pedagogy includes congruency between educational processes and cultural frames of reference of minority students through respect for different cultures and by creating a common culture (Gay, 2000; Wlodkowski, 1999). By incorporating this more

holistic approach of culturally responsive learning methods, teachers can “unleash the higher learning potentials” of marginalized groups (Gay, 2000, p. 20). Considering the call for culturally responsive pedagogy in order to help students of color achieve, a need to understand and be able to implement these teaching methods becomes clear.

### **An In-depth Definition of Culturally Responsive Pedagogy**

The previous section revealed a need, on the part of educators, to examine the foundations of culturally responsive pedagogy. This section addresses that need by building on Gay’s (2000) definition above. This section attempts to define and characterize this practice as having its roots in culture, specific characteristics, and influence from the complex interplay of different cultural identities, such as race, class, and gender. This definition is explored through the use of a jazz metaphor.

Researchers insist that culturally responsive pedagogy is “an evolution of sound educational practices” (Wlodkowski & Ginsberg, 1995, p. 283) and “the best of what we know about good teaching” (Irvine & Armento, 1995, p. 9). With this in mind, it would be reasonable for a teacher to determine that the musical notes of ideology and methodology are simple, or as simply common sense. However, culturally responsive teaching is “a frame of mind as much a set of strategies or practices” (Weinstein et al., 2003, Dealing with Problem Behaviors section, para. 3). Therefore, when one hears the entirety of the sound, or all the individual musical notes of ideology and methodology put together, culturally responsive pedagogy becomes much more complex.

*Culture as the Base/Bass.* If culturally responsive pedagogy were a pyramid, then culture would be the base. If culturally responsive pedagogy were a jazz ensemble, then culture would be the rhythm section, percussion and bass. No matter which metaphor is chosen, research indicates that culture is at the center of the prism of culturally responsive pedagogy. Gay (2000) provides her own visual interpretation:

[C]ulture is at the heart of all we do in the name of education, whether that is curriculum, instruction, administration, or performance assessment...Even without our being consciously aware of it, culture determines how we think, believe, and

behave, and these, in turn, affect how we teach and learn. (p. 8-9)

She makes a significant point about culture affecting all aspects of education and, therefore, making up its core. Wlodkowski (1999) contends that currently in the field of social science thinking and learning are seen as “inherently cultural” (p. 7). Thus, culture cannot be ignored by educators.

Working from the assumption that culture is the bass and percussion of a culturally responsive jazz ensemble, defining culture becomes essential. Banks (2001) defines culture as “the values, symbols, interpretations, and perspectives that distinguish one people from another in modernized societies” (p. 71). Therefore, if culture is distinguished and defined as the ways in which people interpret, perceive, and value their lives and the world, then culture can be influential on all aspects of the human mind and learning. Further, culture seems to work on both a conscious and unconscious level, is passed along by means of enculturation and socialization, and pervades every aspect of life, including language, communication, art, teaching and learning (Gay, 2000; Irvine & Armento, 2001; Ovando et al., 2003). Consequently, culture affects education and the practice of teaching.

The profession of teaching is an exercise in communication that is influenced by culture. Gay (2000) explains,

Culture provides the tools to pursue the search for meaning and to convey our understanding to others. Consequently, communication cannot exist without culture, culture cannot be known without communication, and teaching and learning cannot occur without communication or culture. (p. 77)

The inherent connections between culture, communication, teaching, and learning make it important for educators to incorporate culture into their classrooms. Traditional pedagogy would need to be redesigned “not merely to fit the school culture to the students’ culture but also to use student culture as the basis for helping students [succeed]” (Ladson-Billings, 1992, p. 314). By incorporating students’ knowledge of their own and others’ cultures, previous personal and educational experiences, ways of knowing, orientations to learning and understanding educational content and the world

around them, modes of communication, and “performance styles” in the classroom and curriculum as a means to make learning more pertinent and effectual for marginalized students, one can teach “to and through the strengths of these students” (Gay, 2000, p. 29). Teaching to and through cultural strengths is oppositional to a deficit-based, behavioristic method. For the culturally responsive teacher, in contrast to traditional teacher perceptions, culture is a base or a bass (or a core or a heart) for culturally responsive pedagogy.

*Characteristics of Culturally Responsive Pedagogy.* Applying the components outlined by Gay (2000) to the jazz ensemble, the defining characteristics of culturally responsive pedagogy would represent the saxophone, guitar, trumpet, and keys. The saxophone represents the validation of all cultural backgrounds and traditions, and the guitar acts as an evocative bridge between the home and the school for students (p. 29). Using an array of teaching methods and techniques is, in essence, like the variety of sounds Miles Davis makes with his trumpet, and the piano’s ebony and ivory synchronicity encourages students to understand, respect, and take pride in their own and each others’ cultures (p. 29). With all of these melodic and methodological characteristics in place one can move towards the transformational agenda of culturally responsive teaching, which is dual focused.

The transformational theory that is integral to culturally responsive teaching has two paths that lead to the same place, just like the rhythm and melody both lead to one sound. Gay (2000) identifies these converging paths as “confronting and transcending the cultural hegemony nested in much of the curriculum content and classroom instruction of traditional education” and developing “social consciousness, intellectual critique, and political and personal efficacy in students so that they can combat prejudices, racism, and other forms of oppression and exploitation” (p. 34). The first pathway has to do with recognizing and acting against the “cultural hegemony” of mainstream pedagogy, whereas the second pathway leads educators towards helping students discover that same hegemony in the school and wider communities and to act against it. Thus, culturally responsive teachers can help students become culturally responsive in the face of inequity.

*Influences on Culturally Responsive Pedagogy.* Every band has their influences and the music made by those inspirational performers can be found in the sound of their musical predecessors. Similarly there are elements that culturally responsive pedagogy entails, such as empowering students to “examine critically the society in which they live and work” (Ladson-Billings, 1992, p. 314). Wlodkowski and Ginsberg (1995) would, perhaps, identify the “dynamic mix of race, ethnicity, class, gender, region, religion, and family” as a musical influence on the ensemble. The jazz of culturally responsive pedagogy also includes classroom components like educational environment, subject matter, teaching methods and strategies, personal relationships between educator and student, and academic achievement evaluations (Gay, 2000, p. 31). Recognizing the parts of the band coupled with understanding the influences can lead to a full and complex sound, the song of culturally responsive teachers.

#### **Effects of Attitude**

Teacher attitudes have an effect on the achievement of students in their classroom. Kailin (1998) explains that “the individual most likely to influence the student’s learning environment is still the teacher” (Conclusion section, para. 1). This influence is especially true for students of color. According to Shannon and Bylsma (2002), “[S]tudents of color are more affected by negative as well as positive attitudes and treatment [from] their teachers” (p. 26). Thus, teachers need to be highly sensitive and aware of the impact their attitudes may have on student achievement, particularly for marginalized populations. This section presents evidence about the ability of teachers to negatively affect students of color and outlines how culturally responsive teacher attitudes can reduce harmful consequences to the education of underrepresented cultural groups.

Teachers sometimes complain about the attitudes of their students without having critically examined their own attitudes. Webb-Johnson (2002) explains, “Studies have shown that some academic and social skill problems experienced by African-American youth have to do with teacher perceptions of the behavioral, language, and communication skills children bring to various classrooms” (p. 657). The effects of those perceptions on academic and social skills create a sense of “learned helplessness” among diverse students (Gay, 2000, p. 56).

An extension of perception is expectation. Teacher expectations do not often reflect the values teachers claim to believe in and expectations more often than values influence teacher behavior (Gay, 2000, p. 57). Students will live up or down to teacher expectations, and their behavior will often reflect, like a mirror, their teacher’s deficit-based attitude (Gay, 2000, p. 57). Brown (2003) quotes a “successful urban teacher” from his qualitative study: “It doesn’t matter what good content you have, or what good curriculum you have, or what exciting lessons you have; if you don’t care about students and they know that, you don’t have a chance to get to them” (Caring section, para. 4). Culturally responsive pedagogy can help teachers avoid harboring low expectations and give educators a chance to “get to” their students.

Considering the negative impact a teacher’s pessimistic attitude towards students of color can have on their achievement, culturally responsive pedagogy demands a shift from deficit-based thinking. This perceptual shift can also be considered as caring for students of color and engaging in healthy student-teacher relationships in order to help students develop and grow (Brown, 2003, Caring section, para. 3). Caring goes beyond students to encompass the profession of teaching in general. Ladson-Billings (1995) suggests that successful urban teachers “identified strongly with teaching. They were not ashamed or embarrassed about their professions...teachers [see] themselves as part of the community and teaching as a way to give back to the community” (p. 163). For educators, developing a positive attitude entails caring for students, building relationships, and identifying strongly with the role of teacher.

Research suggests that there are specific ways for teachers to express a genuine caring attitude towards their students. Weinstein et al. (2003) claim that teachers can create a more inclusive and positive environment from the very beginning through convivial greetings that express a feeling of welcome and an appreciation for all students, and by modeling acceptance and respect for individuals’ cultural, personal, and intellectual differences (Creating Caring section, para. 1). Further, teachers can foster healthy relationships with students by learning about their pursuits and past times outside of the classroom and the school, empowering them to have voice in classroom procedures and engagements, and actively listening to their perspectives, ideas, challenges, and criticisms. In fostering these relationships through the above



methods, teachers are more likely to be able to incorporate students' lives into the classroom and curriculum. From simple actions like smiling and saying hello to strategic implementation of student-centered learning, teachers can influence whether young people, particularly individuals of color, feel that the classroom is a caring environment (Creating Caring section, para. 1).

High expectations and quality teaching are also important ingredients in caring culturally responsive classrooms (Ben-Avie, Haynes, Ensign, & Steinfeld, 2003; Weinstein et al., 2003). High expectations stem from a belief that all students are capable learners that can and must succeed. Consequently, a teacher may then begin to examine instructional adjustments that can be made to ensure that success, rather than blaming students for their lack of achievement (Ladson-Billings, 1995, 2001). In order for teachers to adopt attitudes and a knowledge base that are necessary to develop a culturally responsive pedagogy, they must start with critical reflection of themselves and their teaching. The following two sections attempt to outline major steps that researchers have identified teachers can take towards becoming more culturally responsive under the umbrellas of understanding self and understanding students.

### **Understanding Self**

Maintaining culturally responsive teaching methods begins with a thorough review of a teacher's own behaviors, beliefs, and biases which should continue throughout an educator's career. Howard (2003) explains, "In order to become a culturally relevant pedagogue, teachers must be prepared to engage in rigorous and oftentimes painful reflection about what it means to teach students who come from different racial and cultural backgrounds than their own" (Difficulty of Critical Reflection section, para. 1). To engage in serious reflection requires that teachers be equipped with "the necessary skills" to do so (para. 6). Kailin (1998) presents the idea of a racial autobiography as a way to achieve such an end. Being prepared for the difficult process of self-analysis and identity development through autobiographies or any other method can have significant impacts for an educator's personal and professional growth as well as their efficacy with students.

In understanding the multilayered make up of one's own psyche and behavioral motivations, regardless of age, profession, or race, one can develop a stronger sense of self identity.

However, the benefits of identity reflection are especially appropriate for White teachers. Tatum (1997) argues:

But in not noticing [racial identity], one loses opportunities for greater insight into oneself and one's experiences. A significant dimension of who one is in the world, one's Whiteness, remains uninvestigated and perceptions of daily experience are routinely distorted. Privilege goes unnoticed, and all but the most blatant acts of racial bigotry are ignored. (p. 201)

In order to grow as a person and avoid the unconscious perpetuation of racism, one must engage in identity reflection, and educators are no exception. In fact, the culturally responsive pedagogue should consistently investigate who they are as teachers, individuals, and cultural contributors because if they fail to examine their own identities, then they may not be able to facilitate the identity development of their students, (Gay, 2000; Howard, 2003; Tatum, 1997). Culturally responsive pedagogy demands that teachers dissect their own practices and perspectives.

Professional development for educators is stimulated by the ability to critically reflect. Irvine and Armento (2001) posit, "Through reflection, teachers are able to evaluate their teaching and seek appropriate professional development for continued growth" (p. 10). It is reasonable to assume that continued educator development is stunted without self-analysis. Questioning one's own cultural beliefs and prejudices can force teachers to consider how they might "subtly but profoundly" affect the extent of inclusiveness, acceptance, safety, and enthusiasm felt by learners in their classroom (Wlodkowski & Ginsberg, 1995, p. 15). Wlodkowski and Ginsberg (1995) argue that "the first requisite for culturally responsive teaching" is "a humble sense of self-scrutiny, not to induce guilt or liberal, knee-jerk responses but to deepen our sensitivity to the vast array of ways" teachers may perpetuate the "inequitable treatment of others" (p. 285). Armed with the skills of self reflection and the knowledge of their own biases, teachers can better serve marginalized populations.

The importance in understanding one's biases and cultural, racial, and ethnic identity stems from a need for the equitable treatment of students of color. Wlodkowski and Ginsberg (1995) identify the problem a lack of self-

awareness can pose for a teacher. They state that “we, as educators...may be misguided in believing that we are encouraging...meaningful opportunities for learning to occur when we are, in fact, repackaging or disguising past dogmas” (p. 10). These researchers confront educators with their role in the perpetuation of inequity through a lack of critical reflection. In bringing personal cultural biases to the forefront of teachers’ minds, there is less of a risk of misinterpretation of culturally different behaviors and inequity.

### **Understanding Students**

If culturally responsive pedagogy has culture at its base, as discussed earlier, then teachers must understand students and their respective cultures. A student’s culture is not simplistic nor is it easy to determine or characterize, especially when it is different from that of the teacher. Weinstein et al. (2003) suggest that teachers must attain “cultural content knowledge” by learning about students’ families and former education (Prerequisites section, para. 2). Further the cultural norms for behavior, discipline, and time/space relations of those families must be uncovered in order to achieve cultural awareness (Prerequisites section, para. 2). It seems there is a great deal of “cultural content knowledge” to absorb in understanding students’ cultures, and this section addresses some of the components of culture for young people as they relate to culturally responsive pedagogy.

*Valuing Students’ Cultures.* Racially, ethnically, linguistically, and economically diverse students bring a wealth of experience and unique cultural perspectives to the educational context. Gonzalez and Moll (2004) conducted a study in which teachers visited the homes and families of their students. The result was a deeper understanding on the part of teachers for the wealth of resources provided by students’ cultures and families for curriculum and instruction. The researchers contend:

An important implication of this work is that of debunking ideas of low-income households as lacking worthwhile knowledge and experiences...This view of the household as possessing ample resources for learning changes radically, we claim, how the students are perceived, talked about, and taught. (p. 712)

Teachers can, therefore, change their attitudes and treatment of culturally diverse individuals by recognizing that all students’ experiences and cultures are valuable. Lintz, Wills, and Mehan (2004) argue that “the households and neighborhoods of even the poorest families are not devoid of knowledge and are not disorganized” (p. 166). Other researchers agree that marginalized populations bring valid and vital cultural knowledge with them to school (Gay, 2000; Howard, 2003; Ladson-Billings, 1992).

Ladson-Billings (2001) explains the pedagogical implications of shifting perspective. She states, “Rather than seeing students’ culture as an impediment to learning it becomes the vehicle through which they can acquire the official knowledge and skills of the school curriculum” (p. 100). In order to get the vehicle running requires comprehensive knowledge of individual students and their cultures on the part of teachers.

*Knowing Students.* Culturally responsive pedagogy requires that student experience and culture be a base for curriculum and classroom design. This goes beyond knowing the general characteristics of certain cultural groups to knowing the specific details of individual students’ lives through interaction and input outside the classroom environment (Lintz et al., 2004, p. 179). The detailed information on students’ experiences and cultures is especially important for minority students because it can shift classroom power-dynamics and move towards equality by transferring the possession of knowledge from teacher to students (Ensign, 2003, pp. 107, 116). Thus, incorporating students’ lives into the curriculum and classroom is a key component in the success of marginalized groups. The benefits include increasing student motivation, engagement, cooperation, and feelings of inclusiveness that can reduce the amount of time spent on classroom or behavior management. (Ben-Avie et al., 2003; Howard, 2003; Wlodkowski & Ginsberg, 1995).

Student experiences start in the home with their families. Thus, for teachers, communicating with students’ families and being aware of their home life can assist in understanding student experiences, but it is not without its challenges. Weinstein et al. (2003) recognizes the “integral but challenging” component of family communication (Working with Families section). It is fundamental because family interaction can

assist educators in seeing students as part of a wider familial, communal, and cultural context, which connects teachers and marginalized populations on a personal level (Brown, 2003; Gonzalez & Moll, 2004). As a result of personal relationships, instructional materials are more relevant to students.

Becoming familiar with students' community and culture is another way to better understand students. It is ultimately the responsibility of the culturally responsive teacher to "learn about students' cultures and communities" (Ladson-Billings, 2001, p. 99) because to learn from an outsider who fails to validate one's culture "causes a major loss of self" (Tatum, 1997, p. 26). Evidence suggests that teachers need to utilize students' communities and cultures in the learning process (Ladson-Billings, 2001; Rodriguez, Jones, Pang, & Park, 2004; Weinstein et al., 2003). Delpit (1995) argues the best way for teachers to learn about unfamiliar student cultures is through knowledgeable individuals of the same cultural background (p. 102). Knowledge about students' experiences, families, communities, and cultures is necessary in order to implement those elements into curriculum and the classroom. The following two sections discuss how to utilize self-awareness of personal bias and student cultural content knowledge into curriculum and classroom management.

### **The Culturally Responsive Curriculum**

Similar to the characteristics of culturally relevant pedagogy, the characteristics of its counterpart, culturally responsive curriculum, can be understood metaphorically. Each of the three characteristics represent a tile color in the mosaic of the culturally relevant curriculum. These characteristics, as defined by Gay (2000), are (1) valuable texts and materials, (2) meaningful subject matter and (3) "content that includes information about the histories, cultures, contributions, experiences perspectives, and issues of [students'] respective ethnic groups" (p. 112). Given the scope of this review, the latter two characteristics are focused on.

Meaningful content has a dual meaning dependent on the situation, similar to the way colored tile reflects light differently dependent on where one is standing in relation to the mosaic. From one angle meaningful content may require "validating personal experiences and cultural heritages," and, from another, it may require presenting new information to students in ways that are accessible to them (Gay, 2000,

p. 112). Further, information incorporation is "characterized by the use of symbols, thoughts, cognitive processes, [social structures] and social contexts derived from an individual's culture" (Rodriguez et al., 2004, Conceptual Framework section, para. 5). Thus, a culturally responsive curricula that includes meaningful content and inclusive information for students of color is represented by a mosaic in which the individual colors seen as a whole represent student cultural infusion into every aspect of student learning.

Research suggests that the use of culturally responsive curriculum can have benefits for students of color. Gay (2000) claims, "The validation, information, and pride [culturally responsive curriculum] generates are both psychologically and intellectually liberating" (p. 35). She also gives examples of improved test scores, expanded vocabularies, better reading comprehension, and greater appreciation of their own and others' learning to attest to the intellectual liberation of the culturally responsive curriculum (pp. 132-133). When utilizing a culturally responsive curriculum, "[minority] students are able to see their current efforts to develop as scholars and leaders as a way to transform not only themselves but their communities" (Rodriguez et al., 2004, Conceptual Framework section, para. 4). If students can see their educational growth as positive in their larger cultural context, motivation may increase.

Teachers can use a number of different resources in culturally relevant curriculums. Gay (2000) and Kailin (1998) agree that the use of media, both audio-video and print materials, can prompt discussion and maintain student engagement in the material. Further, teachers can make the most of inequitable, and sometimes unfortunate, circumstances, such as out of date textbooks, to help students think critically about issues of power, resource distribution, and social justice (Ladson-Billings, 1995, p. 162). Researchers identify critical thinking about institutional and cultural norms and values and commitment to social justice as integral parts of the culturally responsive curriculum (Ladson-Billings, 1995, 2001; Vavrus, 2002; Weinstein et al., 2003). Culturally responsive pedagogy, however, goes beyond the curricular materials and into the classroom.

### **Culturally Responsive Classrooms**

In order to create the culturally responsive classroom, issues of classroom management are important to tackle. It is important that culturally

responsive teachers see the “ultimate goal of classroom management is not achieve compliance or control, but to provide all students with equitable opportunities to learn” (Weinstein et al., 2003, Conclusion section, para. 4). By transforming traditional notions of management that emphasize conformity and hegemony into a sense of educational equality, an educator can promote “the cause of social justice” (Conclusion section, para. 4).

One of the ways that a culturally responsive classroom can assist students in respecting their own and others’ culture is through the creation of a learning community. Ensign (2003) insists that “culturally relevant classrooms for African-American students foster a sense of community and sharing” (p. 108). Although Ensign (2003) refers specifically to African-American students, one could argue that the same could be true for other ethnic and cultural groups. Vavrus (2002) reveals some characteristics of a learning community when he states, “Grounded by the active participation of diverse voices, a learning community should emulate democratic processes that permit individuals to learn across parochial interests” (p. 145). If learning communities, founded in diverse perspectives, that help students learn without boundaries are an integral part of culturally relevant classrooms, how can educators create such a space?

Research findings suggest ways in which a teacher can set up a learning community in the classroom. Brown (2003) identifies a successful urban teacher that “creates this safe place by spending the first few weeks of the school year engaging students in social games and establishing school-to-home relationships to build trust between the school and students’ families” (Caring section, para. 4). By socializing the classroom with guided activities and creating familial bonds, teachers begin to create a learning community. Ladson-Billings (1995) found that culturally responsive teachers “encouraged the students to learn collaboratively, teach each other and be responsible for each other’s learning” in their classroom (p. 163). Allowing students to work together and learn from each other can be important. However, at the same time, educators need to be mindful of hurtful comments about cultural identities and physical appearance, even when used jokingly, and let students know that they have no place in the culturally responsive classroom (Weinstein et al., 2003, Creating Caring section, para. 2). Further, the culturally responsive classroom should provide students

and teachers with opportunities to congruently communicate (Brown 2003; Rodriguez et al., 2004).

One of the major differences between culturally responsive classrooms and traditional classrooms is how students are motivated. Wlodkowski (1999) uses a framework of internal motivation to create a culturally responsive learning environment. Traditional classrooms use “extrinsic motivational systems” in which teachers are “perceived to motivate students through the engineering of reward and punishment” (p. 10). However, the culturally responsive teacher may use intrinsic motivation. Intrinsic motivation is a system in which teacher and student work together to “create opportunities, experiences or environments that are likely to evoke motivation” in the classroom and the curriculum (p. 10). A symbiotic relationship between teacher and student that elicits intrinsic motivation is a defining element of culturally responsive classrooms. Delpit (1995) sheds insight into this relationship and explains that “while teachers provide access to the ‘codes of power’ represented by acquiring facility in ‘standard edited English,’ they must also value and make use in the classroom of the language and culture children bring from home” (p. xvi). Thus, a successful culturally responsive classroom will chirp with the sounds of different dialects and languages while ensuring all students can succeed in the dominant culture and academic language contexts.

Culturally responsive classroom teachers make expectations clear and allow students to live up to them. Weinstein et al. (2003) insist that involving students in the creation of classroom conduct norms, being clear regarding expectations, modeling, and giving students the ability to practice these behaviors and reach expectations can help to avoid “unnecessary disciplinary interventions and antagonism” (Establishing Expectations section, para. 2). Proper preparation, through the use of explicit expectations and modeling, and ample opportunity, by way of giving students the chance to succeed at meeting expectations, are important steps in stopping behavioral problems before they become problems. Further, culturally responsive teachers consider how perceptions of behavior, especially problem behavior, are affected by issues of race, class, and culture (Dealing with Problem Behaviors section, para. 1). If they understand the actions of students as representative of cultural norms, they are less likely to be defensive and can think more

constructively about their actions and choices in relation to student behavior (Dealing with Problem Behaviors section, para. 1). If teachers consider the relationship between perceptions of behavior and culture, then they can be more effective in their response to culturally diverse behavior. In fact, educators may “actually come to see the benefits of allowing intensity and passion to be expressed in the classroom and broaden their definition of what is acceptable student behavior” (Dealing with Problem Behaviors section, para. 1).

### **Conclusions and Recommendations for Practice**

Seeing the benefits of culturally diverse behaviors, including passion and intensity, and broadening definitions of acceptable behavior are glimpses into the keys of culturally responsive pedagogy for educators. It is not merely a set of practices or strategies; it's a complete paradigm shift that moves away from deficit-based notions about racially, ethnically, culturally, and linguistically diverse populations (Gay, 2000; Gonzalez & Moll, 2004; Howard, 2003; Kailin, 1998; Vavrus, 2002; Weinstein et al., 2003; Wlodkowski, 1999; Wlodkowski & Ginsberg, 1995). The trends in academic achievement between minorities and their white counterparts point to inequity in current pedagogical practices (Multi-ethnic Think Tank, 2001; Shannon & Byslma, 2002). Recognizing this inequality prompted a movement towards multicultural education in the 1970s, and, specifically, a focus on teachers and teacher preparation. Culturally responsive pedagogy originated in an educational reform movement that sought to provide equitable educational opportunities for all students, which may explain its persistence into the 21<sup>st</sup> century (Gay, 2000). A review of the literature on culturally responsive pedagogy leads to a conclusion that it is a legitimate methodology that can increase equitable education for minority populations and aid in the achievement of all students.

Traditional school practices can alienate students of color with extrinsic motivational frameworks that place the responsibility on the individual student to be motivated (Wlodkowski & Ginsberg, 1995). This framework is problematic because it does not place any responsibility on the environment, the instruction, or the content to be motivating. Further, it relies upon a reward and punishment system that is controlled by the teacher and can be culturally biased. Students of color are more

often placed in behavioral/emotional disorder (BED) settings and given behavior referrals then their white counterparts. Traditional teachers often lack an awareness or understanding of cultures that differ from their own, and traditional pedagogy does not require teachers to have such knowledge (Kailin, 1998). Cultural ignorance coupled with the behaviorist methods of traditional pedagogy can perpetuate the underachievement of students of color by punishing them for their cultural differences and not providing them with culturally relevant and interesting material (Weinstein et al., 2003; Wlodkowski & Ginsberg, 1995).

Culturally responsive pedagogy requires teachers to understand their own identities and cultures as to be able to self-assess for bias, effectiveness, and efficacy (Howard, 2003). It also demands that teachers understand their students at an individual, familial, community, cultural, and global level (Gay, 2000). Further, as documented in the literature review, teachers must incorporate this working knowledge into lessons, curriculum, and classroom management, thereby making the classroom more culturally relevant and intrinsically motivating. Culturally responsive pedagogy, then, is a shift from those traditional practices that can perpetuate the underachievement of minority students towards more reflective and culturally relevant practices that can help marginalized populations succeed in school.

Most of the research comes to similar conclusions concerning culture, education, and the benefits of culturally responsive pedagogy, and most of it is qualitative with limited quantitative research. Moreover, various case studies seem to have small, geographically narrow samples. More ethnographic research, with wider sample sizes from different areas, on successful pedagogy for racially, ethnically, socio-economically, and linguistically diverse students, as well as a great deal more quantitative research, needs to be conducted. Further information regarding how to incorporate students' culture and interests into a traditional, standards-driven curriculum is needed for teachers in today's schools.

Despite a need for more information regarding incorporation of students' cultures in today's high stakes, standards-driven school environments, there are some recommendations for practice based on the major steps towards being a culturally responsive educator outlined in the literature. Table 1 presents some of the strategies teachers can use to better understand

Table 1: Major Components and Practices of Culturally Responsive Pedagogy

Major Component	Strategies and Practices
Understanding Self	<ul style="list-style-type: none"> <li>• Autobiography on cultural identity development (including ethnicity, heritage, race, gender, class, language, etc.)</li> <li>• Reflective journaling</li> <li>• Ask a colleague of color to observe and provide feedback on teaching</li> <li>• Review and rethink instructional procedures when students fail to succeed</li> <li>• Identify patterns, biases, and effectiveness in cross-cultural relations throughout all of the above reflective strategies</li> </ul>
Understanding Students	<ul style="list-style-type: none"> <li>• Engage with students individually</li> <li>• Engage with students both in and out of the classroom</li> <li>• Find out student interests and activities</li> <li>• Engage with students' families and home lives both in and out of the classroom</li> <li>• Talk with adults of similar cultural, racial, socio-economic, and linguistic background as student(s) to gain information/insight</li> <li>• Attend community and cultural events</li> </ul>
Culturally Responsive Curriculum	<ul style="list-style-type: none"> <li>• High quality texts (including textbooks, historical documents, literature, film, newspapers, magazines, and music)</li> <li>• Content that is meaningful</li> <li>• Content that includes information relevant to students' respective ethnic groups (including history, culture, perspective, and experience)</li> <li>• Critical thinking about institutional and cultural norms</li> <li>• Commitment to social justice</li> </ul>
Culturally Responsive Classroom	<ul style="list-style-type: none"> <li>• Care for students</li> <li>• Create school-to-home relationships</li> <li>• Value and utilize the languages and cultures of all students</li> <li>• High expectations for all students</li> <li>• Clear and explicit expectations for all students</li> <li>• Involve students in creation of classroom conduct norms</li> <li>• Model classroom conduct norms and appropriate behavior</li> <li>• Give students the chance to practice norms</li> <li>• Socialization through guided activities</li> <li>• Create a learning community founded in diverse perspectives</li> <li>• Foster a sense of sharing and community</li> <li>• Collaborative learning (with a mindfulness regarding hurtful comments)</li> <li>• Congruent communication</li> <li>• Consider culture in relation to behavior</li> </ul>

themselves and their students, as well as how to incorporate that knowledge into the curriculum and the classroom. The left hand column offers four major components associated with culturally responsive pedagogy: *understanding*

*self, understanding students, a culturally responsive curriculum, and a culturally responsive classroom.* The right hand column identifies the strategies and practices associated with each component. The strategies and

practices listed are often related to perception, attitude, or belief, as much as they are to actual activities or methods. In order to be culturally responsive, teachers may need to change the way they think or feel about education, learning, and minority students. Wlodkowski and Ginsberg (1995) assert,

Unless we, as educators, understand our own culturally mediated values and biases, we may be misguided in believing that we are encouraging divergent points of view and providing meaningful opportunities for learning to occur when we are, in fact, repackaging or disguising past dogmas. (p. 10)

If teachers fail to shift perspective, then no classroom practice is going to be effective.

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### **Boys Do Cry: Compulsory Norms in a Heteronormative Society**

*Heterosexuality in the United States prevails over all other sexual expressions to the extent that most U.S. residents take heterosexuality for granted and do not realize how its normalization has negatively affected society and schools. In particular, young males find themselves trapped from an early age onwards by gender norms produced in a heteronormative society, which necessitate they conform to masculine conducts. As a result, homophobic behaviors are cultivated within most males' social development. Gay and gender deviant males are often singled out for abuse in this type of climate, especially in schools, although all boys are victims of compulsory heterosexuality. Schools can begin breaking down these hetero-normative barriers by incorporating (homo)sexualities into curriculum, confronting heterosexism, and making all students visible.*

Across the United States, a large majority of its inhabitants remain unaware of their privileged status in matters concerning sexuality. Heterosexuality, as a sexual identity, is the norm across all racial and ethnic backgrounds in this country. Heterosexuality can be found all throughout U.S. society - it can be seen in the media, in grocery stores, at the local bars, and heterosexuality is even in most American homes. This pervasive normalization of a single, accepted sexual identity is referred to by researchers and social activists alike as heteronormative behavior. This dominant behavior not only oppresses all other sexual identities contrary to its norms, but it manages to demonize any other healthy expressions of human sexuality and label them as deviant or abnormal (Epstein, 1997; Epstein, O'Flynn & Telford, 2001; Filax, 2003; Kumashiro, 2002; Lipkin, 1999; Marino & Pallotta-Chiarolli, 2003; Straut & Sapon-Shevin, 2002). Therefore heterosexuality is compulsory and functions as heterosexism or heterosexual privilege. This identity does not merely refer to the sexual attraction between two persons of opposite gender; heterosexuality is the expected standard of behavior that governs relationships, friendships, and social interactions within American culture (as well as the rest of the world). Individuals who transgress beyond these heteronormative boundaries because they are gay, lesbian, or bisexual - hereafter referred to as queer - risk criticism, scorn, and often violent abuse by those from the heterosexual community.

Conservative estimates place the queer population at around 2% of the general U.S. populace (King, 2003). Mainstream and liberal

sources approximate that the population more likely registers at 6-10% however, especially with the increasing visibility of queer people across U.S. society (Lipkin, 1999; Pollack, 1998). Regardless of these varying estimates, it is clear that there are tens of thousands, perhaps hundreds of thousands, of gay, lesbian, and bisexual students across schools nationwide. While great strides have been made in the past decade for stronger civil rights in the queer community, queer youth still face outrageously high levels of harassment in schools across the U.S. (Anderson, 1995; Epstein, 1997; Epstein et al., 2001; Filax, 2003; Gay, Lesbian, Straight Education Network, 2003; Lipkin, 1999; National Education Association, 2002; Peters, 2003; Szalacha, 2003). Many teachers and administrators offer little to no support for changing such hostile school climates and confronting homophobia (Kumashiro, 2003; NEA, 2002; Reynolds & Koski, 1995). Boys and adolescent males are particularly affected in negative ways by the compulsory heterosexuality prevalent throughout society, regardless of whether they identify as heterosexual, homosexual or are still questioning their sexual identity (Connell, Davis, & Dowsett, 2000; Mac an Ghaill, 2000; Martino & Pallotta-Chiarolli, 2003; Pollack, 1998). In this heteronormative culture, effeminate, weak or socially isolated males are often singled out for homophobic abuse by peers and adults alike, based only on their perceived sexual orientation.

Sadly, many male adolescents who do identify as gay or queer find themselves at an even greater risk than heterosexual adolescents for dropping out of school, engaging in unsafe sexual practices, and committing suicide

(Anderson, 1995; Lebson, 2002). These youth are given little support and advocates attempting to bring resources into schools for them often run into fierce opposition from social conservatives across the country who maintain that queer issues have no place in a school setting (Altemeyer, 2002; King, 2003; Wald, Pienzo, & Button, 2002). Queer students of color endure even more discrimination than their white counterparts due to the double bias stemming from both their ethnicity and sexual orientation. Many communities of color in the U.S. view homosexuality as a “white disease;” thus these youth may also experience alienation from within their own cultures because their ethnic and sexual identities are not mutually compatible in a heterosexist society (Kumashiro, 2002; Mac an Ghaill, 2000; Sears, 1995).

The compulsory heterosexuality of U.S. society has regulated untold numbers of students into marginalized groups for far too long. These students cannot continue to be isolated and invisible in their classrooms nor allowed to be bullied and harassed. Organizations like the Gay, Lesbian, Straight Education Network (GLSEN) have helped create safe zones for queer students throughout schools nationwide and given them a voice. There are also increasing resources to help educate queer allies (heterosexual advocates) about issues these youth face as well as legislation in certain states like Massachusetts that mandate teacher training on queer issues (Perrotti & Westheimer, 2001). Despite this progress, many root problems that perpetuate a heteronormative, as well as a heterosexist, environment are not being addressed. Bringing queer issues openly into classrooms and implementing them into the curriculum must be advocated within all schools (Kumashiro, 2002). Working to eradicate heteronormative behaviors and homophobic expressions are among the most powerful ways of changing hostile school climates and to develop respect and tolerance for students of all sexual identities.

Tolerance for the queer community has grown stronger over the past two decades in the U.S.; both positive and negative changes continue to happen all the time regarding queer issues in education (Altemeyer, 2002). New research and new statistics reveal current successes and failures for queer students. Laws are both enacted and revoked that affect these students, depending on the changing shifts in thinking in heteronormative communities. Studies cited in this research may soon be outdated and the statistics might have already

changed significantly in this type of climate. Much of the research on queer youth issues has focused on males and masculine identities in schools, due in part to sexism and favoritism of males in U.S. culture. Studies, however, have shown that boys begin developing sexual identity awareness years earlier than females, giving researchers a larger and more varied age-group to investigate (Anderson, 1995; Epstein et al., 2001). Thus, this paper focuses on issues facing both gay and heterosexual males, despite the fact that these issues also significantly affect those in the lesbian and bisexual communities. Much of the research on these issues also works in a white privileged context. Even in the marginalized queer community, white privilege is pervasive. One observant researcher notes:

whereas much of the work in queer youth studies assumes queer youth are White and studies on queer male youth are especially prolific, an expanding body of work investigating gender, class, ethnicity, religion, culture, and racialized differences both in and outside of...the United States, contests the idea of any mainstream queer identity. (Filax, 2003, p. 150)

Issues facing queer youth of color are addressed, but this paper only begins to hint at the enormous challenges confronting these youth that stem from both racism and homophobia. The research does adequately cover the homophobic environment prevalent in American schools at the present time, however.

The beginning of the 21<sup>st</sup> century saw two notable research groups reporting on the homophobic climate in American schools. Peters (2003) reports that Action Research sampled six high schools on the suburban edge of New York City through social surveys and peer-to-peer interviews in the year 2000. Representing students of diverse racial, ethnic, and income backgrounds, the results yielded an all-too-predictable portrait of anti-gay comments and harassment. Ninety-four percent of all respondents had heard ‘that’s so gay’ used as a put-down in their community and 65% has heard ‘faggot’ or ‘dyke’ used on school grounds. The research also showed that while

students were identified as the group most frequently making anti-gay comments ... 18% reported hearing these comments from coaches, 15% from teachers, and 14% from security guards. Nine percent of students

reported being physically harassed because of their perceived sexual orientation...[and] when asked: 'How would you react to someone being harassed?' 48% said they would try to stop it; 36% said they would ignore it; and 17% said they would either watch it or join in. (Peters, 2003, pp. 333-334)

In another report by GLSEN, which sampled queer youth across the United States in 2003, the findings were similar, if not worse. Eighty-four percent of queer students had reported being verbally harassed because of their sexual orientation, 92% had heard homophobic remarks such as 'faggot' or 'dyke' frequently or often, 45% of queer youth of color reported being verbally harassed because of both their sexual orientation and race/ethnicity, 39% had been physically harassed by other students, and 64% of queer students felt unsafe in their own school because of their sexual orientation (GLSEN, 2003).

In response to the harassment and fear many queer students face daily, the National Education Association (NEA, 2002) published a report by one of its task forces that acknowledged the hostility and homophobia prevalent through U.S. schools. The report states:

Although adolescence can be a stressful and trying experience for many students, this experience is nothing short of traumatic for many [queer] students. From their peers, these students face discrimination, harassment, and abuse that is specifically directed at them by reason of their actual or perceived sexual orientation or gender identification. All too often, these serious problems are met with inaction on the part of education employees and school officials. Indeed, at times, education employees and school officials themselves practice discrimination against [queer] students. As a consequence, [queer] students are at considerable -- and disproportionate -- risk for mental health problems, self-endangerment, and self-injury, as well as for poor school performance, absenteeism, and dropping out of school. (para. 5)

While the task force acknowledges that "inaction" and "indifference" from school employees is a part of the problem, the NEA does not spell out any solutions in this document. More importantly, the NEA does not even begin

to address the much deeper roots surrounding the issue of homophobia.

In American society, the term homophobia often connotes different meanings based on perspective. Social conservatives assert that the labeling of someone as 'homophobic' has become a wrongful and "frequent accusation made not only against anyone who questions the morality of homosexual acts but also against anyone who doesn't accept the entire gay activist program" (King, 2003). However, social conservatives tend to be religious fundamentalists. Their strict interpretation of scripture firmly anchors their often negative and intolerant attitudes towards the queer population (Altemeyer, 2002). Research shows that many of them "fear that traditional conventions and values are crumbling in a disintegrating society, and [that] the gay rights movement presents a prime example of this" (Altemeyer, 2002, p. 68). Sadly, a great many heterosexuals in the U.S. agree with this social conservative perspective and believe homosexuality to be both immoral and threatening to a healthy society, especially in the context of schooling and education. Absurd as the link may be when critically analyzed, "many heterosexuals harbor strong, although unsubstantiated, fears about gay recruitment and abuse of children" (Wald et al., 2002, p. 162). These unsubstantiated, often irrational fears partially explain the suffix *phobia* at the end of homophobia. Yet as Arthur Lipkin (1999) states, "homophobia is not always irrational; it is often a logical outcome of one's own predicament and perceptions about homosexuality. Moreover, a dreadful number of homophobes, far from fleeing, actively pursue gays and lesbians for attack" (p. 46). Thus, homophobia can imply both fear and avoidance of queer people as well as hate and aggression carried out against them. Exploring the loaded nature of its definition is of utmost importance before educators can adequately understand its impact on gay youth.

Educator Wayne Martino describes homophobia as the normalization of heterosexuality, which creates a climate in schools where heterosexuality is compulsory (Martino & Pallotta-Chiarolli, 2003). As a speaker at various institutions, he asks, "How do we get those in schools to understand that this [issue] is not about 'promotion' and 'recruitment'? Often when I mention the word 'homophobia' in presentations, it is equated with 'promoting' homosexuality, the effect of which is to divert attention away from 'heterosexual privilege' " (Martino & Pallotta-Chiarolli, 2003,

p. 75). These denunciations against 'promoting' homosexuality are unfounded and reflect the hyper-visibility given to issues surrounding queer populations. Heterosexuals have the privilege of acting in, living in, and participating in heteronormative behaviors freely everyday without scrutinizing these behaviors or giving their sexual identity critical conscious thought. However, when queer identities outside this norm are asserted or acknowledged in any way, many heterosexuals cannot comprehend why these issues must be forced upon them and flaunted. Homosexuality can only be considered in an acceptable and tolerable light when it remains invisible, otherwise it is perceived as a threat (Straut & Sapon-Shevin, 2002). One male student interviewed by Mac an Ghaill (2000) wonders, "Given that it is supposed to be normal to be heterosexual, you would think that they would not have to work so hard at it" (p. 163). Considering that homophobia is so predominant throughout society,

why is it...that an institution as dominant as heterosexuality must be defended so vehemently and at so much cost, not only to those who identify as in some way 'queer' but also to those not conforming to quite narrow gender norms? (Epstein et al., 2001, p. 128)

Research and, hopefully, common sense have disavowed the damaging arguments that young adults and adolescents are recruited into a homosexual lifestyle by other queer people. Studies have shown time and time again that the process of realizing one's sexual identity is one of developmental discovery (Epstein et al., 2001; Lipkin, 1999; Pollack, 1998; Wald et al., 2002). Heterosexuals have no need to feel threatened by queer groups taking over and radically transforming society through the educational system. Unlike the numerous racial or ethnic groups that are growing in population within the U.S., the queer community remains fixed between 2-10% of the population depending on a wide variety of estimates (King, 2003; Lipkin, 1999; Pollack, 1998).

Compulsory heterosexuality and the "social demands of being 'normal'... help to produce queer-based oppression" (Kumashiro, 2002). The results of the heteronormative social dynamics in this country can affect all boys in U.S. schools, regardless of their sexual orientation; explorations of externalized and internalized homophobia must be thoroughly explored to

understand their damaging costs. Externalized homophobia often shows itself in the hatred, anger or avoidance of both the feminine, or what is seen as feminine, in other men (Lipkin, 1999; Mac an Ghaill, 2000; Pollack, 1998). This form of homophobia most often shows itself in boys who identify as heterosexual. However, externalized homophobia is not limited to only heterosexuals, as evidenced in an interview conducted by Epstein (1997) with one gay youth who admitted to a history of gay-bashing and anti-gay verbal harassment of other youths at school. Although ashamed, he attempted to justify his actions by saying, "You would attack [other queer youth], perhaps rather than being attacked yourself" (Epstein, 1997, p. 108). For some queer students, acting homophobic lets them hide their own homosexual identity and gives them a position of power, in a sense, by lowering others. As one educator writes:

Once a boy is classified as having what are considered to be feminine characteristics, he becomes a visible target for homophobic abuse despite, apparently, whether he is gay or not! ... To assume a straight-acting masculinity, - which involves talking, acting and behaving like a 'normal' man, like a 'straight' man - can therefore be a means of appropriating a heteronormative form of power, often denied to non-heterosexual men/boys on the basis of their alternative or non-normative sexualities. Such a currency of heteronormative masculinity is often grounded in regimes of misogyny in which the denigration of the feminine is built into a hierarchical set of power relations that also impact on those men/boys who identify as non-heterosexual. (Martino & Pallotta-Chiarolli, 2003, p. 79)

Any male who deviates from the assigned gender norm of masculinity remains open to abuse by his peers for not acting in a heterosexual, masculine manner (Epstein, 1997).

Externalized homophobia, then, does not limit itself to the oppression and abuse of only queer youth, but "it also involves the informal policing of heterosexual boys" in schools (Connell et al., 2000, p. 102). The social hazards involved for heterosexual boys who transgress heteronormative masculine norms can run high. Male adolescents who "act in ways that appear feminine or that could possibly suggest homosexuality" risk being reproached or rejected by their peers, marginalizing them into isolation

(Pollack, 1998, p. 158). Most boys may experience stressful inner turmoil as a result of these social constraints on gender deviance. They may feel the need to restrict their affections for other males and monitor their friendships with other boys carefully in order to avoid any hint of homosexual expression (Martino & Pallotta-Chiarolli, 2003). Teachers and parents often humiliate and shame boys for acting in a feminine manner or showing any vulnerability or dependence contrary to masculine traits of strength (Pollack, 1998). This oppressive atmosphere only further alienates boys who may be unsure of their sexuality during adolescence. Yet whether gay, straight, or questioning, there remains a considerable amount of “pressure on them to act in certain ways...especially when they [are] not sure about their sexuality (Mac an Ghaill, 2000, p. 176).

Not all boys, regardless of sexuality, find they must prove their masculinity by harassing others. Many boys are secure in their own sexual identities and have little use for externalizing homophobic, oppressive behavior. However, few of these boys are willing to put themselves in a position to challenge homophobic elements in the school setting. In combating homophobia and bullying, many

individual boys...feel helpless and are afraid to intervene for fear of being bullied themselves! What is often not provided at school are support structures and educational programmes [*sic*] designed to assist boys to develop the necessary skills for dealing with such emotionally charged situations.

(Martino & Pallotta-Chiarolli, 2003, p. 35)

The failure of schools to develop these support structures must be addressed at all grade levels, preferably beginning as early as elementary school where teachers can create a classroom community that will teach boys the tools and social skills that need to minimize bullying and harassment. In particular, boys who identify as queer or are questioning their sexuality need to be able to effectively deal with externalized homophobia in order to confront the internalized conflicts within themselves as their sexual identity develops.

Internalized homophobia is a self-loathing experienced by almost all queer adolescents to some degree due to being different or abnormal in a heteronormative society (Lebson, 2002; Lipkin, 1999; Mac an Ghaill, 2000; Pollack, 1998; Wald et al., 2002). For many, this can lead

to depression, loneliness, underachievement, and even psychological issues that may result in suicidal feelings. After all, “these students grow up in an environment that teaches them to hate themselves. Accordingly, they find themselves at disproportionate risk for an array of destructive behaviors: suicide, substance abuse, and sexual risk-taking” (Peters, 2003, p. 332). The National Education Association’s (NEA, 2002) report on sexual orientation lists the alarming trend of suicide attempts and committed suicides within school-aged queer populations. However, in a recent study by Micah Lebson (2002), the researcher acknowledges the complexities in gathering valid and reliable statistics on suicide among queer youth. There is often no way to determine a suicide victim’s sexual orientation, and the stigma of homosexuality may cause parents, friends, and loved ones to hide a victim’s perceived sexuality from investigators, allowing for an underreporting in the statistics. Despite these difficulties, many researchers and educators believe queer youth make up to 30% of all successful adolescent suicides and are three times as likely to make the attempt than their heterosexual counterparts (Anderson, 1995; Epstein et al., 2001; GLSEN, 2003; Lebson, 2002; Perrotti & Westheimer, 2001; Peters, 2003). Although these statistics have been publicized for well over a decade, schools are only now taking initial steps to reduce this alarming rate.

One positive step has been the successful development of Gay/Straight Alliances (GSA) across the country. Beginning in Massachusetts in 1993, GSA’s operate as an extracurricular group open to all students and offers them the chance to create a supportive atmosphere for stigmatized sexual minorities within the school. GSA’s set up a faculty advisor from the school, signifying administrative backing and are one way that schools can begin building the necessary support structures to combat homophobia and the institution of heterosexual privilege (Lipkin, 1999; Perrotti & Westheimer, 2001). Researchers and queer advocates argue that queer youth need a safe place where they can freely communicate with others like themselves in an environment they have helped create and control (Kumashiro, 2002). Although GSA’s utilize teacher and administrator support, these safe zones recognize the need for students to be at the center of their formation. GSA’s build on the core values of respect and tolerance, which many schools readily encourage through their mission statements and avowed goals.

GSA's also create visibility and presence in the school for marginalized youth and construct a support system through students, parents, faculty and each other (Perrotti & Westheimer, 2001).

Social conservatives and others threatened by this disruption in the heteronormative culture weakly argue that GSA's only exist to recruit young and impressionable adolescents into embracing a deviant lifestyle by choosing to become gay, lesbian, or bisexual (Szalacha, 2003). However, one of the fundamental principles behind GSA's is their emphasis on constructing a school coalition of both 'gays' and 'straights' to foster a sustainable atmosphere for all students. GSA's do not strictly support queer youth because of the stigma an all-queer group would potentially garner in a heterosexist atmosphere. An all-queer group may also shut out students who remain unsure or questioning of their sexual identity and leave them afraid to participate for fear of being labeled or outed. Studies have shown that while GSA's have yet to 'recruit' anyone into a 'deviant lifestyle', they have an added benefit beyond giving queer youth a voice. By creating an open and tolerant atmosphere in implementing a GSA, schools seem to facilitate understanding and frank dialogue throughout the entire student body, which directly reduces verbal and physical abuse in the school climate (Szalacha, 2003).

For queer and questioning males, adolescence is "often an extremely lonely time...especially for younger adolescents or preadolescents who are cognitively and affectively not equipped to effectively manage these issues" (Anderson, 1995, p. 22). Queer males often become aware of their sexual identity three to five years earlier than queer females, and begin dealing internally with these issues between ages 12-14 (Anderson, 1995; Epstein et al., 2001). Since most middle schools are without a visible queer population or a GSA, queer youth at this age often experience an identity crisis and either attempt to change their feelings or hide their feelings long before they begin to accept them. These boys rarely have recourse to express their isolation and fears to anyone else, including family, in the compulsory heterosexual setting at school and in their own homes (Anderson, 1995; Lebson, 2002).

Students of color who question their sexual identity or identify as queer have an even greater burden. Many find themselves alienated from family and friends in their own ethnic communities if openly queer, because many Asian, Latino, and Black communities in the

U.S. associate homosexuality with "whiteness" or view it as a "White disease" from the "decadent White world," leaving these students doubly marginalized (Kumashiro, 2002, p. 109). For example, since the black population has historically been, and continues to be, subordinated throughout the U.S. by the dominant white society, many black males strive to present an image of themselves as tough, strong, and assertive within their own communities. Males who cannot project this hypermasculinity may find themselves marginalized within their own ethnic or cultural communities (Mac an Ghaill, 2000). A black queer male may find himself in the quandary of being "the black man who is rejected by black culture because he is gay, and rejected by white gay culture because he is black" (Lebson, 2002, p. 113). The discovery that these dual identities of sexuality and ethnicity are often mutually exclusive may significantly increase pressure and stress on youth of color as they wrestle internally with embracing one over the other (Lipkin, 1999; Sears, 1995). This may leave queer students of color feeling culturally ambivalent and lost as to which identity belongs to them.

The developmentally-normal egocentrism of early adolescence causes all adolescents to feel as though they are at the center of others' attention. Teenagers at this stage often believe that others are observing them, and that their peers are almost able to read their thoughts or find them 'out' through their body language and interactions. Gay adolescents are especially monitoring themselves. They may worry non-stop over seemingly trivial concerns that they think could cause others to think they are gay like: "Am I standing too close? Is my voice too high? Do I appear too happy to see him?" (Anderson, 1995, p. 23). The mental and emotional stress brought on by this endless self-monitoring negatively affects school performance and self-esteem - and this is not restricted to only adolescents identifying as gay or queer. Research shows that "boys who do not observe boundaries and construct a gendered identity accordingly can become defined by their 'transgressions' and thus targets for homophobia, regardless of their sexual orientation" (Martino & Pallotta-Chiarolli, p. 89). Boys identifying as heterosexual, but with feminine mannerisms or any other gender deviance, also find themselves subject to the same abuse and externalized homophobia fostered by a hostile school climate that queer boys face (Pollack, 1998). In fact, since many queer adolescents are scrutinizing

their own behaviors to avoid being labeled gay, heterosexual youth may ironically end up facing disproportionately more homophobic harassment than their queer counterparts (Anderson, 1995). Too many schools foster an atmosphere of isolation, treating students with *any* gender identity issues as if they were invisible. Yet when it comes to harassment, these students are often the most visible targets of their homophobic peers. Schools have not adequately addressed these students' needs and these youth desperately need some form of support.

One traditional area of support for students with emotional and developmental issues has been the school counselor. Queer and questioning students who are unsure about their emerging sexual identity or have questions on whether they are developing normally should be able to find legitimate information and resources through their school's counseling department.

School counselors are a natural choice for filling this role. Just as counselors today are expected not to tolerate a lack of respect for racial, ethnic, and religious differences, so should the counselor be unwilling to tolerate a lack of respect for [queer] people and issues, whether it comes from students or staff. (Reynolds & Koski, 1995, pp. 90-91)

The reality, however, reveals that many counselors across the nation have not been adequately trained in queer issues and do not have the background knowledge to support queer youth in a positive manner. As executive director of the Hetrick-Martin Institute, a social service organization for queer youth, Verna Eggleston testifies: "A typical response is for the guidance counselor to ask, 'What are you doing to make them think you're gay?'" (Goldstein, 1999). There are numerous documented narratives from queer youth across the country that echo this same mentality. For one openly gay youth in a suburban high school, defacement of his locker and personal attacks against him were attributed to his being too openly gay. The principal and the counselor reasoned that blame fell on the young man who had "escalated his openness about being gay...and that if he was more discreet things would be better" (Filax, 2003, p. 165). Homophobia and compulsory heterosexuality are not identified as the core issues in many U.S. schools because teachers and administrators have decided queer youth are personally responsible for the violence and harassment exercised against them. Or as one

writer bluntly asserts: "It's easier to crack down on nose rings than to confront a system that assigns status in proportion to gender conformity, relegating boys who can't meet the standard to the ranks of America's most despised minority: that legion of failed men known as 'faggots' " (Goldstein, 1999).

Developing a physical space where oppressed students can go for help, support, advocacy and resources remains important, but in order to create larger change, schools must create an institution-wide environment that values and supports *all* students (Kumashiro, 2002). In particular, schools must better address the needs of marginalized students beyond creating a GSA. GSA's are an important measure for developing a positive safe space for queer youth and promoting dialogue on these issues in the school community. However, they are merely an additive-based approach to a serious problem that in many cases does not address the roots of homophobia and heterosexism in schools and society. One of the most central difficulties for schools and teachers is to open up a dialogue around queer issues. The attitudes of nonresponsive school districts in this country fall into three categories: Denial - *We don't have any gay students in our school*; Intolerance - *We don't want gay students influencing other students*; and Fear - *We can't do anything to help these students because parents will be outraged* (Peters, 2003). The visibility of queer people in the media and in the general population has made denial an almost non-existent argument in most communities. Fear and intolerance, however, is recognized within schools as a serious problem by the NEA (2002) and the indifference to correct such hostile atmospheres encourages and emboldens this type of climate further.

Many social conservative groups are angry that organizations such as GLSEN, the NEA, the American Library Association and the American Psychiatric Association are backing educational programs and workshops that "force tolerance" on schools and communities by "importing a broader [queer] agenda that offends the values of many students and parents" (King, 2003). Of course, "values" against the indecency and immorality of racially mixed schools were argued throughout the 20<sup>th</sup> century after the *Brown vs. Board of Education* decision legally ended racial segregation (Irons, 2002). Both homophobia and racial segregation actively oppress marginalized students, but the effects on mainstream students (i.e. heterosexual and white)

are also detrimental. Educator Arthur Lipkin (1995) comments that regarding the *Brown* decision, the Supreme Court

did not point out that lack of contact with black people resulted in a poor education for whites. Segregation hindered the white child's understanding of the breadth of human experience by limiting his contact with his black neighbor. Integration can prevent that by stimulating new dialogues about race.

Getting over homophobia - the misunderstanding, fear, or hatred of homosexuality - can have direct benefits as well, analogous to those of a racially integrated education. Antihomophobia education can help heterosexual people to understand better their own sexualities. The requirements of heterosexual identity in our culture are narrow and rigid. Much anxiety is created over the need to live up to these requirements. (p. 36)

The privilege heterosexuality holds in U.S. culture can never be addressed without looking critically at queer issues. The heterosexism prevalent throughout society places invisible restraints upon all males (even socially conservative ones) by requiring strictly imposed delineations between masculinity and femininity, marginalizing all those males who do not meet these standards, regardless of sexual orientation.

Despite calls for integrating queer issues into mainstream school curriculums, segregated schools and programs have been seen as the answer for giving queer youth the support and safe space they need to develop, exemplified most notably through The Harvey Milk High School for queer youth. The school had been in existence since 1984, supported by the Hetrick-Martin Institute with private funds (Lipkin, 1999). In September 2003, the New York City Department of Education awarded the school \$3.2 million to remodel and expand its program; many protestors came together to denounce the public use of funds (Divito, 2003). Heavily debated within the local and national media, the school was portrayed as helping to solve the "learning disabilities" that develop in hostile classrooms for queer youth. This solution should not be seen as the answer for creating change away from a heteronormative society, but this type of program has become the "path of least resistance often taken by teachers and administrators when dealing with the sticky issue

of homosexuality and other people's children," reports N.P. Divito (2003) of the *Village Voice*. Dismissing Harvey Milk High School's well-meaning aim of helping queer students, Divito concludes that "it is often easier to remove the victim than to educate the antagonist." The noble intentions of this separatist movement do little to cultivate an inclusive atmosphere in mainstream schools. Furthermore, school segregation, voluntary or no, does nothing for queer and questioning students who are not ready or able to come out and enroll in such an institution.

Positive additive-based approaches like GSA's and negative separatist solutions like school segregation avoid the issue of transforming a school's curriculum to focus on queer concerns, giving them visibility. Homosexuality, instead, continues to be marginalized in schools and treated as an invisible issue. This demeaning invisibility within the educational curriculum contributes to the internalized homophobia on the part of queer students by offering no positive recognition of queer figures or queer achievement (Mac an Ghaill, 2000). Invisibility also perpetuates the idea that heterosexuality remains the privileged norm above all other forms of sexuality and seems "natural, neutral, inevitable, and universal" for students and teachers alike (Filax, 2003, p. 148). Educators implement "curricular, pedagogical, and interactional choices on the assumption of compulsory heterosexuality, and [they] do not even perceive that [they] have made a choice" because of these unacknowledged norms (Straut & Sapon-Shevin, 2002, p. 32). Many educators will continue to blindly promote a heterosexist mentality unconsciously without critical self-reflection of their methods; transforming curriculum and creating a more inclusive school environment will take serious time and work.

Racial and ethnic identities also play a large role in the lives of many queer students, and often the result is negative. In the rare instances that homosexuality is addressed positively in the classroom, there is little value if the particular curriculum centers exclusively on the white experience (Sears, 1995). This can result in groups like queer white American students remaining privileged based on race, and marginalized based on sexuality (Kumashiro, 2003). One activist reflects that for queers of color, "challenging the multiple oppressions in our lives requires challenging the many norms that privilege and marginalize different groups or



simply different ways of being” (Kumashiro, 2003, p. 367). Inclusive classrooms tackle all the issues facing students from multiple backgrounds; breaking down the barriers stemming from heterosexual privilege while maintaining the ones resulting from white privilege makes little sense.

Studies have shown that incorporating queer issues into the curriculum brings out higher achievement in queer students (Epstein et al., 2001; Kumashiro, 2002; Lipkin, 1995; Straut & Sapon-Shevin, 2002). Yet integrating queer issues into the curriculum is a step that very few school districts and educators are willing to take:

Protecting gay youth from assault or suicide and offering them counseling are seen as issues that are separate from presenting gay subject matter. The first three are defended as care giving, an approved function of school...the last is condemned as proselytizing, [or] teaching kids to be gay. (Lipkin, 1995, p. 48)

The good will and intentions of many educators turn sour once they are asked to include queer issues on an equitable footing with heterosexual behaviors. Many cannot separate queer identity from the physical act of sex.

A pervasive perception exists throughout the heterosexual community that identifying as queer equals sexual intercourse. Too many people believe that

one’s sexual orientation can be determined simply by looking at what sexual acts one chooses to carry out. This is misguided because being gay or straight, in reality, has to do mostly with what a person feels rather than with what he or she does at any given time. Just as a heterosexual person is not less heterosexual because he or she does not actually have sex with people of the opposite sex, a homosexual person is not less homosexual because he or she hasn’t actually had sexual experiences with somebody of the same gender. (Pollack, 1998, p. 221)

Homosexual identity is regarded as “sexually explicit” and sinful by many individuals in mainstream society and many schools logically assume from this belief that any curriculum involving queer issues “actively endorses experimenting with...a polymorphous range of bisexuality, transgenderism, and transsexuality” (King, 2003). Thanks to this injudicious

assessment, heteronormative and homophobic discourses continue to “represent and shape queer people as adult, sinful, disgusting, hypersexualized, diseased, criminal, deviant, predatory...and either as shadowy spectral figures shrouded in secrecy or as flamboyant and public spectacles” (Filax, 2003, p. 148). Even in discussing ‘sexuality,’ there remains a tendency to associate the term with queer populations - not heterosexuals (Mac an Ghaill, 2000).

Incorporating sexuality into the school curriculum includes far more than the physical and emotional sexual activity between two partners; it also explores types of relationships, cultural beliefs, historic variations, stereotypes, power relationships, and sexual identities among all types of genders and identities - *including heterosexual* (Epstein et al., 2001). Thorough, integrated reflection on these issues may effectively address the multifaceted nature of sexuality in a transformative approach that will work to break down the assumptions of heteronormative behavior (Mac an Ghaill, 2000). Advancing an awareness that sexual acts consist of only a small and limited part of a queer identity is an essential place to begin.

Curriculum that brings queer issues into the classroom in a transformative way can be incorporated into many different academic areas (Straut & Sapon-Shevin, 2002). Social studies classes in elementary schools often discuss civil rights issues of the 20<sup>th</sup> century without making any mention of gay and lesbian liberation movements. One educator wonders

why it should be harder to imagine children in kindergarten classes acting out events at Stonewall in June 1969, when a group of drag queens fought back [against police oppression], than to imagine them playing at being Rosa Parks or Martin Luther King during events in Montgomery, Alabama, at the start of the civil rights movement. (Epstein et al., 2001, p. 136)

In the past decade, many books dealing with queer issues for all ages have been published that could be incorporated in literature and English classes. Merely adding such books to the overall curriculum or teaching an isolated gay and lesbian unit does not constitute a transformative educational approach, however. Teachers should be able to lead their classes in open discussions of the homoeroticism found in many famous literary pieces or explore the effects of heteronormative behavior on the works of the

authors read in class (Lipkin, 1995). Most importantly, queer issues should be included in health and sex education classes. This area may be the most controversial regarding queer curricular issues because it addresses sexual activity directly.

There exists a significant contradiction in U.S. culture in which sexuality is pervasive throughout the media, but silenced and closed for discussion in most schools and many mainstream homes (Epstein et al., 2001; Filax, 2003; Lipkin, 1999). In silencing these discussions, a culture of “sexual innocence” has been created around children because they are assumed to be neutral or without sexual feelings (Khayatt, 1997). Others argue that this silence is used to keep children and adolescents ignorant on sexual issues for as long as possible (Epstein et al., 2001). Few adolescent students would agree with the assumption that they are sexually innocent, however. Lipkin (1995) notes:

The entire realm of sexuality can be an obsession for adolescents. One may argue that the mass media contribute to the exaggeration of this aspect of human experience for young people. But even without the commodification of sex - MTV, teen magazines, film, and advertising - the protracted coming-of-age process that has developed in our culture would probably find sexual musing and anxieties at its core ... If schools are going to have any impact on the attitudes and behaviors of their sexually concerned and often active students, they must acknowledge in their curricula the importance of sexuality in our lives and in the lives of those who have gone before us. This academic exercise will not only illuminate the details of sexuality; it will also put it in perspective. (p. 32)

The AIDS crisis has led to more open discussions of sexuality in a less taboo fashion in schools around the country; many sex education and health classes now explore sexual behavior more thoroughly than in the past, albeit in a heteronormative way (Mac an Ghaill, 2000). When homosexuality is discussed, if at all, it most often comes in the context of sexual activity and risky behaviors, which then links these traits together in many students' minds. Any school that focuses “exclusively on the physiological dimensions of homosexuality compounds the societal misconception that gayness is just about sex acts. It objectifies the

gay student into a biological subject, reducing his... experience in the world to his...sex life” (Lipkin, 1995, p. 41). Thus queer adolescents are seen as sexually deviant individuals through society's heteronormative lenses. Since queer visibility in social studies, literature or any other academic subject usually remains left out, sex acts become the defining characteristic for queer youth at school.

Objectifying queer youth as sexual deviants in this manner can impair their social and emotional development. Considering “the importance that mainstream youth studies attribute to socializing opportunities for friendships and dating purposes, queer youth are seriously disadvantaged [in] schools” (Filax, 2003, pp.151-152). On one hand, many schools see their queer students in a hypersexualized way, losing sight of the individual; the only focus is on these students' perceived (and often imagined) sexual activity. Then, despite believing “being gay is all about having sex”, they often deny these students common social norms such as taking dates to school dances and holding hands in the hallway (Mac an Ghaill, 2000, p. 171). With regards to the expression of sexuality, queer students still rarely share the same privileges granted to the heterosexual community. Denied these privileges, some of these adolescents turn to unsafe and detrimental coping mechanisms.

The NEA (2002) notes that gay students are at an increased risks for sexual and drug abuse - but without offering any solutions in its report. Health and sex education classes, especially in AIDS prevention, can specifically benefit queer male students by empowering them with knowledge of sexual diseases and preventing risky behaviors - but not by presenting homosexual sex in only the negative context of HIV and STD threats (Lipkin, 1995, 1999). Studies have proven, although it should be obvious, that “a high school health curriculum that ignores bi, lesbian, and gay sexuality leaves [queer] students on their own to negotiate the normative sexual identity development process,” which almost invariably leads to precarious sexual behaviors (Peters, 2003, p. 332). Many social conservatives and some educators unfairly blame the homosexual lifestyle for the problems facing gay teenaged boys (Pollack, 1998). These problems stem instead from the stigmas, stereotypes and misconstructions of heteronormative behavior, the true culprit in this situation that continues to function almost unnoticed (Filax, 2003).

Few teachers and administrators would consciously attempt to marginalize any of their students or inadvertently push them into risky sexual behavior. Yet many are unaware that the pervasive theme of compulsory heterosexuality intrudes throughout schools - even those with a GSA and/or openly queer teachers. Queer teachers could easily be one of the most positive and powerful symbols of visibility in a school system. Their positive openness about their own sexuality and their perceived acceptance by other faculty may beneficially serve as a constructive example for all students. There are many positive stories of teachers who have come out to their students and helped develop a healthy dialogue and atmosphere in their classroom (Perrotti & Westheimer, 2001). Just as often though, there are teachers who have been forced to resign or relocate because of disclosing their sexuality (Lipkin, 1999). U.S. society continues to believe that

the 'innocence' of the child has to be protected at all cost, particularly from any mention of sex. A teacher's coming out to students by its very nature is an allusion to sexual matters [in a heteronormative society], and is consequently considered outside the realm of what is appropriate for children to know or discuss. (Khayatt, 1997, p. 129)

Many teachers remain in the closet and cannot serve as a potential resource for confused, questioning students or a positive affirmation for openly queer ones. Queer teachers were once students themselves, and the lingering consequences of heterosexism in schools and society have no doubt affected their own development into adults and into educators.

The continued marginalization of queer people in deference to heterosexual privilege in the United States can no longer be accepted or tolerated in the 21<sup>st</sup> century. The research explores in depth the devastating effects heteronormative behavior produces on gay males coming to grips with their queer identity, rendering them isolated and invisible from peers, family and even culture. Compulsory heterosexuality takes a dire toll on all boys, however; its adherence to a strict and narrow code of masculine behavior singles out any boy who deviates from gender norms regardless of his sexuality. No longer can educators allow any of these students to suffer in silence. The option of letting these boys work their issues of sexuality out by themselves cannot be an

acceptable alternative (Pollack, 1998).

Externalized and internalized homophobia must be confronted and dealt with in a positive, healing manner and not allowed to wreak havoc with boys' friendships, emotions and lives.

Educators, as adults, must remember they have a powerful responsibility to model the desired social behaviors necessary for creating a safe and supportive school environment.

Schools assume a principal role in the creation of a societal change away from heterosexism. Classrooms across the nation reflect the dominant norms of U.S. society with the hierarchical privileges of whiteness and heterosexuality on top (Mac an Ghaill, 2000). Yet schools can construct foundations of tolerance and break down these privileged systems through the means of education as no other societal institution can. Before students can be educated, however, educators must have a cohesive understanding of the issues involved; reflection on their own biases and privileges within society must be addressed. Necessity dictates that "as teachers and learners...we need to examine how the things we learn can be useful for improving our lives as well as how they can contribute to oppression in often invisible ways" (Kumashiro, 2003, p. 367). Questioning how heterosexuality affects individuals, why it functions as an unconscious identity for most Americans, and why people perceive homosexuality as a threat to their own sexuality must be answered by educators before they can deconstruct the norms prevalent throughout educational institutions.

Transforming the educational paradigm to create a more inclusive curriculum that values and embraces queer students will take time. Some educators hold particular biases and beliefs that negatively color their perceptions regarding queer issues, and they will continue to consciously sustain and promote heterosexual privilege over the needs of their students. Unfortunately, only their retirement will affect the needed catalyst for change in those classrooms. Other teachers, with good intentions, may believe implementing queer issues into their curriculum merely entails adding an isolated, stand-alone unit on homosexuality, which they trust will create the necessary classroom foundations for mutual respect and tolerance. Convincing these educators that an additive-based approach tokenizes queer students and offering them alternative methods that will positively transform their classroom curriculum may seem too formidable a task for them to

undertake. Creating a more inclusive curricular structure can be a daunting task, but the nature of teaching involves the obligation for reaching out to all students. Applying a transformative curriculum involves the development of teaching practices that challenge heteronormative assumptions and make visible all sexualities throughout the entire school year. Powerful concepts such as heterosexism can barely be fully explained in a week-long unit, let alone broken down and deconstructed. Educators in this task must be ready to help generate change, but they must also stay patient and avoid discouragement when the hierarchy of compulsory heterosexuality does not come crashing down immediately.

Already, the structure of society had undergone significant changes since the beginning of the 21<sup>st</sup> century. Attitudes toward homosexuality and queer people have significantly moderated, even among some social conservatives, with the increasing visibility of queer people in the media, the workplace, and families (Altemeyer, 2002). Queer students are challenging school district regulations and state laws that discriminate against homosexual conduct. Same-sex partners at school dances have become an accepted norm in a handful of districts across the country. Teachers are meeting more and more same-sex parents with children in their classrooms. Communities of color are acknowledging homosexuality within their culture in a more positive fashion. Laws are slowly being passed that recognize the civil unions of same-sex partners. How exactly these small, but growing, changes affect schools and society remains to be seen. In another ten years, much of the research in this paper may seem remarkably outdated, just as much of the research from over a decade ago does now.

Heterosexual privilege should have no place in American society. Boys must be allowed to develop genuinely without the stifling constraints of heterosexist masculinity being chained upon their burgeoning character. Affection, friendship and love between boys and male adolescents should not absurdly be perceived in a sexualized light nor be discouraged to avoid gender deviance. Young males, and particularly young queer males, experience enough pressure and stress during the process of adolescence without the burden of being marginalized and disadvantaged because of their perceived or actual sexuality. One educator noted that at the beginning of the 21<sup>st</sup> century, “the largest risk factor for queer youth is

living in a heteronormative world, not their queerness” (Filax, 2003, p. 155). She was partially correct. Our heteronormative world creates an enormous risk for all young males, regardless of sexuality.

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**The Effects of War on Arab Students in U.S. Public Schools: An Examination of Arab-American Students Since the Ending of the Persian Gulf War**

*The learning process of Arab and Arab-American students in United States public schools has been affected as a result of increased prejudice, discrimination, and stereotyping of Arab and Arab-Americans during U.S. military conflicts with Arab nations. This paper highlights the effects that increased prejudice, discrimination, and stereotyping of Arab and Arab-American students during times of conflict have on their learning process. In addition, the paper aims to help educators and administrators understand the challenges faced by Arab and Arab-American students and to reduce prejudice, discrimination, and stereotyping. Peer reviewed literature and government documents provide evidence to conclude that the learning process of many Arab and Arab-American students in U.S. schools has been affected during times of U.S. military conflicts with Arab nations.*

Prejudice, discrimination, and stereotyping of different ethnic, racial and cultural groups has been present in the U.S. school system since the development of the common school in the 1830s and 1840s (Spring, 2005). As large numbers of immigrants enter the United States, public schools become filled with children from every part of the world. The ever-changing demographics of the U.S. school system in turn create continual increases in cultural differences. Despite this increase in diversity, there still remains prejudice, discrimination, and stereotyping of ethnic students by their peers and educators. According to Rothstein (1995),

Children are likely to experience race prejudice at an early age, long before they enter schools. Nevertheless, the schools do their part, as they have done in the past. Schools have been and are bastions of exclusion in the inner cities of the United States today, and have been essentially segregated since their earliest days. (p. 126)

A closer look at prejudice, discrimination, and stereotyping of ethnic student by their peers and educators in U.S. schools throughout history sheds light on the fact that during times of U.S. involved conflict, the amount of prejudice, discrimination, and stereotyping of ethnic student in U.S. schools has increased drastically. For example, during WWII large numbers of Japanese and Japanese-American students faced prejudice, discrimination, and stereotyping in U.S. schools (Abdelkarim, 2003). Today as the U.S.'s status of "world super power" grows, so too does its number of enemies. Accordingly,

this growth has a direct effect on the prejudices and stereotypes placed on members of these enemy countries within the U.S. during times of conflict (Hakim, 2001/2002). A prime example of this direct effect is the way in which Arab and Arab-American students in public schools are treated as a result of recent conflicts with Arab countries. As one student noted as soon as the Gulf War broke out, he and his fellow Arab and Arab-American students were stereotyped and lumped with such Arabs as Saddam Hussein (Ibrahim, 2004). Consequently, many Arab and Arab-American students have become self-conscious of their ethnicity at any early age. And for many, this self-consciousness leaves them feeling rejected and lonely at school (Rothstein, 1995). Furthermore, fears of teachers and peers by Arab and Arab-American students can continue to be passed on to further generations of Arab and Arab-American students who attended U.S. schools.

For many Americans, the issues of prejudice and discrimination brought against Arab and Arab-American students by their classmates and educators during times of conflict are widely publicized throughout the media. Consequently, these widely publicized stories overshadowed the medias stories of good that classmates and educators enacted for Arab and Arab-American student during times of conflict. One such case was the visit of President George W. Bush to a mosque on September 17, 2001, following the events of September 11, 2001 (Weston, 2003). Similarly, Weston (2003) noted that in a 2003 issue of the *Chicago Tribune* a story of Americans across the city of Chicago and its suburbs made numerous phone calls to mosques

to offer emotional and financial support to Muslims, and their children after the U.S. invasion of Iraq. Most Americans think that these positive actions towards Arabs and Arab-Americans were not sufficiently publicized. However, a close examination of these “acts of good” reveals that they often reinforced the stereotype that all Arabs are Muslims and did little to combat the prejudice and discrimination that Arab and Arab-Americans face. Thus, it appears there is a lack of understanding on the part of many Americans surrounding the amount of discrimination, prejudice, and stereotyping faced by Arab and Arab-American students in U.S. public schools during times of conflict (Weston, 2003).

In light of the many acts of discrimination, prejudice, and stereotyping faced by Arab and Arab-American students in U.S. public schools, it is important to examine the ways in which Arab and Arab-American students have been affected in U.S. public schools during times of conflict. This literature review attempts to explain the differences between the terms Arab and Arab-American, the history of Arab immigration to the U.S., and experiences of Arabs and Arab-Americans in the U.S. In addition, this literature review explores the influence of the mass media and U.S. conflict with Arab nations in generating increased discrimination, stereotypes, and prejudices towards Arabs and Arab-Americans, and how this has affected Arab and Arab-American students in U.S. schools. Hopefully, this information can be used by teachers and administrators to better understand the challenges faced by Arab and Arab-American in U.S. schools and reduce prejudice, stereotyping and discrimination.

### **Definitions**

Arab and Arab-American are terms that have become very popular in the mass media over the past 14 years. From the time of the Persian Gulf War in 1991 until recently, the U.S. has been in conflict with one Arab nation or another. This constant conflict between the U.S. and the Arab world has brought with it many repercussions for Arabs and Arab-Americans living in the U.S. One of the most notable of arenas in which these repercussions have been felt by Arab and Arab-American students is the school setting. Given that Arabs and Arab-Americans have received greater attention in the public eye (via the mass media as a result of current world issues), it is important to highlight these two terms and the

history of the Arab people in America. Who are Arab and Arab-Americans? According to Seikayl (2001),

There are approximately three million Americans of Arab descent, the majority of whom trace their roots to five national groups: Lebanese, Syrians, Palestinians, Egyptians, and Iraqis. The early Arab immigration started to travel to the United States in the late nineteenth and early twentieth centuries; most of them from the area that is present day Lebanon and Syria. The population of Arab Americans spans all fifty states, with large concentrations in three major metropolitan areas: Los Angeles and southern California, Detroit and Dearborn in southeastern Michigan, and the New York/New Jersey area. (p. 350)

Like many other commentators, Seikayl has given an important definition of who Arab-Americans are, but he has neglected to point out the importance of religion and language in this definition. Unlike any other ethnicity, Arabs and Arab-Americans are ethnically categorized by their language and religion. Further, Arab and Arab-Americans are broad terms that cover people of diverse nationalities, religions, and social economic backgrounds. Because these terms encompass such a broad category of people, people from non-Arab nations are often labeled as Arabs simply on account of their religious views. In particular, those who practice the Muslim faith are typically presumed to be Arabic. Similarly, non-Muslim Arabs are typically presumed to be of the Muslim faith (Parrillo, 2000). These same stereotypical generalizations are made among Arabs in their understanding of whether they are Arab or Arab-American. These distinct differences between Arabs and Arab-Americans are best examined through the work of Parrillo.

According to Parrillo (2000), there is a great sense of family, language, and heritage in the Arab culture. Over the years Arab immigrants to the U.S. have brought with them many of these traits. Due to fear of losing their feeling of culture and their heritage, many Arabs who have become U.S. citizens would rather be known as Arabs rather than as Arab-Americans. In addition, many Arabs are reluctant to call themselves Arab-Americans as a result of the prejudice and discrimination they have experienced at the hands of “Americans.” On the other hand, there are many Arabs who have

immigrated to the U.S. and do call themselves Arab-Americans (Parrillo, 2001). With this in mind, it is important to examine the historical migration of Arabs to the U.S. to understand where, how and when these immigrants organized their communities.

### **History of Arab Immigration**

The large numbers of Arabs and Arab-Americans currently living in the U.S. are related to immigrants who arrived in the U.S. between 1880 and 1940. The immigrants that arrived during these years were mostly merchants and farmers who emigrated for economic reasons from regions that were then apart of the Ottoman Empire. The second influx of Arab immigration arrived after World War II and continues through today. This second group associates with the “Arab” identity more heavily. That is, these Arabs practiced and continued to practice their traditions and customs in the U.S.; these customs reflect either a hyphenated identity as Arab-Americans or sometimes alienation from the majority of society as Arabs (McGoldrick, Giordano, & Pearce, 1996). Nonetheless, the migration patterns of these Arabs was one that followed the earlier migration patterns in which these Arab immigrants gathered as a community in the Midwestern and Northeastern U.S.

An example of recent immigration of Arabs to the U.S. was the migration prompted by the occupation of Kuwait by Iraq in 1990 and the subsequent Persian Gulf War that followed (Lynch & Hanson, 1998). Evaluations of the immigration of Arabs to the U.S. over the span of 125 years may seem as though it has been a time of assimilations with little conflict, but this is all too often not the case. Indeed, this group of people has been subjected to high amounts of prejudice and stereotyping.

### **Media Portrayal of Arabs**

How and why are stereotypes and prejudices formed? In the case of the stereotypes associated with Arabs, there are significant reasons underlining the same. The root of these stereotypes being the perception that Arabs and the Arab world are “different.” Throughout the history of the U.S. it has been a practice to treat all people and practices that are non-European as the “other” and “exotic.” Arabs have received such treatment. Throughout history, Arabs in the U.S. have been seen as the “other,” a people and culture that exists outside the U.S. concept of what is good and civilized. This idea of the “other” has been generated by the media and

popular culture. For decades, images of Arabs have consisted of terrorists, harem girls, wealthy oil sheikhs, and mysterious Easterners. These impressions and stereotypes have been given to the American people through textbooks, comic books, television programs, movies, cartoons, and music (Seikayl, 2001).

Textbooks used in U.S. schools have conveyed to students the idea of the Arab and the Middle East as a mysterious place of the “others” (Seikayl, 2001). Although in recent years there has been a push to improve textbooks, many textbooks still contain inaccuracies. According to Seikayl (2001), textbooks “often present Arabs as a homogenous people (in fact, there is much diversity in the Arab world) and use photographs that reinforce stereotypes such as camels in a desert and nomadic people” (p. 349). These stereotypes help to generate a feeling of the “other” that is so readily felt by Arabs in the United States. Textbooks often focus on the Arab world as a region of conflict without properly exploring Arab culture, civilization, and history. Consequently, these feelings reinforce the stereotype of Arabs as a violent people (Seikayl, 2001). What these texts do not mention is that although there has been conflict in the Arab world for hundreds of years, there has also been conflict of extraordinary magnitudes in the whole world during that same time span. In addition, textbooks are not the only source of popular media that depicts Arab and Arab-Americans as the “other.” Film and television play a significant role in the lives of many people in the U.S. (Wingfield & Bushra, 1995). This negative portrayal of Arab and Arab-Americans is present in popular film and television.

When U.S. children hear the word “Arab,” what might be the first thing that comes to mind? Is it images of camels in the desert? Or is it the all too famous *Aladdin*, a popular Disney film that has been shown countless times throughout classrooms in the U.S.? Despite the belief by many that the film *Aladdin* did not reinforce stereotypes of Arabs, such an assertion appears to be inaccurate. According to Wingfield and Bushra (1995),

Arab Americans have problems with this film. Although in many ways it is charming, artistically impressive, and one of the few American films to feature an Arab hero or heroine, a closer look reveals some disturbing features. The films light-skinned lead characters, Aladdin and Jasmine, have anglicized features and Anglo-American



accents. This is in contrast to the other characters who are dark-skinned, swarthy and villainous-cruel palace guards or greedy merchants with Arabic accents and grotesque facial features. The film's opening song sets the tone, Oh, I come from a land, From a Faraway place where the Caravan camels roam. Where they cut off your ear if they don't like your face. Its barbaric, but hey, its home. Thus, the film immediately characterizes the Arab world as alien, exotic, and other. (p. 7)

This is not the only film that has produced stereotypes of Arabs. Negative portrayals of Arabs are found in such popular films as *True Lies*, *Back to The Future*, and *Raiders of the Lost Ark* (Wingfield & Bushra, 1995). Thus, U.S. popular culture has fostered a negative image of Arabs for children. Much like textbooks, these other forms of popular culture carry negative images of Arabs. For Arab women, these negative images are carried by the representation of belly dancers and harem girls. Arab men are too often negatively portrayed as violent terrorists, oil sheiks, and marauding tribes' men who kidnap blonde Western women (Wingfield & Bushra, 1995). These negative images are even found in Saturday morning television cartoons. An example of this is the Fox Children Network's *Batman*. This cartoon portrays fanatic, dark complexioned Arabs armed with sabers and rifles as allies of an alien plotting to take over the earth (Wingfield & Bushra, 1995).

Films, television, and textbooks are not the only forms of media these stereotypes are found in. Comic books frequently have gratuitous elements in their story line: "Tarzan battles with an Arab chieftain who kidnaps Jane, Superman foils Arab terrorist hijacking a U.S. nuclear carrier, and the Fantastic Four combat a hideous oil, sheik super villain" (Wingfield & Bushra, 1995, p. 8). While there are numerous examples of ethnic stereotyping of Arabs taking place throughout popular culture and media, each case can contribute to the development of a universal perception and stereotype of Arabs as the "other," an image that is presented to children at a young age and carried with them into their schooling experience. Accordingly, it is important to shift the focus of this study to examine the effects that these stereotypes have on Arab-American children.

### **The Effects of Stereotypes and Prejudice on Arabs**

What then does it feel like for Arab and Arab-American children to grow up surrounded by a culture that does not recognize their ethnic identity in a positive way? This is a question that is not often addressed. For many Arab and Arab-American children, growing up in an environment that generally does not accept their ethnic identity is difficult. These children often are faced with teasing, taunting and epithets. Worse, wherever they turn, the mass media, classmates and neighbors have taunted, teased, and formed new epithets for these children. For many Arab and Arab-American children this meant being subjected to such epithets as "camel jockey," "desert niggers," "greasy Lebs," and "terrorists" (Wingfield & Bushra, 1995, p. 8). For others, it meant witnessing their classmates tease them by dressing up in their traditional Arab dress and equip themselves with oilcans and large noses in order to further emphasize their characters (Wingfield & Bushra, 1995,). When Arab and Arab-American children see negative and erroneous portrayals of Arabs by the mass media, they begin feeling ashamed and inferior. According to Wingfield and Bushra (1995), "these children begin to feel ashamed and belligerent and in some cases they even begin to feel aggression towards those who practice these stereotypes" (p. 8). Wingfield and Bushra (1995), go on to note that "the more positive a student's self-concept, the higher his or her achievement level will be" (p. 9). Thus, as Arab and Arab-American children see these "negative portrayals" by the mass media, and hear the epithets by their classmates, their self-concept becomes negative and their learning is adversely affected (Wingfield & Bushra, 1995, p. 9). Arab and Arab-American students may get caught up in a spiral, "begin to feel that they, as people, are inferior. They may stop trying to do their best and become convinced that they can never amount to anything. For many it becomes a self-fulfilling prophecy" (Wingfield & Bushra, 1995, p. 9). The mass media has helped to create and perpetuate stereotypes of Arab and Arab-Americans, resulting in a backlash of teasing, taunting, and epithets. These stereotypes are mimicked in schools throughout the country, directly affecting the learning process of Arab and Arab-American students.

In a 1986 study, based on interviews given to 50 Arabs, researchers found that Arabs were most worried about immigration, language, education, and community acceptance.

Specifically, of the issues raised, 48% were related to immigration, 42% to education, and language issues, and 36% to community acceptance issues (Nassar-Mcmillan & Hakim-Larson, 2003). It is important to note that if 36% of these Arabs interviewed were worried about community acceptance, this meant that 64% were not worried about the way they were accepted into their community by Americans. Why was it then that 64% of the Arabs interviewed were not worried about community acceptance? A closer examination of the data of these interviews leads one to believe that during 1986 the amount of conflict between the U.S. and Arab nations was not at a high level (Nassar-Mcmillan & Hakim-Larson, 2003). Thus, it appears that the amount of stereotyping and prejudice brought against Arabs and Arab-American students might not have been relatively high, compared to during or following times of conflict. To gain a better understanding of this it is important to examine the work of Alreshoud.

In a correlational study, Alreshoud (1997) assessed the effects that stereotypes and prejudice have on the amount of interaction between Arabs and Americans. In order to attain these findings, Alreshoud gave 85 Arab and Arab-American students questions to answer related to their contact with Americans, attitudes towards Americans, and Arabs' understanding of the U.S. In each portion of the questions the respondent rated how often they had been involved in 12 different activities with Americans on a 4-point scale ranging from never to often (Alreshoud, 1997, p. 2). The results for this test showed that Arabs had little desire to interact with Americans. Thus, from these findings one could deduct that following a time of conflict, such as the 1991 Gulf War, the amount of interaction between Arabs and Americans is minimal and undesired by Arabs, based on the amounts of prejudice and stereotyping they are presented with during times of conflict. Nevertheless, Americans also held these same feelings. According to a 1991 American Broadcasting Company news poll taken during the Gulf War, 41% of Americans had a low opinion of Arabs, 59% associated Arabs with terrorists, 58% with violence, and 56% with religious fanatics (Paulson, 2001, ¶ 8). Following the 1993 World Trade Center bombings, 35% of Americans acknowledged that they had less trust in Arabs living in the United States and, as such, had less contact with Arabs. Additionally, following the September 11, 2001,

attacks, 55% of 18-29 year olds in the U.S. distrust Arabs and had little contact with Arabs (Paulson, 2001, ¶ 10). As a result of these attitudes held by both Americans and Arabs, contact between these two groups is limited.

### **Aftermath of September 11, 2001**

Throughout history the U.S. has prided itself on patriotism and purports to be more patriotic than any other nation. Therefore it is no surprise that in times of conflict with other nations, patriotism in the U.S. becomes more pronounced. Flags, banners, yellow ribbons, patriotic songs, and inspirational speeches from military personnel become much more common (Wingfield & Bushra, 1995). As these patriotic feelings begin to mount, so do feelings of hostility and resentment for those believed to contradict U.S. policy. As a result, many of the negative stereotypes for the "enemy country" already existing in the U.S. culture were brought to the forefront of conversation and everyday practice. Because the impact of the conflict is moveably pervasive, these negative stereotypes were heightened not only in U.S. communities but also in its schools. Thus, Arab and Arab-American students became targets for stereotyping.

Such stereotypes come with several consequences. These stereotypes encouraged "further conflict escalation as when a stereotype of the other holds that they are the 'evil' enemy, justifying the most extreme behaviors (e.g. violence) toward them" (Elbedour, 1998, p. 540). According to Elbedour (1998),

[T]he stereotypes initiate a self-fulfilling prophecy/expectancy confirmation processes, in which stereotyped views of the other become the assumptions that guide the individual perceptions of and behavior toward the other. This process often draw out expected behavior, thereby confirming the initially 'false expectations,' which in this case is that of a dangerous enemy. (pp. 540-541)

In other words, as Arab and Arab-American children become targets for stereotyping, researchers feel that it may cause many Arab and Arab-American students to feel as though they are the other. Thus, many begin to use this feeling and stereotype as other to further help portray themselves as the dangerous enemy. Accordingly, Arab stereotyping has led to instances of heightened conflict between Arab-

American students and Anglo-American students and in some cases it escalated to physical conflict.

Following the events of September 11, 2001, many Arab and Arab-American students were faced with emotional and social problems as a result of stereotypes. In some cases, Arab-American students questioned if they would be treated in the same manner that Japanese-American students were treated following the attacks of Pearl Harbor in 1941. As one student was quoted, a common concern was “if they find out that the attackers were Arab, will they put us in interment camps like the Japanese in World War II” (Seikaly, 2001, p. 349)?

The name calling and overt hostility of some Americans toward Arabs in the U.S. invoked fear in Arab and Arab-American students. Some Arab and Arab-American students were simply afraid to go to school during a time of conflict for fear of what their peers might think or what actions might be taken against them. As one Arab student explained, “[B]efore when I walked through campus I used to get smiles, but now, I just get weird looks” (McMurtrie, 2001, ¶ 3). In another such case, a U.S. high school student in a foreign exchange program from Qatar shaved his head, mustache, and goatee, in an attempt to look Latino rather than Arab (McMurtrie, 2001, ¶ 3).

This fear was felt across the board, at every education level. In universities across the nation, large numbers of Arab and Arab-Americans students dropped out of school. Although exact numbers are hard to come by, U.S. universities showed that 25-60 students at 8 major institutions withdrew from their classes (McMurtrie, 2001, ¶ 4). At Arizona State University, 48 students withdrew. At the University of Colorado at Denver 41 of a total 250 Arab and Arab-American students withdrew. Boston University reported that 25 of a total 320 Arab and Arab-American students had withdrawn from classes. And, Washington State University reported that 61 of a total 130 Arab and Arab American students had withdrawn (McMurtrie, 2001, ¶ 10). This information shows that approximately 145 out of 700 Arab and Arab-American students withdrew from these schools during a time of conflict. This roughly translates into 20% of the Arab and Arab-American student population of 4 major universities withdrawing from classes following the events of September 11, 2001.

In the weeks following September 11, 2001, many Arab-American parents across the nation took their children out of the U.S. (Tobias-Nahi

& Garfield, 2003). Many Arab and Arab-American students were shocked and scared of the blame that was being put upon them by the outside world and their fellow classmates (Tobias-Nahi & Garfield, 2003). The impact of this new fear even caused some Arab-American students to receive bomb threats; such unjustified threats were even made to childcare facilities that had Arab-American children attending them. Stereotyping of Arab and Arab-Americans was at a high; students were targeted by their teachers, peers, and community members because of their ethnicity. The students being targeted were unsure of how to express their feelings. Fear of being attacked forced a number of these students to hold their emotions in. Rather than appear vulnerable, many withdrew and hid their inner feelings from the world. As one student explained, “I now see America might not be the safest place. I’m afraid of walking down the street. Will somebody say something? Will I admit defeat by crying” (Tobias-Nahi & Garfield, 2003, p. 15)? The most frightening consequence of all of this stereotyping and inflated fear, however, took the form of hate crimes.

Throughout the nation, numerous Arab and Arab-American students not only faced verbal harassment, but also in some instances faced physical harassment and taunting. Arabs of the Muslim faith were often harassed during their time of prayer at schools. One student’s recollection of his accounts illustrates the judgment these students often felt: “[W]hile I was making *wudu* (washing) before my prayers, eyes were on me longer than they needed to be. I felt uncomfortable because I knew that behind my back people were thinking ‘why is this maniac washing so strangely’” (Tobias-Nahi & Garfield, 2003, p. 20). The harassment and taunting that went on even crossed gender lines. There were also attacks upon Arab-American girls wearing scarves over their heads. Their fellow classmates, based on their religious and cultural beliefs, physically abused these girls who dressed in traditional Arab dress (Tobias-Nahi & Garfield, 2003). Similarly in Santa Anna, California, a Muslim student wearing traditional Islamic dress was physically assaulted while doing laundry in her apartment building (Abdelkarim, 2003). In a similar incident an Arab-American student was badly beaten with golf clubs, baseball bats, and fists by a group of some two dozen other youths, some of whom shouted anti-Arab slurs as they beat the student (Abdelkarim, 2003).

To further emphasize the amount of stereotyping and hate crimes against Arabs and Arab-Americans following the events of September 11, 2001, the U.S. Commission on Civil Rights (2002) released a special document on issues that Arabs and Arab-Americans have faced. The Commission's report noted that the largest number of complaints and threats that were reported came from incidents arising in schools. Within a day of the September 11, 2001, attacks, the Commission publicized a unique complaint hot line to solicit and catalog discrimination complaints to help identify affected communities and discrimination hate crime patterns (§ 4). The Commission report confirmed that incidents were occurring throughout U.S. communities and many reached high levels of violence. In one account, a store in an ethnically diverse area near a school had their windows broken out following the conflict. A Muslim school was damaged as well when explosives were thrown at it from a passing car (Section State Advisory Committee Activities, § 7). One report noted that a taxi driver and college student were hit in the face by two men and then called a mass murderer (Section State Advisory Committee Activities § 9). Each of these incidents reminded Arab and Arab-American students that the consequences of the ongoing U.S.-Arab conflict made not only their communities but also their schools unsafe.

### **Classroom Practices Following September 11, 2001**

Following the events of September 11, 2001, some educators have realized the extent to which there is this lack of understanding among Anglo children towards Arab and Arab-American children. Much like the Commission on Civil Rights that was created, these educators have begun thinking about many different ways in which they must help put an end to the stereotyping and hate crimes that arise during times of conflict. Moreover, these educators have begun teaching classes about the need for empathy for all suffering people (Kohn, 2001/2002). This movement to include such teaching is critical. Educators have helped children find themselves in widening circles of care that extend beyond self or country. Likewise, educators have developed skills and dispositions to question the stories they hear, to view with skepticism the stark "us-against-them" (or us-good, them-bad) portraits of the world and the accompanying dehumanization of others (Kohn, 2001/2002).

In the months following the events of September 11, 2001, many educators started teaching about the need to be multicultural and anti-racist. More specifically, many educators began to teach through a multicultural lens in hope that they would be able to reach children on a level that can make them aware of the hate and the stereotyping that was taking place in the world and to help reduce these practices in schools. One way in which educators did this was by challenging students to examine the mass media. By questioning much of what they see and hear through the mass media, as well as what they do not see and hear, students began to learn that they had the power to evaluate and change the hostility (Dawson, 2001/2002). According to Dawson (2001/2002), one fourth-grade teacher in the U.S. had students cut out articles dealing with hate crimes toward Arab and Arab-Americans. After examining the articles, the teacher asked the class if they knew why actions had been taken against some Arabs. No one in the class responded. To address this, the teacher taught the class about what was currently going on in Afghanistan, how the situation was a repercussion of September 11, 2001, and how Arabs and Afghani people living in the U.S. were being treated (Dawson, 2001/2002). By incorporating a much broader perspective and educating the students of the cause and effect of stereotyping, this teacher took an effective step towards creating change. Thus, the teacher was able to help these children understand that the mass media plays a large role in stereotyping.

Although tensions between the U.S. and Arab nations are increasing, overall little is being done to help Arab and Arab-American students affected by stereotyping and prejudice. Instead, the stereotypes and prejudices that have taken shape over the past 125 years since the first influx of Arab immigrants came to the U.S. are still in practice. Many non-Arab-Americans have simply continued to turn their backs on these issues and helped to further perpetuate problems of discrimination, prejudice, and stereotyping in U.S. public schools.

### **Conclusions**

As the U.S. continues its present day conflicts with Arab nations, Arab and Arab-American children in U.S. public schools continue to face the repercussions of these conflicts: prejudice, discrimination, and stereotyping. With every missile that hits the ground and every related news report that hits the media, millions of Arab and Arab-Americans

children become even more fearful of the prejudice, discrimination, and stereotyping that they will face at the hands of their classmates and educators (Weston, 2003). Consequently, these children fear physical violence will be brought against them and their loved ones. So long conflicts exist between the U.S. and Arab nations, these fears are likely to remain. These fears are not new. Over the past 14 years, since the first media reported altercation in the Persian Gulf War, Arab and Arab-American students have been faced with prejudice, discrimination, and stereotyping at the hands of their classmates and educators.

A literature review of the issues illustrates that the learning process of Arab and Arab-American students in U.S. public schools is greatly affected during times of conflict. Moreover, the more negative a student's self-concept, the lower his or her achievement level will be. Furthermore, as conflicts continue to mount with Arab nations, the amount of prejudice, discrimination, and stereotyping Arab and Arab-American students face increases thereby creating a negative self-concept for Arab and Arab-American students (Wingfield & Bushra, 1995). Consequently, many Arab and Arab-American students' achievement level may become lower as they stop trying to do their best. Furthermore, the literature creates awareness among educators on the effects that prejudice, discrimination, and stereotyping of Arab and Arab-American students has on the learning process of Arab and Arab-American students. As well the literature review is aimed at helping make educators aware of the how to create a learning environment aimed at eliminating the practice of prejudice, discrimination, and stereotyping. Although not an easy task, educators must begin to remain open to and search for new information as they engage in on going self-examinations of their participation in acts of prejudice, discrimination, and stereotyping of all peoples (Derman-Sparks & Phillips, 1997). Thus, it is important for present as well as future educators to examine the pedagogies of other educators who have worked toward creating a learning environment aimed at eliminating the practice of prejudice, discrimination, and stereotyping in U.S. public schools.

### **Recommendations for Practice**

As the effects of prejudice, discrimination, and stereotyping of Arab and Arab-American children continue to be seen in U.S. schools,

educators must face the concern as to how to put an end to these acts. Simply condemning acts of discrimination by educators is insufficient. Educators must instead enlist students in questioning acts of discrimination, prejudice, and stereotyping (Peterson, 2001/2002). For the case of Arab and Arab-American children educators must asks their students to do more than just simply question these acts. According to Peterson (2001/2002), educators need to be multicultural and anti-racist. As a whole, educators need to nurture student empathy. In addition students should learn to examine current conflicts and their circumstances through an anti-racist multicultural lens and question the actions of all those involved. Additionally, these educators must enlist students in deeply questioning the language and symbols that help frame ones understand of global events. Educators need to emphasize and focus on the importance of honoring dissent and those who challenge power and privilege as they work for justice. In addition, educators need to rid themselves of negative and ill-informed media images of Arabs as well as other ethnic groups. Educators must simultaneously learn about their students' histories and cultures and to be prepared to teach about them in their class (Wingfield & Bushra, 1995).

In the case of Arab and Arab-Americans, educators have many different ways of incorporating Arab and Arab-Americans history and culture into the curriculum. According to Wingfield and Bushra (1995), "The historic achievement of Arab culture are rarely discussed in American schools or are perhaps limited to 6<sup>th</sup> and 10<sup>th</sup> grade world history courses" (p. 136). One example of the way in which math teachers could incorporate the Arab culture into their discussions and curriculum is through the explanation of cultural origins, the development of Arabic numerals, the decimal system, geometry, and al-jabr (algebra) (Wingfield & Bushra, 1995). Yet another example, would be a lesson on the history of astronomy in a science class, in which educators present the history of astronomy in ancient Babylon, Hellenic culture, and medieval Arab civilizations as the precursor of modern science (Wingfield & Bushra, 1995).

In addition to the examples listed above, educators must incorporate the use of didactic programs into the classroom. According to Stephan (1999), "[D]idactic programs focus on presenting information about intergroup relations in impactful and involving ways" (p. 58). That is, these programs can allow students to gain

insight into the effects that stereotyping and prejudice have on others through role playing, group discussions, or simulation games (Stephan, 1999).

Consequently, if educators put into practice the recommendations listed above, the amount of prejudice, discrimination, and stereotyping, that Arab and Arab-American students in U.S. schools face during times of conflict can begin to diminish (Peterson, 2001/2002). Despite their complexity and multiple challenges, these recommendations should not turn educators away from the problem. Helping students become more aware of the problems of prejudice, discrimination, and stereotyping is a good place to begin. Furthermore, educators should become familiar with the many different educational instructional sources available to them during these current times of conflict. According to Peterson (2001/2002), there are many journal articles and individual educators working to make more and more instructional sources surrounding the current U.S. Arab conflict available to educators. One source that Peterson (2001/2002), promotes is the *Rethinking Schools* website at [www.rethinkingschools.org](http://www.rethinkingschools.org). This site gives educators access to instructional sources surrounding the events of September 11, 2001, and the current U.S. Arab conflict (Peterson, 2001/2002). Furthermore, these recommendations are not an end in themselves but rather part of a process aimed at eliminating the prejudice, discrimination, and stereotyping of all students in U.S. public schools.

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### **Literacy in Context: Constructing Meaning for Marginalized Youth**

*Examining approaches to literacy theory reveals inequitable practices that have kept some students, particularly delinquent youth, disconnected from school. For the purpose of this paper, delinquent youth refers to students who engage in antisocial behavior and have served time in juvenile detention or remediation programs. This review focuses on the concept of critical literacy and its implications in Language Arts classrooms. Based in sociocultural theory, critical literacy offers an approach to literacy that seeks to put students at the center of learning by integrating formal and informal knowledge in a meaningful context. Teachers who adopt a critical literacy perspective may decrease the marginalization of delinquent youth as they concentrate on equity pedagogy.*

This paper addresses issues concerning literacy development for high school students. Defined from a critical literacy perspective, literacy can offer more than the acquisition of basic reading and writing skills. This paper posits that literacy has been used to ostracize some while empowering others in an arbitrarily selective manner. Delinquent youth are targeted by traditional literacy practices and marginalized by their negative behaviors. Critical literacy offers an alternative for delinquent youth to acquire language skills and to develop critical thinking in a culturally meaningful way (Delpit, 1995; Morris & Tchudi, 1996). This approach includes critical thinking, social advocacy, and the overall growth of the individual in the context of a global community (Bennett, 1972). Critical literacy unites literacy theories with usable practices.

The use of traditional approaches to literacy, as a justification for social stratification and a perpetuation of educational inequity, can leave high school English teachers wavering between administrative objectives and student needs (Finn, 1999; Prendergast, 2003). The question of literacy begins with a review of definitions by literacy specialists (Finn, 1999; Wagner, 1986) that encompasses everything from a basic skills approach to a critical thinking perspective (Bennett, 1972; Delpit 1995; Finn, 1999; Morris & Tchudi, 1996). Literacy may be a conduit for social and economic status reform (Delpit, 1995; Prendergast, 2003), but it cannot be a panacea for social ills (Finn, 1999; Morris & Tchudi, 1996). Those in political, social, and academic power have dictated the requirements for those eligible to receive access to education. In this way, literacy has become a form of social control. Those in power have maintained

authority by manipulating language and literacy practices that have left many people with lower literacy skills to fend for themselves and unable to gain access in a society constructed on meritocracy (Prendergast, 2003; Spring, 2005; Strike, 1989).

Subsequently, educational inequity perpetuates the stratification of power. A self-sustaining system exists, as the powerful remain empowered by the system they support. This system materializes in public schools where educators have the power to teach the knowledge they deem appropriate. Students are viewed as lumps of clay to be molded by those with power. This model presents the teacher as an authoritarian figure who is the source of all knowledge. As a result, students are left without a voice in their own literacy development. Students who question or oppose this pedagogical viewpoint are seen as rebellious dissenters who impede the education of others. In fact, these rebellious dissenters are often labeled as delinquents (Blake, 2004; Finn, 1999).

Students classified as at-risk or delinquent are written off, abandoned in a system that dismisses their actual abilities. They respond by adopting a culture of refusal (Blake, 2004; Keith & McCray, 2002). Students react to the system by embracing a rebellious attitude and refusing the help of those in authority or other adult figures. Behavior problems in school are symptoms of their frustration. Unsure of how to service these students, schools avoid the problem of delinquent youth by sending them to detention centers or remediation programs. This practice further alienates and marginalizes youth who already feel isolated from society (Casella, 2003; Cooper, 2003; Keith & McCray, 2002). The education received in these centers tends to be



punitive and of a lesser quality than what might be obtained in a mainstream school setting (Blake, 2004).

Ideally, the public school functions as an institution where equity can be regained through the redistribution of power. Teachers have the ability to empower and encourage students, introducing them to critical thinking and inquiry pedagogy. Students transition into advocacy roles for themselves and others that can then lead to school-wide reform. Due to inconsistency across the spectrum of programs and philosophies, literacy is an area of the educational system where restructuring is needed. A premise for this reform is a belief that each student can and deserves to learn well (Delpit, 1995). Progressive literacy educators propose a new approach to teaching literacy that considers the sociocultural factors of each student. In a sociocultural theory of literacy, the learner is valued within his or her unique social and cultural context (Perez as cited in Keith & McCray, 2002). This perspective recognizes what has been defined as critical literacy (Bennett, 1972; Finn, 1999; Morris & Tchudi, 1996). Advocates of critical literacy, therefore, contend that the acquisition of skills and the development of critical thinking and citizenship skills can occur simultaneously in a meaningful learning context.

Curriculum evolves as classrooms become student-centered learning communities. Literacy pedagogy is moving away from traditional methods of rote memorization and basic skills acquisition and embracing adolescent literacy theories. This field recognizes that students are literate in many areas including film and music (Duncum, 2004; Kahn & Montgomery, 2003; Keith & McCray, 2002; Verhoeven & Snow, 2001). Valuing student literacies can provide a rich framework for promoting and developing literacy in all students. The amalgamation of traditional and progressive approaches to literacy has resulted in a critical literacy approach. Critical literacy has not only expanded the definition of literacy to integrate skills and meaning, but has also incorporated teaching practices that creatively engage a number of learning styles. Literacy has become a community endeavor. Freire (1970/1983) offered that “a revolutionary leadership must accordingly practice *co-intentional* education” (p. 56). Teachers who embrace this philosophy understand that all members concurrently function as teachers and students because each member of the community has something to

contribute to the learning process. Teachers and students can work towards the development of critical literacy by integrating critical thinking skills and social activism (Delpit 1995; Finn, 1999).

The following literature review provides a historical overview of literacy issues, establishes a general definition of literacy, addresses some struggles of education inequity, describes the relationship between adolescent development and delinquency, and discusses the need for a contextualized curriculum through the use of scaffolding and meaningful literacy activities. The research presented within is a miniscule representation of the spectrum of literature on this topic. While reading and writing acquisition are briefly mentioned, neither topic is thoroughly discussed in the literature reviewed. Media is used as a tool for constructing meaning and developing critical literacy, but the field of media literacy is extensive and should be further explored.

### **Toward a Definition of Literacy**

To adequately deal with the question of literacy, a definition of terms must first be established. Developing a literacy pedagogy necessitates understanding that reading and writing fall under the umbrella of literacy, but only contribute to the function of literacy not its definition. It is important to be aware of the debate between reading acquisition and teaching literacy (Wagner, 1986). Researchers invested in the process of reading acquisition deliberate over the influence of cognitive and psycholinguistic skills upon the reader as he or she decodes and comprehends a text. In contrast, researchers interested in literacy concentrate on the historical, cultural, and sociolinguistic aspects of reading and writing. They extend their concern to literature, aesthetics, and the significance of modernization as it relates to literacy (Wagner, 1986). Therefore, reading specialists concentrate on the acquisition of skills, whereas literacy professionals emphasize the application of skills. Knowledge and functional skills related to reading and writing enable one to be “fully-literate” in a complex society (Wagner, 1986, p. 325).

Literacy encompasses more than the ability to read and write. Some local cultures consider certain individuals as literate, even though they are unable to read or write (Wagner, 1986). In U.S. society, a literate student has the ability to read, write, and interpret symbols in a meaningful and culturally appropriate manner

(Perez as cited in Keith & McCray, 2002). Therefore, cultural context determines whether or not an individual is literate (Delpit, 1995).

Duncum (2003) describes literacy as the ability to use communicative modes to construct meaning. He argues the notion of national and global citizenry as rationale for equipping students to “deal with multimodal cultural sites” (Conclusion section, para. 32). These sites are forms of communication that use a culturally specific language. Media and technology are two examples of such language. Compartmentalized curriculum isolates visual arts, language, or music from more traditional subjects, offering a weakened form of literacy. Multiple forms of communication benefit students and community when they are integrated into classroom practices. Literacy then becomes communitarian and culturally relevant.

Other scholars attempt a definition of literacy that classifies these processes. Finn (1999) refers to the initial stage of contextual literacy as *emergent literacy*. At this stage, children respond to the sounds and the language around them and ascribe meaning to those utterances. Morris and Tchudi (1996) divide literacy into three categories: basic, critical, and dynamic literacy. *Basic literacy*, being the closest to the traditional “3Rs,” is preoccupied with decoding and encoding skills. *Critical literacy* is the capability to move beyond the literal to interpret, analyze, and explain the text. Bennett (1972) defines critical literacy as a movement beyond individual listening and analyzing skills to include the community. Critical literacy cultivates respect for others, encourages social advocacy, and strengthens resolve for a democratic society and its processes. Morris and Tchudi (1996) extend this theory by using the term *dynamic literacy* to describe the ability to synthesize and apply textual lessons to life activities. They suggest that the basic, critical, and dynamic literacy levels intersect to produce a well-rounded, literate person.

Critical literacy can encourage the growth of a socially responsive individual. The student can begin to realize that egocentrism is unbeneficial for personal development. In this context, students view individuality within a community perspective and become aware of the needs of others. This individual not only has the basic skills, but also the proficiency to function on a global level of communication. Consequently, the individual has mastered universal literacy. *Universal literacy* moves beyond cultural barriers by focusing on an individual’s

interaction with the global community (Mayor as cited in Blake, 2004, p. 29).

Other theorists concentrate on specific segments of the community. Luke and Elkins propose the term *adolescent literacies* to address “complex issues around adolescents access to and alienation from social institutions, their position and identities within cultural fields of community life and work, education and consumption, and their engagement with texts and discourse of power” (as cited in Kahn and Montgomery, 2003, p. 143). This concept of adolescent literacies validates many adolescent educational experiences of isolation and marginalization. Recognizing that adolescents have developing literacies can enable educators to better understand how to construct meaningful literacy activities that foster basic and critical skills.

While heterogeneous definitions of literacy exist, critical literacy endeavors to put the student at the center of literacy pedagogy (Keith & McCray, 2002; Wagner, 1986). A critically literate student uses extensive communicative methods to synthesize, analyze, and evaluate the messages of society. This student is culturally relevant and cognizant of his or her responsibility to the universal community (Bennett, 1972; Blake, 2004; Finn, 1999; Kahn & Montgomery, 2003; Morris & Tchudi, 1996). Furthermore, critically literate high school students acknowledge that adolescent literacies can equip them with the cognitive and social skills pertinent to dealing with their complex culture (Delpit, 1995; Duncum, 2003).

### Historical Context

The human rights movement explicates the importance of literacy in U.S. society (Mayor as cited in Blake, 2004). Reflecting upon early American education reveals that, while public education was designed for all children, the elite manipulated the system in order to strengthen their position in society. A ruling class that consisted of white males and slave owners exerted their power to use education as a form of subjugation and oppression. Although education was a means for African-American slaves to improve their economic and political status in the South, white southerners were determined to control education by teaching only industrial skills and prohibiting them from climbing any social ladder (Spring, 2005). Access to education was denied to those without property rights or, more specifically, to people of color (Prendergast, 2003; Spring, 2005). During the

Civil Rights period, a conflict arose between the left and right political spectrums concerning issues of social and economic inequality. The Civil Rights movement emphasized the correlation between issues of racial justice and literacy (Prendergast, 2003). The white majority continued to dominate education as gatekeepers to knowledge. Privileged access to literacy and education began to replace white property rights, leading Prendergast (2003) to suggest that today literacy has become white property. Access for people of color is still controlled by those in power who regulate societal norms through language and education.

Following the Civil Rights movement, researchers in the 1970s began to document reactions toward the nature of reading and writing systems. They evaluated children's attitudes concerning reading and writing that were integrated into the actions of daily life (Goodman, 1990). Some educators and researchers focused on the acquisition of reading and writing skills, while ignoring "that children were already learning to read and write as they were reading and writing to learn" (Goodman, 1990, p. 3). In other words, children were entering the classroom already reading and writing on some level before they were being taught the formal skills of literacy. With the emphasis on memorization and spelling, learning shifted from being student centered to becoming more mechanical. The prior knowledge students brought into the classroom became irrelevant in the overall learning process. Consequently, students who struggled with reading or writing sensed that they were somehow inferior. Instead of confronting the stigma associated with poor reading and writing, public schools perpetuated the shame and widened the division between student knowledge and educational expectations (Morris & Tchudi, 1996).

Currently, literacy functions as a tool of access to gain power in an industrialized society (Finn, 1999; Strike 1989). Reading is an aspect of literacy that has been used to determine status or membership (Bloome as cited in Taylor & Dorsey-Gaines, 1988). According to Bloome, reading is a social process. Reading helps individuals to "gain access to social rewards and privileges, to socialize and transmit cultural knowledge, and to engage in a broad spectrum of social interactions" (as cited in Taylor & Dorsey-Gaines, 1988, p. 123). It can reflect self-control or control of others. Street (as cited in Blake, 2004) believes that the current autonomous model of formal-school literacy practices

discriminates against minority students by empowering the more privileged members of the school population. Each member of the population represents a spectrum of literacies that ought to be considered by educators in order to provide equitable educational opportunities. The social complexity of a diverse nation requires literacy presented in a context relevant to the receiver. Contextualized literacy could promote further equity because it validates what the individual has to offer, while providing new resources with which to navigate through society.

The ideology of literacy that promises equal opportunity, moral growth, financial security, and ensures democratic participation is rhetorically enticing but flawed in a society founded upon inequity (Prendergast, 2003). The general public assumes that societal problems are indicative of low levels of literacy. Many believe that low levels of literacy generate social ills such as juvenile delinquency, criminal activity, chronic unemployment, over dependence on entitlement programs, and teen pregnancy. Literacy would be a panacea, curing social disease (Finn, 1999). The fear of social disarray generated an enthusiastic effort towards implementing literacy programs in schools. This fervor has been fueled by the ill-founded belief that modern education is digressing due, in part, to the evidence that past U.S. literacy rates were higher than current literacy rates (Morris & Tchudi, 1996). While an admirable ideal, there is no evidence that literacy in the "3Rs" can resolve societal issues or improve the democratic process. It is a superficial and misguided belief that through education alone literacy can somehow cure economic and social ills (Finn, 1999; Morris & Tchudi, 1996; Prendergast, 2003).

### **Literacy and Justice**

In *Liberal Justice and the Marxist Critique of Education*, Kenneth Strike (1989) asserts that the root of educational inequity can be understood through concepts of fair competition, autonomy and meritocracy. A society based on fair competition would result in equal opportunity. All members of this society could work hard, be independent, and "get what they deserve" (p. 17). Education would be available and accessible for all who take advantage of such opportunities. Inequality is insignificant because individual merit is rewarded accordingly. Autonomy allows freedom of choice. Therefore, citizens can choose whether or not they will live

by ideals of justice and fairness. The moral point of view in a just society puts the responsibility of equal opportunity in the hands of the public, unregulated by government control. As a result, those who choose to pursue educational opportunities, better employment, or the accumulation of material possessions are free to do so.

The absence of control and overbearing involvement in local matters would present the state as an entity neutral towards the decisions of its people. This neutrality would allow school districts to be self-governing. These beliefs impact the way liberal societies think about the education of their citizens. U.S. national history of inequitable practices in education contradicts the idealistic belief that the state is impartial concerning educational policies, and that access is available for everyone. Since schools are neither immune to nor absent from discriminatory practices, the values of those in administrative authority are communicated through the pedagogy enacted in the classroom. If schools in a liberal society make equal opportunity a requirement, they would need to distribute resources appropriately between privileged students and those who are less affluent. Meritocracy from this perspective becomes an illusion as educational facilities profess to provide equal opportunity yet convey values of inequality (Strike, 1989).

#### **Literacy Accentuates Power Differences**

Inequality in education has been justified by the opinion that these disparities are inherently due to student weaknesses (Darling-Hammond, 1997). Students are often blamed for a school's deficiencies when, in practice, the administrators and educators should take responsibility for their contribution in the poor academic performance of their students. This scapegoat mentality results from an imbalance in educational practices. School deficiencies, manifested through teaching practices and administrative philosophies, have been overlooked. The widening achievement gap blamed on student ability differences is used as an excuse for substandard schooling. Other factors, including language and culture, should be considered as well. A balanced critique of school practices is needed. Verhoeven and Snow (2001) postulate that this discrepancy of access in public schools is facilitating a North American literacy crisis. This crisis stems from "severe inequities in distribution of literacy skills" that alienate members of immigrant and minority groups and

their children attending the schools (p. 1). The varied levels of skills and abilities can be seen as inhibitors to the future academic success of these children.

Delpit (1995) offers a "culture of power" perspective in which those in power dictate the rules by which U.S. culture operates (p. 24). Members of the ruling class may be unaware of their influence or deny its existence, but those subjugated by it are painfully conscious of the culture. In a culture of power, the language of the majority serves as a dialect separating people according to socioeconomic conditions (Delpit, 1995). Elitist academic language further isolates those without means, financial or otherwise, to gain the educational tools necessary to interpret the language of power. Those from a more privileged socioeconomic background have the option to pursue courses in higher education that result in exposure to formalized language (Barton, 2001). Language, a facet of literacy and a conduit of access, correlates with economic status. The struggle for educational equity is affected by economic conditions. Low-income families have neither the resources to pursue the educational opportunities they would like nor can they advocate for themselves in the language of power.

Finn (1999) connects poverty and language when he explains that the poor often feel powerless and, because of this, express themselves in implicit language. The wealthy revel in their power and are accustomed to expressing themselves with explicit language. He asserts that language has perpetuated disparities in education. Some students may be empowered, while others are domesticated by their education, tamed to docilely submit to those with language and power. Many people of low socioeconomic status are capable of functioning in society with only basic literacy skills. While basic literacy facilitates initial access to educational resources, the culmination of skills may not result in critical literacy. As viewed by scholars like Delpit (1995) and Finn (1999), contextualized literacy practices can offer a new language that may contribute as a solution to social disparity. This language of power has the potential to open educational doors, distribute social justice, and allocate voice to subjugated people. Adolescents, particularly delinquents, are one such marginalized population with a unique language and culture that society and educational facilities tend to ignore.

### **Adolescents: Empowerment through Literacy**

Students enter the classroom with language and culture that contributes to the context or classroom atmosphere in which learning transpires (Delpit, 2002; Purcell-Gates, 2002). Conversely, new concepts taught in school can be assimilated into and built upon the foundation of knowledge received through the framework of informal education. Reading and writing activities from daily life often cultivate informal literacy capabilities in children and adolescents. Conscientious teachers recognize these literacies and view them as resources for classroom instruction (Purcell-Gates, 2002). A classroom community that focuses on *how* students learn, be it language or culture, rather than *what* they are taught offers a contextualized forum in which meaningful learning can occur (Morris & Tchudi, 1996). Often when the learning context is valued, the process of learning is prioritized over the tangible outcome from a particular lesson. Teachers can also capitalize on the social nature of adolescence. As highly social beings, youth tend to gravitate towards communities that will support and increase their language ability. Through interactions with others, they can strengthen their ability to comprehend and manipulate language (Morris & Tchudi, 1996). In order to contextualize literacy for marginalized youth, it is imperative to understand some of the history and attitudes these students may possess.

### **Delinquent Youth: A Profile**

According to Blake (2004), neither the impact of biological, psychological, and sociological change on adolescent development nor the implications of ethnic identity and the perceptions and expectations upon marginalized youth have been thoroughly discussed by educational theorists. Delinquency may be learned and acted out in schools by certain adolescents, particularly those from an ethnically diverse background “whose social, adaptive, and academic needs are often ignored, misdiagnosed, or maltreated” (Keith & McCray, 2002, p. 693). As a result of the inequities in school and society and in response to the incongruent relationships among school, community, and home lives, many adolescents procure a “culture of refusal” (Blake, 2004). In the culture of refusal, these youth adopt a fatalistic attitude towards education and life, rejecting adult expectations and support. Students may feel that adults are disingenuous. For that reason, adult reinforcement becomes expendable.

Furthermore, poor urban students can feel isolated as targets of educational inequity because of uncontrollable circumstantial factors, namely the plethora of social, cultural, and economic challenges in many urban communities (Blake, 2004). Students who need the most assistance and attention are often not being serviced by the urban education systems (Balfanz, Spiridakis, Neild, & Legters, 2003).

Remediation programs within schools can be a more productive option than channeling disruptive adolescents into juvenile delinquency centers (Keith & McCray, 2002). Preventative detention programs were developed to impede growing behavioral problems. Unfortunately, they have not decreased the rise of juvenile delinquency. Instead, such programs often “prompt actions that restrict and isolate youths in programs and facilities that do not meet their social and academic needs and that have clear institutional links to the criminal justice system” (Casella, 2003, p. 55). Adolescents classified as juvenile delinquents are likely to remain profiled for life. As social and environmental factors gravitate toward a gradual accumulation of antisocial behaviors, the likelihood is that they will evolve into habitual offenders (Keith & McCray, 2002). Attention to the behavior of students, their peer groups, or their familial unit might obscure other marks of juvenile delinquency such as “poor literacy skill development and curricular/teaching approaches devoid of sociocultural foundations for learning” (Keith & McCray, 2002, p. 697). Problems of delinquency may be reduced when contextualized educational opportunities are available (Keith & McCray, 2002).

Unfortunately, many delinquent youth are not serviced in a relevant and contextualized manner. According to Keith and McCray (2002), equal educational opportunities should transcend public school facilities to include juvenile detention centers. Delinquent youth are entitled to an education that will enhance their entry into and participation in a democratic society. While staff apprehension regarding disruptive, in-class behavior may be justifiable, providing equitable educational opportunities for all students should be the primary concern of educators. Schools, as social centers, may be the facilities needed for troubled teens to acquire the network of support imperative to their academic success. If schools are to provide reinforcement that the students welcome, then students must be involved in their own educational process (Keith & McCray, 2002).

Students need to regain control of their lives and know that their actions can significantly determine their future. Delpit (as cited in Keith & McCray, 2002) suggests a skills-based approach to teaching reading for diverse students. Instruction in literacy should aid students in reconciling “literacy with living.” Delpit recounts:

For juvenile offenders who have experienced repeated economic and familial adjustment challenges and incomplete school achievement, their perception of literacy may be that it is unattainable and unnecessary, especially if, in their lived experiences, literacy attainment is not always connected with economic and school parity. (p. 699)

In essence, juvenile offenders are products of the culture of power, which pushes them towards the margins of society.

Juvenile delinquency may be remedied through educational practices of literacy. Literacy in context can provide an equitable solution because it empowers students. This approach can counter the growing culture of refusal produced from the lack of congruency in the lives of many youth. Teachers can provide a classroom context in which the needs and desires of struggling students are assessed and remedied. It is important for students to be taught *how* to learn instead of acquiring information to be regurgitated at the appropriate time (Cooper, 2003). Delpit (1995) recognizes that when teachers underestimate the potential of their students, they will underteach them. Students, who have been identified as delinquents, are often viewed as limited in their academic capabilities. Teachers should be aware of their subconscious biases and strive to teach rigorous, but accessible curricula. Ladson-Billings (2002) encourages culturally relevant teaching because it “is designed to help students move past a blaming the victim mentality and search for the structural and symbolic foundations of inequity and injustice” (p. 111). The social activism aspect of literacy development can be better understood in the context of a sociocultural theory of literacy.

### **Teaching Approaches**

This section offers a sociocultural theory of literacy as a transformative option to connect delinquent youth with literacy practices. Teachers can motivate students by building upon existing knowledge and contextualizing the

objectives of formal education (Delpit, 1995; Goodman, 1990; Verhoeven & Snow, 2001). Students represent a myriad of literacies. For example, media or youth culture can provide context in which meaningful literacy activities can occur (Duncum, 2004; Keith & McCray, 2002). All things considered, school and curricula reform is necessary to increase meaningful literacy (Darling-Hammond, 1997; Finn, 1997; Thomas, 2000).

### **Sociocultural Theory of Literacy**

Dissenting attitudes towards traditional literacy in combination with the rising concern for a multicultural approach to education have contributed to the development of a sociocultural theory of literacy. According to this theory, students’ cultural context and social surroundings affect their academic development. A sociocultural theory of literacy can help students to understand their identity in relation to other students and to analyze how they have learned to perceive and interpret their world. Sociocultural theory is a framework for knowledge construction. The sociocultural perspective presents literacy as a means to an end. While this theory requires the learning of discrete skills, it is more than decontextualizing or decoding information (Duncum, 2004; Perez as cited in Keith & McCray, 2002). Under this approach, a student can experience literacy as an interactive process that is continually being redefined and negotiated through environmental factors (Perez as cited in Keith & McCray, 2002). Based on a sociocultural theory of literacy, students can learn in a nurturing atmosphere that accentuates commonalities and addresses cognitive variations by which people from different cultures, backgrounds, skill levels, and languages interact (Cooper, 2003).

### **Literacy: a Contextual Endeavor**

Literacy is an activity inseparable from culture. Therefore, literacy pedagogy must be adaptable in order to meet the needs of a culturally diverse classroom (Verhoeven & Snow, 2001, p. 10). Cultural considerations applied to teaching literacy can develop a context in which student concerns and teacher objectives converge. The multicultural and multilingual realities of minority students provide a framework for their literacy needs to be defined and assessed accurately. Using these realities as a foundation, the literate home lives of children can find coherence with the reading and writing activities of school (Taylor & Dorsey-Gaines,

1988). Teachers must be culturally competent to understand the unique subcultures of each student and to draw upon the resources they represent (Blake, 2004). Blake (2004) suggests a cultural compatibility theory to elucidate the connection between minority youths' home and school lives. These contrasting learning environments can be rich with meaning and provide an atmosphere that is conducive to knowledge attainment.

It takes time to determine individual student contexts. According to Vygotsky (2005), scaffolding is a process in which students activate prior knowledge as a stepping-stone to new knowledge. First, teachers would need to determine students' background knowledge. Then, using this as relevant context, teachers would use scaffolding techniques. Through these techniques, the student can interpret clues to discover answers for classroom inspired questions. Cooper (2003) uses the example of vocabulary replacement to demonstrate scaffolding practices. During classroom discussions, students construct mental images and establish concrete ideas based upon their preexisting knowledge. Teachers then substitute student words for stronger vocabulary in order to strengthen understanding.

### **Motivating Students**

When meaning and knowledge construction shifts from teacher control to student responsibility, the student's voice can become audible. Willinsky refers to this exchange of power as "new literacy" (as cited in Finn, 1999, p. 140). Arguably, this new literacy is actually an element of the sociocultural theory of literacy because meaning is constructed through the interaction between teachers and students. Smagorinsky (2001) further proposes that meaning is constructed in a collaborative learning environment in which a community of readers and texts engage in discourse. For meaning to emerge, members of the conversation must be equipped with mediating tools that include an understanding of textual signs. Because reading is a meaning-making process, the dialogue between student and text exceeds the boundaries of the written word to influence life experiences. With mediating tools, students can strive towards attaining critical literacy by interpreting and engaging the world. During literacy activities, cognitive strategies and motivational goals must be integrated to facilitate literacy engagement (Verhoeven & Snow, 2001). Students who are engaged in

classroom activities can be motivated to apply critical thinking and interpretation skills.

One way to apply a sociocultural theory of literacy is to use literature and media as a means to motivate students. Literature and media can be seen as a dialect, the language of many adolescents, for reconnecting youth who are detached from the educational experience. According to Verhoeven and Snow (2001), literature has the potential to intrinsically motivate students to read because it appeals to natural curiosity and aesthetic interest. Kahn and Montgomery (2003) advocate that meticulous engagement with tools of language through writing can have a therapeutic effect on student learning. Creative writing or narrative story telling can further motivate students because students are provided with an opportunity to relate, or contextualize their learning. Stories are a form of communication that emphasizes logical thinking and problem solving in a social context. Therefore, stories can be an effective way to ascribe meaning to a writing activity and motivate students to engage in literacy activities.

Motivation for students to pursue basic, critical, or dynamic literacy stems from a renewed sense of purpose and value. Through interviews with students, Morris and Tchudi (1996) recount the effects of contextualized literacy on youth goals. Several students testified to the inspiration they received from critical literacy taught through media and technology. Their experiences motivated them to set career goals in a variety of fields including theatre and astronomy. Students live in a media-saturated world that can provide a social context for classrooms. While Duff (2002) encourages teachers to use pop culture as a reference point to communicate a principle or academic objective, he also cautions teachers to avoid excessive use because it may alienate certain students, especially immigrant English language learners. These students are less familiar with cultural references and may become lost during the lesson. This would be counter-productive to the purpose of using such starting points. Morris and Tchudi (1996) are concerned that an increasingly centralized media may decrease critical thinking and distort the value of written text. However, education that includes media as a resource for teaching literacy can provide a meaningful environment that evokes interest from adolescents. The interpretive nature of media stimulates engagement among students who bring a variety of perspectives and biases to the classroom. These options are more motivational

than strictly memorizing information and reading bland textbooks (Schwarz, 2003).

### **A Myriad of Literacies**

In a literate society, literacy is a central aspect of “personal, familiar, and social histories” (Goodman as cited in Taylor & Dorsey-Gaines, 1988, p. 61). The diversity of these histories reflects the diversity of literacies often mirrored by children who, through their literate environments, invent their own literacies (Goodman, 1990). Barton (2001) classifies home literacy practices, or literacies that “serve everyday purposes,” as “vernacular literacy practices” (p. 24). As dominant literacy practices are part of formalized education, experts and teachers become gatekeepers to the knowledge conveyed in a formal setting. Home literacy encompasses a variety of resources, including media. Every home fosters a unique language and culture; therefore, family members become literate in their environments. The informal quality of home literacies allows those outside the immediate family to have access to and to acquire those literacies. The process of skill acquisition is one contrasting difference between dominant and vernacular literacy practices. Vernacular literacies are legitimized through common use. Dominant literacies often remain void of authenticity because “learning is separated from use” (p. 31). By validating both vernacular and dominant literacy, schools have the opportunity to expose students to a wider array of voices that otherwise might be ignored by isolated home or school literacy.

Numerous strategies are available to reconcile the gap between vernacular literacies and school literacy policies. Taylor and Dorsey-Gaines (1988) conducted a 6-year ethnographic study of inner city, poor Black families. Families of Shay Avenue, Philadelphia, participated in the study. The study revealed that the function of literacy was practical. The definition of literacy as reading and writing skills appropriate for school and work evolved to incorporate common use. Families used the literacy skills of reading and writing to perform the duties of real life (e.g., shopping lists, filling out employment applications, etc). The study found that social, political, and economic circumstances could determine whether or not literacy had a liberating effect on the family. As demonstrated by family members who were highly literate yet without formal education, Taylor and Dorsey-Gaines (1988) strongly emphasized that education and literacy cannot be equated.

In choosing a strategy to reconcile the gap between personal and school literacies, teachers should be conscious of limiting student potential based on characteristics of personal literacies (Delpit, 1995). Students who refuse to learn in school may feel threatened to make an either-or choice between their home literacies and the literacy promoted by the school. Often a student will choose home literacies to keep his or her sense of identity. Equitable teaching practices rationalize the use of school literacies as sharing the language of power. Students would be enabled to thrive within the dominant culture while preserving and re-enforcing the advantage of personal literacies.

Fostering a keen balance between vernacular literacies and school literacies demands that teachers make certain pedagogical shifts. For students to acquire meaningful reading, writing, and critical thinking skills, teachers must restructure classroom instruction and literacy practices (Perez as cited in Keith & McCray, 2002). Teachers who are aware of the sociocultural theory of literacy can modify their instructional practices to transform the learning experience of the student. For individual “pedagogical learner knowledge” to develop, a teacher needs to actively pursue effective teaching strategies, curriculum resources and technologies in order to motivate students and cultivate a sense of collaboration in the classroom (Darling-Hammond, 1997, p. 296). Teachers can assemble lectures, materials, learning centers, projects, and discussions with this knowledge of cognitive modes, information processing, and communication (Darling-Hammond, 1997). Taking this into account, the teacher can then cultivate a learning environment relevant to student individuality.

### **School Reform: Administration and Implementation**

Literacy is a characteristic of a civilized society; thus schools have a responsibility to produce literate citizens that represent the values and goals of the community (Finn, 1999). Many schools, concerned with the district and state politics, are anxious about the image their students present to the public. Trying to portray a positive view of the school and the quality of education therein, professionals may use constricting educational practices that actually impede student development. Students are limited to modeling the values and beliefs of the school determined by those in positions of authority (Bennett, 1972). Evans (1996) declares



that schools should pursue academic excellence by continually evaluating educational practices. While administrators may stand by research-based programs, commitment to such programs does not guarantee successful educational reform. Reconceptualizing the educational process should precede strategic-systemic reform. In the absence of systemic change, intermediate steps need to be taken to meet immediate student needs. A critical examination of the disconnect between educational objectives and student objectives is necessary.

Thomas (2000) promulgates that enlightenment and learning are fundamental responsibilities of the school. Teaching pupils to be literate is the first step in the process towards those goals. Once students have mastered basic skills, the true value of literacy depends on what they do with the skills they have acquired. It is up to the school staff to provide an environment in which students are given the appropriate tools to function in a literate society. Students should not be blamed for their lack of knowledge. It is the responsibility of the teacher to impart and help construct student knowledge (Finn, 1999).

In addition to the professional development of the teacher, Morris and Tchudi (1996) suggest schools should partner with the surrounding community. The community becomes a support system for both staff and students. Schools can engage the community by recognizing the diversity of literacies represented. Multiple languages and dialects offer a wealth of resources that can be viewed as a cause for celebration (Delpit, 1995). A cooperative effort by administrators, teachers, students, and the community can produce an understanding of literacy that consciously engages youth contexts.

The concept of critical literacy can be an equitable alternative to traditional, skills-based literacy education. This approach contextualizes the construction of knowledge according to youth specifics and develops a sense of global responsibility. Delinquents, many minorities, and often the poor remain marginalized by current literacy practices, but within a sociocultural theory of literacy these youth can have voice. Educational reform and teacher pedagogy should be student-centered, validate both formal and informal literacies, and provide struggling youth with an opportunity for a meaningful educational experience.

### **Conclusions**

Torn between the objectives of educational policy makers and the needs of a diverse student

population, teachers are examining pedagogical equity as it pertains to literacy and reconsidering traditional approaches to teaching literacy (Finn, 1999; Prendergast, 2003). The research described in this literature review contends that the voices of privilege and power have regulated literacy pedagogy and continue to do so. While public schools were created to provide educational opportunities for all children, many of the elite have used them to reinforce societal stratifications. By regulating access to education, they control who receives literacy training. Citizens without basic reading, writing, and language skills appear to lack societal worth, the ability to contribute to the larger community (Finn, 1999; Taylor & Dorsey-Gaines, 1988). Therefore, literacy practices have restricted access to education and employment for the less powerful (Prendergast, 2003; Spring, 2005; Strike, 1989). The belief that literacy might be the solution for many of U.S. social problems contributes to the rising trend in literacy programs. While some social scientists and literacy specialists advocate literacy as a social and economic status equalizer, it is by no means a sure solution for educational equity (Delpit, 1995; Finn, 1999; Prendergast, 2003; Morris & Tchudi, 1996).

These theorists examine definitions of literacy in order to tangibly identify the goal of literacy pedagogy. Defining literacy has been a complicated task as researchers and literacy theorists argue over the qualities they believe characterize a literate citizen. Educators tend to be polarized around two positions. The first group promulgates the skills approach, validating decoding, encoding, and a systematic engagement with reading and writing, while the second group focuses on the application of those skills in a holistic literacy methodology (Finn, 1999; Keith & McCray, 2002; Wagner, 1986). Although there is still disagreement over terms, critical literacy endeavors to put the student at the center of literacy pedagogy (Keith & McCray, 2002; Wagner, 1986). A critically literate student uses extensive communicative methods to analyze, synthesize, and evaluate society. This student is culturally conscious and cognizant of his or her responsibility to the global community (Bennett, 1972; Blake, 2004; Finn, 1999; Kahn & Montgomery, 2003; Morris & Tchudi, 1996). Advocates for critical literacy contend that the acquisition of skills and the development of critical thinking and citizenship skills can occur simultaneously in a meaningful

learning environment (Bennett, 1972; Finn, 1999; Morris & Tchudi, 1996).

The public educational system began with noble ideals of reaching all children, but the current reality is that mainstream teachers are too concerned by what *they* think education is supposed to look like; education becomes teacher-centered. In reaction, many students do not and refuse to fit into the teacher's mold. These sub-groups are pushed further and further to the margins. By excluding some students from an adequate education, public schools have lost their initial purpose. In ideal conditions, the public school functions as an institution where equity can be regained through the redistribution of power as teachers challenge students through critical literacy (Bennett, 1972; Finn, 1999; Morris & Tchudi, 1996).

Contemporary literacy professionals are examining what practices will best serve traditionally marginalized students. A sociocultural theory of literacy values students within individual social and cultural contexts (Perez as cited in Keith & McCray, 2002). This theory provides a guideline for knowledge construction. The sociocultural perspective presents literacy as a means to an end. While this theory requires the learning of discrete skills, it is more than decontextualizing or decoding information (Duncum, 2004; Perez as cited in Keith & McCray, 2002). Through a sociocultural theory of literacy, students can experience literacy as an interactive process that is continually being redefined and negotiated through environmental context (Perez as cited in Keith & McCray, 2002). Through an emphasis on environmental context, marginalization can be addressed. Recognizing delinquent youth as one marginalized group, a sociocultural theory of literacy can provide a framework for motivating students to engage in learning (Blake, 2004; Verhoeven & Snow, 2001). Teachers validate students by acknowledging gifts and abilities, including the unique language and culture each student brings into the classroom. For teachers, the goal is to serve and teach students well. By examining their own attitudes towards groups of students who may seem like problems in the classroom, teachers may evaluate how they can teach them in a constructive and meaningful way. Connecting with students makes the learning process meaningful.

While literacy can provide a sense of organization and structure to daily life (Barton, 2001), formal schooling has often invalidated the learning that occurs outside of school.

Adolescents have areas they might be considered literate in, such as films, music, technology and other media. Such literacies construct a framework of meaning to their worlds. Media can be integrated into teaching practices to appeal to specific youth literacies. Educators are thereby acknowledging that each student is literate in activities outside of formalized school (Duff, 2002; Duncum, 2004). Conscientious and culturally responsive teachers should use those adolescent literacies as scaffolds to develop other literacies including the traditional elements of literacy, reading and writing. When students feel valued and know they have something to contribute, they are willing to support the school community (Delpit, 1995, 2002; Taylor & Dorsey-Gaines, 1988).

Considering the need for school reform, scholars hypothesize that a sociocultural theory of literacy may offer solutions for delinquent youth (Blake, 2004; Keith & McCray, 2002; Verhoeven & Snow, 2001). Students marginalized by current literacy pedagogy can become engaged and motivated when the administrators decide to reach them. Educators must acknowledge the importance of these youth before they can modify their practices to create an inclusive curriculum. With the aid of media, students can discover how they learn and evaluate the lenses through which they perceive the world (Schwarz, 2003). Literacy pedagogy must be adaptable in order to meet the needs of a culturally diverse classroom (Verhoeven & Snow, 2001, p. 10). Cultural considerations applied to teaching literacy can develop a context in which student concerns and teacher objectives converge. The multicultural and multilingual realities of minority students provide a framework to define and assess their literacy needs accurately. Using these realities as a foundation, the literate home lives of children can find coherence with the reading and writing activities of school (Taylor & Dorsey-Gaines, 1988).

### **Recommendations for Practice**

While education reform is needed, particularly in approaches to literacy theory (Darling-Hammond, 1997; Evans, 1996; Thomas, 2000), teachers should be concerned with constructing pedagogy that puts the student at the center of learning (Delpit, 1995; 2002; Ladson-Billings, 2002; Purcell-Gates, 2002). Culturally responsive teachers cultivate a safe classroom environment for all students (Keith & McCray, 2002; Purcell-Gates, 2002). Teachers

can validate the student as an individual without condoning his or her choices. Separating the student from the behavior creates an opportunity for the teacher to better serve students. In turn, students are more receptive to the support offered by an adult. Teachers should examine their own attitudes towards certain groups of students, particularly the stigma they ascribe to delinquent youth (Blake, 2004; Finn 1999). The job of empowering students can only happen when students feel they have a voice in their learning process. The following list offers a few guidelines for equity and justice practices in the classroom that lead to contextualized literacy.

1. *Allow students to be involved in curriculum development* (Keith & McCray, 2002). Reading and writing activities centered in meaningful context offer students a way to interact with the learning process. Healthy, engaging curriculum is student-centered. Freire (1970/1983) offers a pedagogy of the oppressed; pedagogy that is formed “with, not for the oppressed...in the incessant struggle to regain their humanity” (p. 33). In practice, teachers cannot just spontaneously invent a curriculum that is authentically relevant for students without consulting them. Student-centered, contextualized curriculum and methods provoke critical questioning (Finn, 1999).

2. *Design curriculum to engage a spectrum of needs and languages represented in the classroom* (Duff, 2002; Montgomery & Kahn, 2003). Purposeful teachers recognize language and cultural variances in their classroom, consider them assets for learning, and use them to empower students (Barton, 2001; Delpit, 1995; Finn, 1999). Students enter the classroom with unique language, culture, and literacies that can be seen as assets to formal curriculum. Teachers can use the languages of media, art, film and music as curriculum supplements to teach formal language skills and develop critical literacy. As a result, students are empowered to converse with the multiple voices represented inside and outside the classroom (Duff, 2003; Duncum, 2004). Through the integration of adolescent literacies, meaningful curriculum can motivate students. To engage students in school activities and formal education they need to have a connection with the materials being taught (Verhoeven & Snow, 2001). Educators are finally recognizing this need and striving to make those connections by identifying home literacies or adolescent literacies and introducing

them into classroom practices. Activities that use an interdisciplinary approach to the humanities, literature and media can provide a context for the meaningful construction of knowledge. Through these methods, students learn how to apply critical literacy to their own cultural reality (Schwarz, 2003).

3. *Develop critical literacy by using scaffolding techniques, inquiry pedagogy, and reading and writing activities for meaning* (Cooper, 2003; Smagorinsky, 2001; Vygostky, 2005). This inclusive curriculum will integrate traditional language skills with critical and creative thinking and include analysis, interpretation, and synthesis (Bennett, 1972; Delpit, 1995; Finn, 1999; Morris & Tchudi, 1996). Rigorous curriculum and methods that are participatory and experiential are catalysts for change. Transformed curriculum and classroom practices that are inclusive offer hope, sensitivity, and vision (Finn, 1999).

4. *Maintain optimism in the face of challenges.* Teachers can adopt a hopeful perspective towards adolescents that have been labeled delinquent youth. Because teaching is a process of continual redefinition and refinement, time will prove whether or not methods are effective (Blake, 2004). Contextualized literacy offers a space for students to reconnect with formal school and celebrate who they are.

Daily, teachers are presented with opportunities to enact justice in the classroom, counteracting inequitable education practices that have isolated and marginalized some students. Evidenced through the students’ disconnectedness from and apathy towards school, formulaic literacy methods have proven unsuccessful in educating delinquent youth. A critical literacy perspective rejects the deficit model that has characterized many of these students’ classroom experiences. By placing value on the student, it disputes the philosophy that learning is stagnant and that teachers control knowledge. Teachers concerned with equity pedagogy will consider critical literacy as an alternative way of teaching literacy and a positive option for reconnecting delinquent youth to formal school.

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## Evolution: Controversy in the Classroom

*The controversy over teaching evolution and creationism continues to impact the life science curriculum in U.S. Public Schools. Becoming familiar with the legal rulings, commonly raised concerns, and policies surrounding evolution is an important step towards confronting the topic in the classroom. For this purpose, an examination was conducted of peer-reviewed literature, current news articles, and government documents. The findings of this inquiry reveal numerous court rulings and policies in favor of teaching evolution while public sentiment tends to support the inclusion of creationism. This study suggests an awareness of the issues embedded in the controversy may support life science teachers' instruction of evolution while being sensitive to students' diverse beliefs about the topic.*

Evolution has been seen as a threat to religious views about the creation of life since it was first proposed by Darwin in 1859 (Alters & Alters, 2001). Issues surrounding the teaching of evolution, creationism, and intelligent design make the news on a frequent basis, with ongoing court battles over what should be taught and how it should be presented (Cavanagh, 2005a). Surveys of the United States' populace continue to show different opinions on what should be included in biology classrooms (CBS News, 2005). Some teachers may choose to deal with the controversy by avoiding the subject altogether, while others may face the wrath of parents and administrators by including evolution or creationism in their classes (Moore, 2002b). Regardless, all life science teachers are likely to face questions about the issue during their careers (Alters & Alters, 2001).

Challenges to teaching evolution in public schools frequently make their way to the courts. On January 19, 2005, a federal judge ordered school officials in Georgia to remove stickers from science textbooks that said evolution is "a theory, not a fact" (Cavanagh, 2005a, p. 5). Another court challenge is currently in the works in Pennsylvania over the inclusion of intelligent design in lessons on evolution. Intelligent design argues that evolution must have been guided by some cognitive being, because life is too complex to have arisen without a designer (Antolin & Herbers, 2001). As long as intelligent design and other opposing arguments continue to receive public and court attention, it is likely the debate over evolution will continue to affect school classrooms.

Public opinion polls also reflect the continuing divisiveness of evolution and creationism. A CBS News nationwide poll

conducted in November, 2004 found that the majority of United States citizens believe in creationism and think it should be taught alongside evolution. Of the 855 people interviewed, 55% responded that they believed "God created humans in present form," while 27% believe "humans evolved, God guided the process," and 13% believe "humans evolved, God did not guide the process" (CBS News, 2004). Sixty-five percent stated that they favor schools teaching creationism and evolution, and 37% felt creationism should be taught instead of evolution (CBS News, 2004). These numbers clearly indicate that evolution is likely to remain a source of controversy for the foreseeable future.

Public opinion directly affects the extent to which public school biology teachers include evolution in their classes. A study conducted by Rutledge and Mitchell in 2002 in Indiana found that 43% of the biology teachers avoid or only briefly mention evolution. A similar survey conducted by Trani (2004) in Oregon State found 16% of biology teachers do not present evolution at all. A review of studies from different states by Moore (2002b) found a similar pattern throughout the U.S., with regional variation primarily correlated with the prevalence of strong religious convictions in the area. Given the disparity in which students are exposed to information about evolution during their high school careers, it is likely the controversy over what is taught in life science classrooms will remain alive.

There are several key aspects of the evolution and creationism controversy that are important to address. In order to understand the current controversy it is helpful to examine the history of the evolution debate in the United States. It is

also useful to define commonly used terms and identify why evolution is considered to be so important to life scientists. In addition, the leading arguments against evolution and responses to those arguments deserve consideration. Examining the policy statements regarding teaching evolution in Washington State and on a national level is essential prior to teaching evolution. There are also many different views and methods for teaching evolution worthy of exploration.

To address these issues, a literature review was conducted of articles and books about the evolution controversy in the United States. Because of the vast volume of information on this subject, this review is by no means exhaustive. Peer-reviewed journal articles and books, newspaper articles, and websites from major organizations were included on the basis of their relevance and date published. The information from this literature review should provide a greater foundation for understanding and responding to the controversy over what should be taught in public schools about the history and nature of life.

## Literature Review

### Historical and Legal Context

The theory of evolution has been hotly contested since Darwin published *The Origin of Species* in 1859 (Farber, 2003). In the United States, whether or not evolution should be taught in public schools has been a frequent source of debate, as is reflected in numerous court cases and school textbooks. The first court case over the teaching of evolution occurred in 1925 with the trial *Scopes v. The State of Tennessee*. The Tennessee Supreme Court upheld the constitutionality of a law prohibiting the teaching of human evolution in a split decision despite noting it “was not drafted with as much care as could have been drafted” (as cited in Moore, Jensen & Hatch, 2003, p. 767). Teacher John Scopes’ misdemeanor conviction for teaching human evolution was later overturned, but teaching human evolution remained illegal in Tennessee until 1967.

The next major court battle over evolution was decided in 1968, when the United States Supreme Court ruled in *Epperson v. Arkansas* that a state statute prohibiting the teaching of evolution was unconstitutional because it catered to a religious doctrine, thereby violating the First Amendment and the separation of church and state (National Center for Science Education,

2001). In *Willoughby v. Stever* in 1973, William Willoughby sued the National Science Foundation director for using taxpayer money to fund pro-evolution textbooks promoting “secular humanism” as the “official religion of the United States” (as cited in Moore et al., 2003, p. 768). The lawsuit was dismissed by the DC Circuit Court of Appeals on the grounds that the textbooks disseminated scientific findings, not religion. In 1981 the Sacramento Supreme Court ruled in *Segraves v. State of California* against Segraves’ claim that class discussion of evolution prohibited his children’s free exercise of religion (National Center for Science Education, 2001). In the 1982 decision *McLean v. Arkansas Board of Education*, the U.S. Supreme Court ruled that a law in Arkansas requiring that creationism be taught along with evolution was unconstitutional because it promoted a religious doctrine (National Center for Science Education, 2001). A similar decision was reached in 1987 in *Edwards v. Aguillard*, invalidating a Louisiana act requiring equal time for teaching “creation science” (Alexander & Alexander, 2003).

The next major court decision occurred in 1990, when the Seventh Circuit Court of Appeals ruled against social studies teacher Ray Webster’s claim in *Webster v. New Lenox School District* that a prohibition against teaching creationism violated his constitutional rights (Moore et al., 2003). Similarly, in 1994, the Ninth Circuit Court of Appeals ruled in *Peloza v. Capistrano School District* that the district did not violate a teacher’s First Amendment rights by requiring him to teach evolution (National Center for Science Education, 2001). In the 1997 decision *Freiler v. Tangipahoa Parish Board of Education*, the United States District Court for the Eastern District of Louisiana rejected a policy requiring the reading of a disclaimer in biology classes prior to teaching evolution (National Center for Science Education, 2001). The court also ruled that teaching intelligent design is unconstitutional because it is equivalent to teaching creationism. In 2001 the Georgia Court of Appeals ruled in *Moeller v. Schrenko* that the statement “creationism is not a scientific theorem capable of being proven or disproven through scientific methods” in a school textbook did not violate the constitution (as cited in Moore et al., 2003, p. 768).

According to Witham (2002), the inclusion of evolution in school textbooks follows the pattern of court cases. In the early 1900s, Darwinian evolution was presented with great certainty in

public school textbooks by scientists. However, in 1925 when John Scopes was convicted in Louisiana for violating a state law against teaching evolution, many textbook writers began removing evolution, and human evolution in particular. Coverage of evolution began to increase again until the 1950s, when the Cold War era led many to equate communist atheism with evolution. As a result, coverage of evolution decreased until federally backed biology textbooks were published in 1963. Following a rise in creationist activism, evolution coverage again began to wane. In 1974, California and Texas both passed statutes limiting evolution in the state science standards. Since California and Texas represented a major share of the textbook market, publishers quickly changed the evolution sections of biology texts to meet their demands. However, as increasing pressure by the courts mounted for public schools to teach only evolution, textbooks gradually rebuilt their coverage of evolution, although often with disclaimers. By 1990 California had gradually reevaluated its science framework to read “[evolution] is an accepted scientific explanation and therefore no more controversial in scientific circles than the theories of gravitation and electron flow” (p. 155). Despite this, challenges in textbooks and the courts are ongoing in the United States.

### **What is Evolution Anyway and Why Teach it?**

In order to provide a framework for the debate between evolution and creationism, it is useful to first define some frequently used terms. According to Levine (2001), in science a theory is an explanation for an aspect of the natural world that incorporates many confirmed observations, laws, and successfully verified hypotheses. Religious beliefs are not generally regarded as theories because they are matters of faith not testable or confirmed by verifiable observations. The general public’s common definition of a theory is closer to what is referred to in science as a hypothesis, or an explanation for something that can be tested by observations, experiments, or both. A scientific fact is a natural phenomenon confirmed repeatedly by observations and a law describes how a natural phenomenon will occur under certain circumstances.

Evolution is commonly defined in the scientific community as a change in the hereditary characteristics of groups of organisms over generations (Levine, 2001; National

Academy of Science, 1998). Darwin described evolution as *descent with modification* (Levine, 2001). There are many additional definitions of evolution sometimes used (Meyer & Keas, 2003). For instance, evolution can also be defined in genetic terms as changes in the frequency of alleles (DNA patterns) in populations (Levine, 2001). In general, evolution tends to generate greater controversy the more broadly it is defined. In other words, defining evolution as the origin of all species from a single common ancestor is likely to cause a great deal more debate than defining evolution as changes in the frequency of genes or population characteristics (Meyer & Keas, 2003).

It is important to recognize the existence of both evolutionary fact and theory, and understand that the scientific definition of a theory is much more stringent than the common definition (Antolin & Herbers, 2001). That evolution occurs is generally regarded as fact; evolutionary theory describes *how* it occurs (National Academy of Sciences, 1998). Antolin and Herbers (2001) define the theory of evolution as “a series of explanations of natural forces that result in descent with modifications of living organisms” (p. 2380). Questions over exactly how evolution occurs do not diminish the evidence that it does occur (Antolin & Herbers, 2001). Natural selection is the process by which organisms best able to survive and reproduce in their environment increase in numbers over generations relative to those less suited to the environment. Artificial selection is a form of evolution resulting from humans selectively breeding animals and crops to increase desired characteristics in the offspring. Artificial selection has been employed by cultures around the world for thousands of years to produce domesticated animals and crops.

Understanding of evolution is not exclusive to Western cultures. According to Pierotti and Wildcat (1997), Native peoples in North America understood natural selection, relationships between organisms, and the importance of diversity long before the arrival of Europeans. Traditional Lakota stories describe the importance of variation and the process of natural selection:

All birds, even those of the same species are not alike, and it is the same with animals, or human beings. The reason Wakan Tanka does not make two birds, or animals, or human beings exactly alike is because each is



placed here to be an independent individual and to rely upon itself. (p. 71)

Other narrations tell of selecting corn seeds to grow from plants that varied in size and color, so that the resulting plants would also be diverse and better able to survive changes in the environment. Evolution is consistent with a creator that never stops creating, and is un-human-like in form. In addition to Native peoples, other cultures and individuals who worked closely with plants and animals may have had an understanding of evolutionary principles prior to Darwin.

In 1973, geneticist Theodosius Dobzhansky stated “nothing in biology makes sense except in the light of evolution” (p. 125). The theory of evolution unites everything in biology. It explains the amazing diversity of life, such as the existence of thousands of different species of beetles alone (Farber, 2003). According to the theory of evolution, diversity enables organisms to change and adapt to new conditions. Evolution also explains why there are organisms able to live in extremely hostile environments, and why all living organisms have genetic material in the form of DNA or RNA (Farber, 2003). In fact, the questions created by evolutionary theory led to the discovery of DNA and modern genetics (Alters & Alters, 2001).

In addition to providing a unifying framework for biology, there are many examples of why understanding evolution is important to modern life. For instance, the increasing levels of bacterial resistance to antibiotics can only be understood and addressed in light of evolution (Antolin & Herbers, 2001). Resistance to pesticides and herbicides also demonstrates evolution in action. Evolution provides an explanation for why genetic diversity in plants and animals is important to disease resistance (National Academy of Sciences, 1998). If genetic engineering is going to be used to insert a new gene into an organism such as a corn plant, it is beneficial to know how corn is evolutionarily related to other plants, so that it is not a surprise when the new gene starts popping up in surrounding weeds as a result of hybridization (Antolin & Herbers, 2001). Evolution also explains the prevalence of certain diseases, such as sickle-cell anemia. Individuals who have a single copy of the sickle-cell gene are protected against malaria, and thus sickle-cell anemia is much more common in areas where malaria is common (Alters & Alters, 2001). Many additional examples of why evolution is

relevant today can be found throughout the life sciences (Alters & Alters, 2001).

Teaching evolution can also serve as a powerful illustration for the differences between science and non-science (Wuerth, 2004). Research based on surveys of biology teachers have shown that understanding of the nature of science and evolution is highly correlated to acceptance and teaching of evolution (Rutledge & Mitchell, 2002; Trani, 2004). In other words, one of the best ways to reduce the controversy over evolution may be to ensure all students understand the evidence behind evolution and how science works.

### **Arguments Against Evolution**

Given the overwhelming consensus in the scientific community that evolution is a vital part of any science education, it is important to understand why it remains such a source of controversy in the United States. Most attacks against teaching evolution stem from Christian beliefs in creationism and in particular a literal interpretation of the bible (Alters & Alters, 2001). This is not to say that there are not individuals of other faiths who oppose the instruction of evolution; it is just that the vast majority of published research on the controversy over evolution deals specifically with Christian literal creationism. Creationism is commonly defined as the belief that all living things were created by a supernatural being (Levine, 2001). The exact beliefs of creationism vary widely (Alters & Alters, 2001). To many Christian biblical literalists, creationism means the Earth is no older than 10,000 years, was created in six days, and no new life forms have arisen since then (Levine, 2001). All fossils were formed when a single flood trapped organisms in layers of rock (Antolin & Herbers, 2001).

Religious individuals do not necessarily reject evolution; there are both religious evolutionary biologists and many religious leaders, including the late Pope John Paul II, who acknowledge the validity of evolution while maintaining their religious beliefs (Alters & Alters, 2001). As Stephen Jay Gould (2001) stated:

Creationism vs. evolution cannot be equated with religion vs. science. First of all, religion and science do not and cannot stand in genuine opposition, for each vital endeavor treats a different aspect of our complex existence (science as an enterprise devoted to discovering the factual character of nature;

religion as a source of moral discussion, and a focus in our search to understand the meaning and purpose of our lives). (p. 3)

There are many different questions teachers and scientists are likely to hear from those with doubts about evolution. One of the leading arguments against the theory of evolution is that a theory is just a guess (Alters & Alters, 2001). A disclaimer in Georgia textbooks that a judge recently ordered removed played on this by saying evolution is “a theory, not a fact” (Cavanagh, 2005a, p. 1). In science, theory is reserved for explanations about nature that have withstood multiple tests (Antolin & Herbers, 2001).

According to Alters and Alters (2001), another popular argument against evolution is that there are numerous *missing links* in the fossil record. This perception is based primarily from quotes from paleontologists taken out of context and is used to argue that evolution cannot explain the formation of new species. Inquiry based learning activities where students are encouraged to come up with their own explanation for the fossil record can be useful in helping to dispel this perception. New fossils are constantly being found that fill in gaps between species. Also, the absence of fossils does not prove that organisms did not exist.

A similar issue often found with evolution is related to one method of managing the conflict between evolution and faith (Alters & Alters, 2001). Changes within species may be viewed as acceptable and provable, but the idea of one species changing into another is not. In addition, the argument often runs that no one has actually directly observed any animal changing species, or has been able to conduct an experiment showing it can happen. However, from a scientific view point, changes *within* a species lead to changes *of* species. As DeSilva (2004) explains, species’ distinctions are often subjective especially when dealing with the fossil record. Also, entire branches of science, such as astronomy, do not have experimental evidence but are based on facts gained through observation (Antolin & Herbers, 2001).

As described by Antolin and Herbers (2001) and Alters and Alters (2001), another significant argument against evolution that has gained prominence in recent years is intelligent design. Although it is portrayed as being a new theory based on advances in biochemistry, the idea that life is too complex to have arisen without a designer or God has been argued since Darwin’s

time. William Paley argued that the complexity in nature is proof of God’s existence in the early 1800s. Modern day proponents of intelligent design continue this line of reasoning by saying that structures such as flagella and biochemical pathways could not have arisen through Darwinian selection because the intermediates (or transitional structures) would not be functional. However, there is evidence that traits often evolve with other original purposes; for example, feathers evolved first for temperature control not flight. Also, the fact that there have been so many species extinctions is inconsistent with the idea of an intelligent designer guiding evolution to a desired end point. Another argument against intelligent design is made by some theologians, who describe this as a *God in the gaps* theory. If the evidence for God can only be found in what science does not understand, than any time a new scientific discovery is made God’s power diminishes. Furthermore, many theologians argue that a belief in God should be a matter of faith that does not depend on evidence or a lack of it.

In 2001, the Louisiana State Legislature attempted to pass a resolution rejecting evolution on the basis that it was racist (Good, 2003). The argument was that since Hitler and others used the idea of *survival of the fittest* to justify mass murder and eugenics, evolution promoted racism (Antolin & Herbers, 2001). The strongest counter argument to this is simply “the misuse of scientific knowledge has nothing to do with its validity” (Good, 2003, p. 514). Ironically, racist groups like the Ku Klux Klan have also adamantly opposed teaching evolution in schools (Moore, 2002a). In addition, recent research in human evolution and genetics has done a great deal to undermine racism by showing that biologically speaking, there is no such thing as distinct human races (Good, 2003; Moore, 2002a).

Another major argument often made by creationists and the general public is that teaching creationism alongside evolution is only fair. There are several responses to this, as described by Antolin and Herbers (2001) and Alters and Alters (2001). First of all, someone would have to decide which version of creationism to teach. There are numerous interpretations and variations in different sects of Christianity, and many more different creationism stories in other religions. Teaching them all fairly would be almost impossible, especially given the limited amount of time to teach the current curriculum. Another

counterargument is that it is only fair to teach scientific theories supported by evidence. In addition, the courts have ruled that teaching creationism or intelligent design is unconstitutional because it is equivalent to promoting a religious concept.

### **Current Policies and Statements**

Many professional scientific organizations support teaching evolution (Alters & Alters, 2001). The National Association of Biology Teachers (2004) asserts in its statement on teaching evolution that evolution coverage should be woven throughout biology courses and that is not the role of science or science education to contrast religion with science. Biology teachers are encouraged to incorporate evolution throughout their lessons as a unifying theme of biology, and discouraged from presenting creationism or other religious viewpoints as part of their lesson. At the same time, *teachers should respect the diverse beliefs* of their students and recognize it is possible to be religious and still accept evolution.

Although the federal No Child Left Behind Act makes no mention of teaching evolution, it does call for public school educators to only use *scientifically based research* (Cavanagh, 2005b). However, according to Cavanagh (2005b) this standard is not meant to address the teaching of evolution, creationism or intelligent design. Instead, the standard is designed to determine whether specific educational programs are effective through scientifically based research.

The newly published Science K-10 Grade Level Expectations (GLEs) from the Washington State Office of Superintendent of Public Instruction (2005) include biological evolution as a learning requirement for students (see Table 1). The fifth, seventh, and tenth grade level expectations are eligible for inclusion on the Washington State Assessment of Student Learning (WASL), which students will eventually have to pass to graduate from high school (Bergeson, Heuschel, Lahmann, Hardy, & Wuersten, 2005). Although these grade level expectations clearly indicate that evolution is recognized as an important part of science in Washington State, they can be criticized for not mentioning human evolution or the role of evolution as a unifying theory of biology (Beardsley, 2004).

### **Teaching Approaches and Techniques**

There are many different views on how evolution should be taught, and whether any

discussion of creationism should be included. The courts have ruled numerous times that it is unconstitutional for a teacher to actually teach creationism or intelligent design, but there are still varying viewpoints on how much teachers should acknowledge or discuss the controversy. Good (2003) advocates that the ways in which religion has historically influenced the development of evolutionary theory should be included in any discussion of evolution, because “understanding how scientific ideas are developed is just as important in science education as understanding the idea itself” (p. 516). Farber (2003) suggests that teachers convey to students that religion and evolution were not necessarily exclusive in Darwin’s time and are still not today, for it is possible to have a strong belief in faith and evolution at the same time. Based on interviews with seventeen conservative Christians who were also scientists, Meadows, Doster and Jackson (2000) conclude that managing the conflict between religion and evolution is a personal process that varies greatly. Teachers should attempt to understand how their students make sense of the conflict, rather than telling them there is only one correct way. The National Academy of Sciences (1998) advises: “Students are not under a compulsion to accept evolution,” however “if a child does not understand the basic ideas of evolution, a grade could and should reflect that lack of understanding, because it is quite possible to comprehend things that are not believed” (p. 59).

There are also many different approaches teachers can take to teach evolution itself. Wuerth (2004) advocates introducing any lesson on evolution with a discussion of scientific process and the differences between scientific theories, hypotheses, laws, and facts, since there tends to be a great deal of student misconceptions around these terms. DeSilva (2004) concludes that human evolution can be used as an excellent example for why scientists often disagree and how science is driven by questions, not answers. Teachers should encourage students to understand why scientists come to the conclusions they do about evolutionary relationships based on the fossil record, why there are often disagreements, and why relationships and the names of fossils are subject to change. Students can be given pictures or casts of fossils to examine so that they can make their own evolutionary trees, and compare them to those hypothesized by researchers. Farber (2003) also argues that evolution should be presented in terms of the many questions it

Table 1: GLE 1.3.9 Biological Evolution

Grade Level	Expectations
2 <sup>nd</sup> Grade	<p>Know that fossils show how organisms looked long ago.</p> <ul style="list-style-type: none"> <li>Observe and record how fossils are similar to living organisms (e.g., leaves, shells).</li> </ul>
5 <sup>th</sup> Grade Eligible for inclusion on the WASL.	<p>Understand that plant and animal species change over time.</p> <ul style="list-style-type: none"> <li>Recognize and tell how some kinds of plants and animals survive well, some survive less well, and some cannot survive at all in particular environments, and provide examples.</li> <li>Recognize and describe how individual plants and animals of the same kind differ in their characteristics and sometimes the differences give individuals an advantage in surviving and reproducing.</li> <li>Demonstrate or describe that fossils can be compared to one another and to living organisms according to their similarities and differences (i.e., some organisms that lived long ago are similar to existing organisms, but some are quite different).</li> </ul>
7 <sup>th</sup> Grade Eligible for inclusion on the WASL.	<p>Understand how the theory of biological evolution accounts for species diversity, adaptation, natural selection, extinction, and change in species over time.</p> <ul style="list-style-type: none"> <li>Describe how fossils show that extinction is common and that most organisms that lived long ago have become extinct</li> <li>Describe how individual organisms with certain traits are more likely than others to survive and have offspring (i.e., natural selection, adaptation).</li> <li>Describe how biological evolution accounts for the diversity of species developed through gradual processes over many generations.</li> </ul>
10 <sup>th</sup> Grade Eligible for inclusion on the WASL.	<p>Analyze the scientific evidence used to develop the theory of biological evolution and the concepts of natural selection, speciation, adaptation, and biological diversity.</p> <ul style="list-style-type: none"> <li>Describe the factors that drive natural selection (i.e., overproduction of offspring, genetic variability of offspring, finite supply of resources, competition for resources, and differential survival).</li> <li>Explain how natural selection and adaptation lead to organisms well suited for survival in particular environments.</li> <li>Examine or characterize the degree of evolutionary relationships between organisms based on biochemical, genetic, anatomical, or fossil record similarities and differences.</li> </ul>

Note: Adapted from *Science K-10 grade level expectations: A new level of specificity* (pp. 36-37), by Bergeson et al., 2005, Olympia, WA, Office of the Superintendent of Public Instruction

answers, rather than by listing all the evidence that supports it. For example, a lesson on evolution can be started with a discussion of

what questions made Darwin come to the conclusions he did, what problems his theory solved, and what new questions it raised.

Alters and Alters (2001) recommend doing an initial assessment of student understanding and misconceptions before starting a unit on evolution. For example, the students could be asked to write short answers for questions like: “Cheetahs (large African cats) are able to run faster than 60 miles per hour when chasing prey. How would a biologist explain *how* the ability to run fast evolved in cheetahs, assuming their ancestors could only run 20 miles per hour?” (p. 181). Once teachers are aware of students’ misconceptions, they can have students explore the evidence and historical background for current evolutionary theory. A common source of confusion is students reasoning that “individuals can change their characteristics during their lifetime *and that this acquired change is passed genetically on*” (p. 184). Students can examine this assumption in a variety of ways. For instance, they could consider an analogy between the cheetahs and a track team. If a track team needed to run faster, would they be able to do it as a result of increased training or coaching? Would their future children automatically be able to run faster as a result of their parents training? Alternatively, they could explore the history of how scientific thought progressed from how animals passed on changes acquired during their lifetime to an understanding that differences in genes allowed some animals to survive or reproduce more. A discussion of the difference between inherited and acquired traits would also be helpful.

Alters and Alters (2001) also advocate applying Howard Gardner’s multiple intelligences theory to evolution to engage all students. For instance, stories about Darwin’s voyages can be told for students who enjoy learning through narrations. Quantitative/numerical learning can be used in an activity tracking how the numbers of organisms with particular characteristics changes with time as a result of environmental pressure. Students can be encouraged to think deductively about natural selection to engage logical thinkers. Breeding fruit flies or growing bacteria on selective media can give students a hands-on way of exploring evolution. Students can also work in groups to evaluate the impact climate change might have on different species. Role playing can be used to explore how different animals or individual people can survive better in certain environments.

## Conclusions

Despite public resistance to evolution, the courts have consistently ruled in favor of teaching evolution and not creationism in public school biology classrooms. In every case since the Scopes Trial in 1925, it has been ruled that teaching creationism is equivalent to promoting a religious doctrine. Including intelligent design as an alternative theory to evolution has also been found by the courts to be equivalent to promoting religion, because intelligent design is ultimately based off of the idea that life must be created by a higher power. In addition, the courts have ruled that evolution is a scientific theory and not a religion, and that it does not violate either students or teachers religious rights to be required to discuss evolution. These findings indicate that public school biology teachers have a legal obligation to teach only scientific findings in their classroom, including evolution and excluding creationism and intelligent design. Since the court decisions regarding evolution directly effect what biology teachers can and should teach, they should be aware of them both for their own knowledge and to defend their teaching to questioners.

Part of the controversy over evolution arises from misconceptions about scientific theory. Scientific theory is an explanation of a natural phenomenon well-substantiated by numerous observations. Evolutionary theory is not just a guess about how life arose; it is an explanation of how life has changed over time based on an extensive fossil record and current observations of the characteristics of organisms changing over generations. Native peoples in the United States have long had an understanding of the importance of individual variation and evolutionary principles, and it seems likely that other cultures and individuals may have also understood evolution prior to Charles Darwin. Evolutionary theory offers a profound ability to explain the diversity of life and why this diversity is important. In addition, the theory of evolution has led to the discovery of genetics and has important implications for modern life and our interactions with other organisms.

Although evolution is often seen as conflicting with religious beliefs, this does not necessarily have to be the case. It is possible to respect and maintain one’s religious beliefs and understand the principles of evolution. Many evolutionary biologists are religious and many religious individuals acknowledge the validity of evolution. Religion and science may be understood as two different ways of

understanding the world, one based on faith, morality and the meaning of life, and the other based on factual observations. The process of reconciling conflict between evolution and creationism beliefs can vary greatly between different faiths and individuals.

A more thorough understanding of evolutionary theory, how science works, and the differences between religion and science can help alleviate many challenges and questions about evolution. Because a common misunderstanding about evolutionary theory is that it is just a guess, providing education about the scientific definition of a theory can help. Closer examination of the fossil record can reveal that many of the so-called “missing links” have actually been found. Concerns that evolution cannot explain the formation of new species may be reduced by examining what constitutes a species and how they are identified. Although intelligent design has received a lot of attention recently because it can often sound quite scientific, it is based off of the argument used since Darwin’s time that the complexity of life is proof of God’s existence. Contesting that teaching creationism with evolution is only fair ignores the problem of selecting which version of creationism to teach, in addition to violating the separation of church and state.

The National Association of Biology Teachers and many other professional scientific organizations support the teaching of evolution in biology courses. Specifically, it is advocated that evolution is integrated throughout a life science class and that any discussion of creationism or religion be left to a theology or philosophy class. Federal guidelines for public education, such as The No Child Left Behind Act, do not mandate whether or not evolution should be taught in public schools. Instead, guidelines for science curriculum are generally set at the state level and vary greatly. In Washington state, evolution is expected to be taught and may be included in the Washington State Assessment of Student Learning in fifth, seventh and tenth grade.

Given the ongoing controversy over teaching evolution in public schools in the United States, it is crucial that all life science teachers have a basic understanding of the issues involved. By knowing what the courts have said about evolution, teachers can prepare themselves to respond to the controversy in an appropriate manner. Ensuring that all teachers and students have a basic grasp of the nature of science, evolution, and why evolution is important may

serve to diffuse much of the conflict. Since the Grade Level Expectations for science in Washington State include evolution at the second, fifth, seventh and tenth grade levels, this information is relevant not only to high school biology teachers, but also to middle school science teachers and elementary school teachers. Hopefully, by understanding all the issues and arguments surrounding evolution and creationism, teachers can integrate evolution into their curriculum in a confident and respectful manner.

### **Recommendations for Practice**

Based on numerous court rulings and Washington State guidelines, life science teachers have a legal obligation to teach evolution in their classrooms. The courts have consistently ruled that teaching creationism or religion in a science classroom violates the first amendment by promoting a religious doctrine. Thus, all life science teachers should have a firm grasp of the principles of evolution and be prepared to teach it in their classroom. While it is important that students learn about evolution and how science works, teachers should also respect students’ religious beliefs. It may be possible to acknowledge or encourage students to discuss the controversy and explain that religion and science can coexist as two different ways of interpreting the world. Teachers can relate to their students that they are not asking them to give up their religious beliefs, only understand the science.

Evolution can be taught in many different ways. At the start of any science class, clarifying the definitions of basic terms such as theory, hypothesis, law, and fact can help dispel many common misconceptions students may have. Evolution can be used as a way to explore the nature of science, with students encouraged to make their own conclusions based on the questions and observations that have led to the theory of evolution. By analyzing fossil records or other data students can be encouraged to develop evolutionary theory for themselves. Different activities utilizing multiple intelligences, such as role playing, hands-on labs, and numerical calculations of population changes, can be used to encourage all students to understand evolutionary principles. Integrating evolution throughout a life science curriculum can help to emphasize its importance and relevance.

There are many different resources available for teachers planning a lesson in evolution. A

great starting place is the PBS series *Evolution*, which consists of seven videos covering a range of topics, from Darwin to the evidence for evolution and the religious controversy (WGBH Educational Foundation & Clear Blue Sky Productions, 2001). The website for the evolution series located at <http://www.pbs.org/wgbh/evolution/> has online lessons on evolution designed for students and teachers and an extensive list of additional resource links. There are many books available for a variety of age groups, including the Eyewitness Book *Evolution* by Linda Gamlin (2000) and *Our Family Tree: An Evolution Story* by Lisa Westberg Peters (2003). Additional resources can be found in the reference list. By becoming familiar with the legal precedent, important scientific and religious issues, national and state policies, and possible teaching methods, teachers can respectfully convey the principles of evolution to all students.

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## The Case for Serving Organic Foods in School Cafeterias

*This paper examines the National School Lunch Program (NSLP) and the options that it includes for providing healthy, nutritious meals. The history of the NSLP is investigated from its prehistory to its most recent amendments. Examined are the detriments of consuming conventionally grown food and the benefits of consuming organically grown food. Reviewed are case studies of schools that successfully implement farm-to-school lunch programs. Recommendations are made on ways in which schools can learn from these programs to make changes in their own lunch services. This paper finds that the NSLP is moving in the right direction with its work toward offering healthier meals, but that there is much room for improvement.*

Schools are responsible not only for the learning that goes on within a student, but also for the health of students while they are in school. Schools have enormous power to shape and influence the many choices students will make in their lifetimes. What children eat at school will undoubtedly affect the nutritional choices they and their parents make outside of school. In this paper, I examine (a) the current challenges in providing healthy options in school cafeterias, (b) the ways in which the conventionally grown food that is served in food cafeterias can contribute negatively to the health of students, and (c) options schools have to provide their students with alternative choices.

The federal government oversees the National School Lunch Program (NSLP), a federal program that serves lunch, breakfast, and snacks to school-children all over the United States. Due to the recent epidemic of overweight children (Strauss & Pollack, 2001) and dramatic increase in Type II diabetes in children, there has been an increased focus on serving nutritionally sound meals via the far-reaching food program (General Accounting Office, 2004).

Habits learned in childhood carry on throughout life (Examine nutrition issues, 2001). Children who are familiar with certain foods through repeated exposure are more likely to prefer these foods (Birch, 1987). Studies show that the presence of children in the household affects household food buying habits (Fine, Heasman, & Wright, 1996). Thus, if schools serve healthy foods to children, there is hope that these healthy habits will transfer to children's food choices at home.

Much attention has focused upon the nutritional value of the food served via the NSLP (General Accounting Office, 2003; Salisbury,

2004; USDA, 1999) and the negative impact that the sale of competitive foods, or any foods that are served at school but not under the auspices of the NSLP, has on students' nutritional intake (Cullen & Zakeri, 2004; General Accounting Office, 2004; Lin & Ralston, 2003; Salisbury, 2004; USDA, 2001). While an effort to serve healthier food is certainly needed, there is no published evidence that the NSLP has considered the next important step in putting the health of students at the forefront: serving organic foods. This is despite the evidence that points to the link of exposure to widely used organophosphorous pesticides to a variety of health problems. These health impacts include (a) shorter gestation lengths for human fetuses of mothers exposed to organophosphorous pesticides (Eskenazi et al., 2004), (b) deficits in cognitive functioning after acute exposure to organophosphorous pesticides (Kamel & Hoppin, 2004), and (c) association of birth defects and various types of cancer with pesticide exposure (Eskenazi, Bradman, & Castorina, 1999). These studies suggest the need for further research on the possible effect of long-term, low-level dietary pesticide exposure on children's health.

Schools that serve organic food to their students can have opportunities for critical thinking exercises connected to the food that children eat. Teachers can connect classroom lessons to the food that students eat in the cafeteria. Teachers can incorporate into a curriculum information that encourages students to think critically about how the food they eat impacts the environment, global warming, animal rights issues, and the proliferation of genetically engineered crops (Horrihan, Lawrence, & Walker, 2002). Resources and programs exist that are available to schools that

are interested in implementing farm-to-school organic food programs in their schools (Azuma & Fisher, 2001; Center for Ecoliteracy, 2004; Sanger & Zenz, 2004; USDA, 2000). These resources provide ideas on how to work with parents, school administrators, students, and farmers to bring healthy, locally grown, organic food to schools in Washington and throughout the U.S.

This paper provides background information on the history of the National School Lunch Program, from the mid-1800s, when the idea of serving lunch to students in school first came to fruition, until the present day when it is generally taken for granted that students are served lunch in schools. Schools are now grappling with concerns about the nutritional value of the food being served. This paper then examines the potential problems associated with consumption of pesticide-laden food, and the nutritional benefits of eating foods grown organically. Finally, this paper points to examples of other schools who have successfully reformed their school lunch programs.

#### **History Prior to National School Lunch Program**

The first school lunch programs in the United States were administered by non-profit organizations. The Children's Aid Society in New York began serving lunch to students in a vocational school as far back as 1853. About 40 years later, the Starr Center Association began serving penny lunches in several schools in Boston. The management of Boston's program transferred to the school board in 1909. Before 1915, when lunchrooms were installed in most of Cleveland's schools, lunches were served by lunch wagons, area stores, or were catered in baskets. In Milwaukee, school lunch services began in 1904 as an initiative of the Women's School Alliance of Wisconsin. Their program focused on poorer areas where both parents were often required to work. Homes were empty during the day so children in these areas could not go home for lunch. In Milwaukee's program, women prepared the meals in their own homes and then brought them to school for children. Eventually lunches were prepared and served at participating schools. Students that were able to pay were charged a penny and those who were not were given their meal for free. This program never caught on throughout the district; the board contended that this would encourage parents to shirk their child-rearing responsibilities (Gunderson, 1971).

In rural schools, too, there was a shift away from requirements that students bring lunches from home. In some cases, the students would bring vegetables and then the class would together prepare a soup to serve for lunch. In 1914, one school in Florida began its experimentation with providing for children's nutrition by placing a large white cow in the playground to provide daily milk for each child. This program was so successful that the school began providing soup to go with the milk (Gunderson, 1971).

It was generally agreed upon that school lunches should be wholesome and nutritious. In the early 1900s, the nutritional value of food was determined by the weight of the children eating it. In light of these methods, New York kept measures of the height and weight of 143 children who participated in the school lunch program, and 81 children who did not. Evidence showing that the majority of the children who participated in the program gained more weight than most of the children who did not was considered proof that the program was serving nutritionally sound food (Gunderson, 1971).

School lunch programs continued to expand in the 1920s and took on a sense of urgency during the 1930s. During the depression, many children could not get their nutritional needs met at home. In response to this need, 15 states authorized school boards to take on the responsibility of running lunchrooms (Gunderson, 1971).

With the depression came severe hardships for many people. Agricultural surpluses resulted in a drop in prices so farmers received meager earnings for their work. At the same time, child malnourishment became a huge concern as millions of school children could not afford to pay for school lunches and their families could not afford to supply nutritious food at home. In 1936 the federal government stepped in with a law that mandated the use of customs revenues for purchasing agricultural commodities for use both within the United States and as exports. It made sense to distribute some of this surplus food to school lunch programs. By 1939 there were 14,075 schools receiving commodities to serve 892,259 children. During the 1941-1942 school year, 454 million pounds of food were distributed through this program. Farmers provided soldiers with food during World War II so agricultural surpluses became virtually nonexistent. This meant that this food was no longer available to students through the school lunch program (Gunderson, 1971).

### **The Early Decades of the National School Lunch Program, 1940s-1970s**

In 1943 the federal government enacted a law assuring schools financial support to purchase food for the school lunch programs (Gunderson, 1971). Since there was no long term plan in place and Congress annually renewed its commitment to fund the school lunch program, schools were not encouraged to make costly investments in equipment or modify their buildings to include lunchrooms. It was recognized that a stable school lunch program independent of agricultural surpluses was needed. To make federal contributions to the school lunch program permanent, Congress passed legislation known as the National School Lunch Act in 1946 (Gunderson, 1971). Concurrently, the National Advisory Council on Child Nutrition was established, with all 13 members appointed by the Secretary of Agriculture (Salisbury, 2004). Schools participating in the National School Lunch Program (NSLP) had to adhere to some guidelines: meals needed to meet nutritional requirements, children needed to be served without discrimination regardless of their ability to pay, and the program needed to be non-profit, utilize commodities, and maintain records of expenses (Gunderson, 1971).

The NSLP was amended several times. In 1962 the distribution of money was changed to be dependent on participation in the program as well as the per capita income of the state. The federal government was also to provide cash reimbursement for meals served to low-income students at reduced or no-cost (Gunderson, 1971). With the passage of the Child Nutrition Act of 1966, the government's role in food-provision in schools was expanded. This expansion was based in part on the previous success of the school lunch program and in part on the government's recognition of the connection between good nutrition and child development and learning (Gunderson, 1971). Also in 1966, the School Breakfast Program was established to provide early morning meals to "nutritionally needy" children. This program was fully authorized and given more permanent status in 1975 (USDA, 2004d). The Summer Food Service Program began as a pilot program in 1968. This program provided food to children who lived in low-income areas during the summer months when school was not in session. Like the School Breakfast Program, this program was authorized on a more permanent basis in 1975 (USDA, 2004e). Like the food served

through the NSLP, the food served via these new programs was also required to meet nutritional standards (Gunderson, 1971).

The Food and Nutrition Service (FNS) was created in 1969 as a sub-agency of the USDA that, among other responsibilities, administered the NSLP. The FNS was created amid concerns that the children who were most in need of nutritional assistance were the least likely to be served. In low-income urban and rural areas lack of participation in the NSLP was often based on a lack of facilities. Because school buildings often had been built before school lunch programs were commonly operated within schools, there was no space for food preparation or consumption. There was often an assumption that children would go home for lunch. Other reasons for lack of participation included the contention of authorities that providing food was not the school's responsibility, along with the assertion that the school lunch program must be self-supporting (Gunderson, 1971).

### **Foods Sold in Competition with the NSLP**

The USDA defines *competitive foods* broadly as any food that is available in a school with the exception of food served through the NSLP. Competitive foods are generally available in a la carte lines, vending machines, school stores, canteens, or snack bars (General Accounting Office, 2004). Competitive foods do not have to adhere to nutritional requirements (USDA, 2001). The USDA discriminates between foods of minimal nutritional value (FMNV) and other competitive foods. FMNV include carbonated beverages, chewing gum, hard candy, jellies and gums, marshmallow candies, fondant, licorice, spun candy, and candy-coated popcorn (General Accounting Office, 2004). While federal regulations do prohibit the sale of FMNV in food service areas during lunch periods, they do not control their sale at other times in other areas of the school (USDA, 2001).

Throughout the 1970s there was a series of legislation passed by Congress in regard to the sale of competitive foods in school. The Secretary of Agriculture prohibited the sale of extra food items at the same time and location as non-profit food items. The schools resisted this ruling as they gained financially with the sale of these for-profit products. The Secretary's ruling that certain products such as chewing gum, soda, and some candy could not be sold on school grounds while school was in session was challenged in court by soft drink companies. The soft drink companies involved in the suit

asserted that the prohibition of the sale of soft drinks during school hours was not a power granted to the Secretary of Agriculture. The court sided with Secretary of Agriculture by stating that this regulation was neither erratic nor compulsive. The court's decision was overturned in appeal when a federal district court determined that this regulation was outside of the scope of the Secretary of Agriculture's authority (Salisbury, 2004).

In a USDA report presented to Congress in 2001 in which the agency was asked to evaluate the competitive foods sold in schools, numerous concerns were cited. The USDA stated that students who participated in the NSLP consumed higher levels of nutrients, whereas many of the competitive foods served were low in nutrient density and high in fat, added sugars, and calories. The USDA found that the sale of competitive foods in schools can stigmatize the participation in the non-profit NSLP and adversely affects the rate of student participation in the NSLP. The USDA also voiced concerns that the sale of unhealthy foods would convey mixed messages in regards to the importance of nutrition (USDA, 2001). Recent research shows that when students moved from schools in which they only have access to the NSLP to schools where they have access to a snack bar in addition to the NSLP, their consumption of fat and sugar increased (Cullen & Zakeri, 2004).

In light of concerns about the nutritional value of competitive foods served in school cafeterias, 23 states have passed stricter regulations regarding the sale of these foods (General Accounting Office, 2004). The State of Washington passed a law in 2004 dealing with the sale of competitive foods in school cafeterias. The law requires that a committee of school directors develop a policy that addresses "the nutritional content of foods and beverages...sold or provided throughout the school day or sold in competition with the federal school breakfast and lunch program" (Senate Bill 5346, 2004). The policy put forth by the Washington State School Directors' Association (2005, para. 6) suggests that foods of minimal nutritional value "should not be sold or served in schools until at least 30 minutes after the end of the last lunch period." The policy also suggests that vending machines be stocked with only healthy foods and beverages (Washington State School Directors' Association, 2005). School districts have until August 1, 2005, to establish their own policy (Senate Bill 5346, 2004, sec. 2, para.1).

Policies like these are necessary because it is likely that students do not have the knowledge to make informed food choices. Studies show that the amount and type of nutrition education provided in schools has an effect on student's meal choices (General Accounting Office, 2003). Representatives from the General Accounting Office (2003) interviewed school officials in 22 schools representing 13 school districts. They found that none of the schools that they investigated allocated much time to nutrition studies. Schools generally taught nutrition education as part of an elective consumer studies course or a health class where the topic received little attention. Teachers and principals pointed to the focus on meeting state standards as a reason that nutrition education cannot be thoroughly discussed in classrooms. One school official said, "If you want to see it taught, get it on the test" (p. 17).

School officials interviewed by representatives of the General Accounting Office (2003) cited financial issues as another variable restricting the regulation of competitive foods. Revenue generated by the sale of competitive foods is used to fund some school programs (General Accounting Office, 2004). The school administrators and school food authorities who were interviewed cited financial issues and time constraints as the main influences on whether schools encourage students to choose healthy lunch options (General Accounting Office, 2003).

There is a recent trend for school districts to negotiate contracts with individual soft drink companies. Contracts often entitle the companies to sell only their brand of soft drink. These can be financially lucrative agreements for schools and have the effect of discouraging schools from attempting to minimize the sale of these unhealthy beverages (USDA, 2001).

### **Recent Changes to the National School Lunch Program**

The USDA has made many improvements to the NSLP in recent years. In 1995 the USDA commenced its School Meal Initiative for Healthy Children (SMI) program. This program's goal was to increase the nutritional quality of foods served in the NSLP and the School Breakfast Program. Under the direction of SMI, the NSLP meals were to provide a third of the recommended daily allowance for protein, calcium, vitamin A, iron, and vitamin C. Further, school meals served under the NSLP must also reduce the level of cholesterol, salt and sodium,

while increasing the levels of dietary fiber. Further, school meals must meet the *Recommended Dietary Guidelines* for the amount of saturated and total fat allowed in meals (USDA, 2001).

The momentum necessary to launch SMI was provided by events that occurred in the 1990s. A report released in 1993 showed that meals served through the NSLP contained higher than recommended levels of sodium and fat (USDA, 2001). The *Recommended Dietary Guidelines*, which are updated every 5 years as a joint venture of the USDA and the U.S. Department of Health and Human Services (USDA, 2005), recommended limiting fat and sodium consumption (USDA, 2001). A national health program, Healthy People 2000, was initiated in the 1990s and encouraged child nutrition programs in schools. The USDA felt that it was contradictory to serve unhealthy foods in schools while promoting good nutrition in the classroom (USDA, 2001).

The National School Lunch Program served over 29 million children in 2003 (USDA, 2004a). More than 4.7 billion meals were served under the auspices of the program in 2003 (USDA, 2004b). Because so many students depend on the NSLP, it is imperative that the meals meet strict nutritional guidelines. In 1995, under SMI, Congress provided funds to establish Team Nutrition to help schools to meet new nutrition goals. Team Nutrition works toward this goal. The program compiles and disseminates information regarding nutrition and nutrition education. The program also emphasizes viewing “the dining room as a learning center” (Team Nutrition, n.d., p. 5). Through Team Nutrition, partnerships are developed with other federal, state, and local entities to work on these issues (Team Nutrition, n.d.).

Findings from a General Accounting Office (2003) report to Congress indicated that schools have made considerable improvements in serving healthy, nutritious, low-fat meals to students through the NSLP, but more progress was needed. There is some concern that the NSLP cannot offer high quality nutritious meals due to lack of funding. The American School Food Service Association believes that the USDA should increase funding of the NSLP if the government wants to see more nutritious meals served (Salisbury, 2004). Presently, the USDA reimburses a school \$2.24 for a free lunch, \$1.84 for a reduced-price lunch, and \$0.21 for all lunches (USDA, 2004c).

The most recent amendments to the NSLP included guidelines specifying a program to make fresh fruit and vegetables available to students free of charge. The Secretary of Agriculture expanded a program that makes fresh fruits and vegetables available to 75 schools and three Indian reservations that were authorized to participate. The amendments also expand a section of the law in regards to access to local foods and school gardens. The Secretary can provide grants and technical assistance to schools and nonprofit agencies to “improve access to local foods in schools and institutions...through farm-to-cafeteria activities, including school gardens” (Amendments to NSLP, 2004). This program requires participating schools to get foods from small or medium-sized farms and to include nutrition education in the form of “participation of school-children in farm-based agricultural education activities, that may include school gardens” (Amendments to NSLP, 2004). There are provisions for a sustained commitment to this program and encouragement for a linkage between schools, farmers, state departments of agriculture, parents, and other members of the community (Amendments to NSLP, 2004).

### **Consumption of Pesticide-Laden Food**

Although there has been much attention paid to the positive outcomes of offering nutritional school lunches on children’s health, there has been no formal attention paid to the possible negative impact on children’s health associated with eating foods treated with pesticides. A pesticide is defined as any chemical “intended for preventing, destroying, repelling, or mitigating any pest,” or any substance that is intended to destroy plants (Federal Insecticide, Fungicide, and Rodenticide Act, 1996). Pesticides include herbicides, insecticides, and fungicides. Pesticides are present in people’s immediate environment to varying degrees. They may be found in homes, lawns, parks, schools, playgrounds, water, gardens, and foods. Pesticides are used to reduce or eliminate human’s contact with and competition with organisms they consider to be pests (Weiss, Amler, & Amler, 2004).

Farms in the U.S. use between 770 and 944 million pounds of pesticides annually (Weiss et al., 2004; Worthington, 2001). The potential for indirect human harm as a result of pesticide use, however, has not been thoroughly studied, including the pesticides most commonly used on food crops. The lack of evidence has not stopped

farmers from using pesticides on their crops (Weiss et al., 2004).

Children as a population have special characteristics that may make them especially at risk of harm from pesticide exposure. Children have a higher intake of air, water, and food related to their weight than adults do. They also have a larger skin surface area related to body weight than do adults (Wigle, 2003). Because children's organs are still in the process of growing, damage to them can result in permanent physical impediment to development (National Research Council, 1993). Children manifest abilities that are clearly not as developed as those of adults. Children's internal systems are also not fully developed. Kidney function, for example, varies with age. Children's developing kidneys are not fully able to perform their body detoxification function. Behavioral development is dependent on internal system development. Some abnormal internal development may be manifested outwardly. Human growth is at its highest rate during infancy and puberty. The body is believed to be more susceptible to toxicants during these times (National Research Council, 1993). In addition, the association of certain types of cancers with pesticide exposure is stronger in children than in adults (Wigle, 2003).

There are many different ways in which children in particular come into contact with pesticides. This section of the paper focuses on ways in which children take in pesticides through the food they eat. This paper will examine the widely used organophosphate (OP) group of pesticides. OPs are insecticides. Insecticides generally work by impairing the function of the nervous system. OPs, which account for about half of the insecticides used in the U.S., work by interfering with neurotransmission (Weiss et al., 2004). These OPs are far less persistent in the environment than the organochlorides that they replaced (Wigle, 2003). Some well-known organochlorides are DDT, Dieldrin, Heptachlor, and chlordane. It bears mention that although the use of persistent organochloride pesticides is presently prohibited in the United States, many commonly eaten foods in the United States are contaminated by these same pesticides. These pesticides are so persistent that although they have been banned in the United States for decades, they still exist in some soils. Also, these organochloride pesticides are used to grow crops in other countries that import their produce to the United States (Schafer, Kegley, & Patton, 2001).

The Children's Health Act of 2000 created the National Children's Study that is a longitudinal study on the effects of environmental roles in children's health and development. This study identified non-persistent pesticides and included OPs as a group to be studied (Wessels, Barr, & Mendola, 2003).

There have been some studies completed in regards to children's exposure to pesticides through the ingestion of foods that have been treated with pesticides. The National Research Council's (1993) influential study, *Pesticides in the Diets of Infants and Children*, has spurred research about the existence and possible impact of pesticides in the diets of children. Prior to this report there had been no data collected to determine the effects of chronic low exposure of children to pesticides (Eskenazi et al., 1999).

Pesticide residue data maintained by the United States Department of Agriculture (USDA) are often unreliable for drawing conclusions about the pesticide intake in the diets of children due to irregularity in methods used for sampling, the lack of study of food grown outside of the USDA-monitored production and distribution system, and the generally more focused food consumption of children. Recent studies assessed the pesticide residues on the actual food consumed by a group of children (Fenske, Kedan, Lu, Fisker-Andersen, & Curl, 2002).

The pilot study of determining children's pesticide residue ingestion by examining what is on the actual food that they consumed, studied the diets of 13 children in Washington state. Samples of each of the foods that the child consumed were collected and tested for pesticide residue. The study showed the importance of considering children as a separate population due to enhanced consumption of certain foods and of foods that may contain relatively large amounts of pesticide residues (Fenske et al., 2002).<sup>1</sup>

Other potential methods of study include testing participants' level of inhibition of acetylcholine, a naturally occurring chemical which transmits chemical signals across neuronal synapses. OPs work by inhibiting acetylcholine function. Researchers can also test for metabolites, or chemicals that exist due to the breakdown of certain OPs in a participant's blood or urine, or in a newborn baby's meconium or first excrement. One problem that researchers may run into is that because there are so many OPs in use, it would not be feasible to test for all of the possible metabolites (Wessels et al., 2003). Human bodies break down OP

pesticides quickly, and their metabolites are almost entirely excreted in urine within 24 hours of their consumption (cited in Aprea, Stambi, Novelli, Lunghini, & Bozzi, 2000).

A study was done in Siena, a non-industrial town in Tuscany, Italy, on 195 6-7 year old children. One urine sample was taken from each child. The level of 6 different pesticide metabolites in the urine was measured. These results were compared to the results of a similar test of 124 adults in Tuscany. The comparison showed significantly higher levels of all OP metabolites measured in the urine of children than adults. This study suggests a possible linkage to the proportionally large amount of fruits and vegetables that children consume relative to adults and to the possibility of pesticide residues on those foods. However, this was not directly tested, as the foods that the children consumed the previous day were not tested for pesticide residues (Aprea et al., 2000).

Another more extensive study was done on 102 children ages 3-12 who lived in both urban and rural areas near St. Paul, Minnesota. In this study, 3 urine samples were taken from each child. In addition, air samples, food and beverage samples, house dust, and drinking water samples were all taken. The amount of certain pesticides found in these intake samples was compared to the level of pesticide metabolite concentration found in the urine. The researchers concluded that ingestion rather than inhalation was the primary intake route of the pesticide metabolites found (Clayton et al., 2002).

Similar to the study of the preschool children in Italy, a study involved 110 children ages 2-5 from 96 families who lived in 2 communities within the Seattle metropolitan area. Each child's urine was tested twice for six common metabolites of OP pesticides. Only one child in the study had no metabolites found in either of the urine samples taken. This child's parents reported that they did not use pesticides in their home and that they purchased exclusively organic produce (Lu, Knutson, Fisker-Andersen, & Fenske, 2001).

Another study was conducted on 41 children between the ages of 2 and 5 who also lived in the Seattle metropolitan area. Approximately half ate primarily conventionally grown produce and the other half ate primarily organically grown produce. The urine of each child was tested once for five different OP pesticide metabolites and a food diary of each child was compared. Results indicated that the children who ate 75% or more organic food had significantly less dimethyl

metabolites in their urine than children who ate 75% or greater conventionally grown food. By using the food diaries and comparing the foods that the children ate to the known crops on which certain pesticides were used, researchers determined that children who ate conventional diets received higher doses of these pesticides than children with predominately organic diets. This study concluded that a simple way to reduce children's pesticide exposure is for the child to consume organically grown foods (Curl, Fenske, & Elgethun, 2003).

A similar conclusion was reached and suggested to parents in the *British Journal of Midwifery*: "One of the most effective ways to reduce exposure to toxic substances is to eat organic food" (Howard, 2003, p. 275). This is especially important for young children due to their ability to accumulate persistent chemicals in their bodies more quickly than adults (Howard, 2003).

#### **Nutritional Benefits of Organic Foods**

Aside from the implied benefits associated with not consuming pesticides, many studies have found organically-grown produce to show equal or higher amounts of nutrients than conventionally grown produce. Produce analysis has demonstrated a decline in the vitamin and mineral content of fresh fruits and vegetables over the last 60 years (Worthington, 2001). In a review of studies, Lundegardh and Martensson (2003) note that the daily intake of magnesium in the 1990s was only one-sixth of that during the 1900s. They also cite a study that indicates that in comparison to apes, the average human has a higher daily intake of sucrose and a lower daily intake of minerals, protein, and vitamin C. This trend of lower vitamin and mineral intakes coincides with the implementation of chemical industrial agriculture. Until World War II, chemicals were not used extensively in agriculture. By the year 2000, 95% of crops grown in the U.S. used chemical fertilizers and pesticides (Worthington, 2001). Agriculture that depends upon chemical fertilizers and pesticides is referred to as *conventional*. Agriculture that does not depend upon chemical fertilizer and pesticides and tends to use natural process for pest control and soil fertility is referred to as *organic*.

There have been many studies done comparing the nutrient levels of foods grown organically and foods grown conventionally. The results of these reviews appear inconclusive. Part of the reason for this is that the methods used to

grow the foods were not standardized because there is diversity of methods within organic and conventional farming practices (Heaton, 2001).

The Soil Association of Britain looked at dozens of these studies and tried to assess their validity. The organization sponsored a review of 99 papers that analyzed some of the differences between organically grown and conventionally grown produce. The Soil Association looked carefully at the methods before deciding whether to include the results in their review (Heaton, 2001).

70 of the 99 studies were rejected because of problems with the methodology. Fourteen of the studies analyzed mineral content of fresh vegetables and fruits. The minerals tested for include phosphorous, potassium, calcium, magnesium, iron, sulfur, boron, chromium, cobalt, copper, iodine, manganese, molybdenum, nickel, selenium, tin, strontium, vanadium, and zinc. Seven studies found that organically grown crops have higher mineral content, six studies found inconsistent or non-significant differences, and one found higher mineral contents in conventionally grown produce (Heaton, 2001).

There were 13 studies reviewed comparing vitamin C content of conventionally grown and organically grown produce. Of these 13 studies, seven showed higher vitamin C levels in organically grown produce, and six showed inconsistent or non-significant differences in the level of vitamin C. No studies showed higher levels of vitamin C in conventionally grown produce (Heaton, 2001).

Recent studies show similar trends: generally organic produce has higher vitamin and mineral content or there is no significant difference in vitamin and mineral content between conventional and organic produce. A study from the University of California-Davis measured the level of secondary plant metabolites. Recent evidence pointed to the importance of these metabolites to human health. Phenolic metabolites are a group of metabolites that recent research has focused on due to their anticancer and antioxidant properties. This study compared total phenolic content and ascorbic acid levels in conventional, organic, and sustainably grown marionberries, strawberries, and corn. The results showed that total phenolic content was consistently higher in organic marionberries, strawberries, and corn. There were similar findings for ascorbic acid. Organically grown or sustainably grown corn and strawberries showed higher levels of ascorbic acid than conventionally grown corn and strawberries.

Only the sustainably grown marionberries showed any amount of ascorbic acid (Asami, Hong, Barrett, & Mitchell, 2003).

Another recently published study compared organic and conventional tomato products for their levels of the micronutrients lycopene, beta carotene, vitamin C, chlorogenic acid, rutin, and naringenin. Organic tomatoes were found to have significantly higher content of all of the micronutrients aside from chlorogenic acid. When the authors measured tomato purees, they found that while there was significantly higher levels of vitamin C and phenols in the organic purees, there was no difference found in carotenoid content (Caris-Veyrat et al., 2004).

### **Implementing Innovative School Lunch Programs**

Examples exist of schools that have taken the responsibility of providing their students with fresh, healthy produce for their meals. Some schools have provided this food by working within suggestions made by government programs. Some schools have gone beyond government suggestions in order to provide local, fresh, organic produce in their cafeterias.

The USDA established the Community Food Projects Competitive Grants Program as part of the Community Food Security Act that was part of the 1996 Farm bill. It is funded at \$5 million per year. Between 1996 and 2003, \$22 million was given to 166 projects. These grants can go to projects that meet the needs of low-income people, help communities become more self-reliant in procuring their food supply, and respond to local issues regarding farms, food and nutrition. One grant was used by Occidental College's Center for Food and Justice to provide food for salad and fruit bars in dozens of schools in the Los Angeles Unified School District, the second-largest school district in the U.S. Originally, fruits and vegetables were purchased directly from local farmers. Because it was found easier to purchase foods through conventional wholesale methods, the program switched to this manner of food procurement after the first year of the program. The schools in the pilot program have a universal free lunch policy. During the launching of the program, the school promoted the program with an all-school assembly about the new lunch choices. These new food choices were combined with school gardening activities and field trips to farmers markets and to local farms. Findings from a follow-up study found that the students' daily caloric intake was reduced by an average of 200 calories and their



daily fat intake was reduced by 2% (Tauber & Fisher, 2002).

The Appleton, Wisconsin, Central Alternative High School has initiated a similar program with the help of a local bakery. The lunch program began in 1997. The school started serving healthy fresh, minimally processed foods in their cafeteria. This approach went beyond a salad bar; the entire menu, including the hot portion of the meal, was prepared by using fresh ingredients. The high school had a large number of at-risk youth and had a great deal of behavior problems. Since the implementation of the program, there has been anecdotal evidence of positive changes in students' behavior. Since the program began, there have been no suicides, dropouts, or expulsions. The school's social worker claimed that this program had made her job easier due, in part, to the elimination of "angry outbursts" from students. Many school officials said that the healthy food program has made a far greater positive impact than they had expected (Appleton School District, 2002).

Lincoln Elementary School in Olympia, Washington, instituted changes to its school lunch program that began with the expansion of the school's salad bar. The salad bar now features organic fruit and vegetables, whole grain breads, and vegetarian protein sources. Organic farmers supply some of the fresh produce. From the program's inception, the school purchased squash and potatoes from an organic local farm and soon after began purchasing salad greens from another organic farm. Lincoln has taken an integrated approach to the food that children eat. There is a greenhouse and garden on the premises and students often harvest food to eat and seeds to sell. At an annual school-wide Harvest Festival children harvest, cook, and serve a variety of fresh foods. The school composts food waste for use in its garden. The school's commitment to responsible food production encouraged them to consider solutions to higher costs associated with the purchase of organic produce. As a result, they stopped offering desserts because school officials felt that such offerings sent a mixed message to children that were being told to make nutritionally sound choices. They switched from disposable eating utensils to washable utensils, and they also worked with the students to reduce food waste (Flock, Petra, Ruddy, & Peterangelo, 2003).

Perhaps the most well-known school lunch program is the Edible Garden in Berkeley, California. This project began as a collaborative

effort between renowned chef Alice Waters and the principal of Martin Luther King Middle School. The idea of the program is that through the integration of the garden, the kitchen, and the meal table into the school's curriculum, students would learn important values of patience, compassion, self-discipline, and respect. The vision of the program was discussed at a large meeting of a wide range of interested parties. In 1994, the first year of the program, an after school cooking class was offered to students at the middle school. The program expanded quickly during the second year with crops planted in the garden and cooking classes integrated into the curriculum. Initially, produce for these classes was supplied by a nearby organic farm. Positive changes were constantly occurring, and by 2002, the garden had grown a huge variety of produce that included greens, garlic, apples, figs, raspberries, corn, broccoli, asparagus, peas, grapes, and olives. The school is careful to grow organic produce. What they cannot grow, they purchase from organic growers. The garden now has chickens that supply the kitchen with eggs. All students in the school prepare food in the kitchen, work in the garden, and take time to share food together at the table (Edible Schoolyard).

### Conclusions

Nutrition has always been a focus of those who argued for the necessity of serving children lunch in school. Initially, it was children's aid societies that supported the feeding of children in schools, but school districts began to take on the responsibility. A permanent federal financial commitment to serving school lunches was assured in 1946 with the passage of the National School Lunch Program (NSLP). This program provides free and reduced-price lunches to those who qualify. With many students depending on the program for their meals, it is imperative that the food served be healthy. The NSLP has to adhere to Recommended Daily Allowances as guidelines for nutritional components of food served. Competitive foods that are sold in school, however, do not.

The USDA, which administers the NSLP, has given much recent attention to the problems posed by the foods sold in competition with the NSLP that are not nutritionally regulated. There has even been growing attention to the need to provide minimally processed foods, as evidenced by recent amendments to the NSLP that promote the consumption and distribution of fresh fruits and vegetables. While there has been much

concern about the nutritional issues surrounding the NSLP, there has been no evidence of discussions that address the issue of how the food served through the NSLP is grown.

Farms that use pesticides to prevent insects or weeds from competing with their food crops often use chemicals that can be harmful to human health if ingested. Pesticide residues are present in varying concentrations on food grown *conventionally*, i.e., with the use of synthetic pesticides and chemical fertilizers. However, until 1993, when the National Research Council released its report *Pesticides in the Diets of Infants and Children*, there had been no studies initiated to determine possible effects of long term exposure to low levels of pesticides, levels that one would expect to encounter on food that is grown conventionally.

Recent studies have conclusively demonstrated that children's bodies are processing pesticides. Researchers in one study determined that ingestion was the primary route of exposure for the children tested. Another study showed that children who ate conventional diets received higher doses of pesticides than children who ate organically-grown foods. This led researchers to conclude that one of the best ways for children to lower their exposure to pesticides is by eating food that is grown with organic methods.

Further, many studies have shown that foods grown with organic methods show equal or higher amounts of nutrients than foods grown with conventional methods. Therefore, if children eat organic foods, they consume foods that will not increase their load of toxic chemicals, and they may be consuming foods of higher nutritive value.

Many schools have found ways to serve organic foods to their students. Some have even found ways in which to weave issues about farming techniques, consuming locally produced products, and the importance of food choices in our everyday lives into the curriculum, based upon changes made in the cafeteria. One school makes food production and consumption an integral part of the school day. It boasts a large organic garden, a well-stocked kitchen, and even chickens to provide the students with eggs. These schools lead the way in showing what school lunches can be with a lot of hard work.

### **Recommendations for Practice**

Schools seem to be moving in a positive, thoughtful direction in their school lunch offerings. The USDA, who administers the

NSLP, seems to have a growing recognition of the role that it can play in encouraging lifelong healthy eating habits. It is encouraging that there have been new dietary guidelines put into place that dictate what can be served through the NSLP. Some states have already created rules that further regulate the sale of competitive foods within schools.

Until further changes are made on a national, state, or district level, schools can look into what changes they can make on the local level to enhance the well-being of students in their care through the foods that they serve. Schools can look to organic food, and farm-to-school programs that have been instituted by other schools around the country (see Appendix).

While keeping nutritional needs in mind, schools should examine the benefits of serving organic foods in cafeterias. Although there have not been national public discussions of the importance of serving organic foods through the NSLP, schools can move forward on this issue individually. Schools should work to incorporate organic foods into their lunchtime offerings. This can be done through purchasing some organic processed foods, such as organic tomato sauce, or organic canned soups. Another way to incorporate organic produce into the lunchtime offerings is for the school to purchase organic produce and then serving the produce raw, or using the produce to prepare meals. A favored approach is to enter into a purchasing agreement with local organic farms. Schools can create a garden plot that is to be tended by students. This plot can eventually produce fruits and vegetables that can be used to make lunches.

Schools can incorporate their food choices into lessons for children. In a middle school in Berkeley, the school's curriculum is infused with conversations about the importance of food choices that the students make. Issues surrounding food that children choose to eat can be incorporated into social studies, science, English, and math lessons. In science class, students can learn about how organophosphorous pesticides work to inhibit insect function. They can talk about how this may be harmful to them. In a social studies class students can learn about the over reliance on fruits and vegetables produced by huge corporate farms and subsequent effects of this practice on family farms and small towns. In English class, students can read excerpts from passionate food and farming writers such as Wendell Berry, Barbara Kingsolver, and Alice Waters. In a math class, teachers can create lessons in which students

calculate the calories it takes to transport locally-transported, organically-grown, minimally-processed foods in comparison to the calories that it takes to produce conventionally-grown, internationally-transported highly processed foods. They can compare their findings to the calorie content of the fruit or vegetable studied.

Schools should work to develop student support for organically-produced foods so that students can see the importance of the food choices that they make. Schools should look at students as partners in their quest to provide foods that are healthy and tasty for students to eat. As in classroom instruction, schools need to look to other entities for building partnerships in food service. Because parents are an integral part of their children's lives, they can be excellent allies in regards to their children's health. Schools will need to investigate what organic options are available in their region. Certainly relationships with local organic farms are desirable. Schools must look into nearby options to determine what is possible for fresh, local produce.

Schools across the country are realizing the hypocrisy of telling students of the benefits of nutritional eating while offering unhealthy options in the school cafeteria. There are many resources available for schools and other interested parties to utilize to make positive changes in lunchroom offering.

#### Note

<sup>1</sup> Fruits and vegetables with highest pesticide residues: An environmental organization tested common fruits and vegetables for their amount and variety of pesticide residue. They compiled a list of the twelve most contaminated fruits and vegetables: Apples, bell peppers, celery, cherries, imported grapes, nectarines, peaches, pears, potatoes, red raspberries, spinach, and strawberries (Environmental Working Group, nd).

#### Appendix:

##### On-line Resources for Developing Farm-to-School Programs

###### Food Security

[www.foodsecurity.org](http://www.foodsecurity.org)

This organization has a variety of materials giving reasons for beginning a farm-to-school program, as well as practical advice on how to work to successfully implement a program. The information provided by this organization would be most helpful to an outside organizer rather

than a farmer, a school district, or a state department of agriculture. The information provided includes a sample agenda of an organizational meeting, sample telephone surveys for farmers and school food service personnel, and a list of possible funding sources for farm-to-school programs.

###### USDA

[www.usda.gov](http://www.usda.gov)

The USDA puts out a booklet entitled *Small Farms/School Meals Initiative* that explains the basics of how to set up a successful meeting to discuss and promote a farm-to-school program.

###### WSDA

[agr.wa.gov](http://agr.wa.gov)

A copy of the Washington State Department of Agriculture's *Farm-to-Cafeteria Connections* book is available in pdf form online. The book provides models of farm-to-cafeteria programs and gives copious practical information on how to organize a program from the farmer's perspective, the food service personnel's perspective, and from a community organizer's perspective. This book includes regulations that need to be considered that are specific to Washington.

###### Center for Ecoliteracy

[www.ecoliteracy.org](http://www.ecoliteracy.org)

This organization puts out a comprehensive *Rethinking School Lunch Guide* covering the a wide spectrum of issues associated with implementing a farm-to-school program: finances, food and health, facilities design, curriculum integration, waste management, communications, food policy, the dining experience, and professional development. Each section contains background information that demonstrates why each issue is important, case studies or interviews, and additional resources for those who want to learn more. This guide provides excellent background information and would be extremely useful to those in the beginning stages of considering whether to work to set-up a program. This is a useful reference guide.

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## **Derailing Tracking: Social Justice through Heterogeneous Grouping**

*Homogeneous grouping, or tracking, is a common structural element in the United States school system. Tracking places students into separate classes by perceived notions of ability and intelligence. For the past century a heated debate has raged over the effectiveness of tracking. This review presents both sides of the arguments. The research presented provides evidence of discrimination, negative psychological effects, and decreased access to proper materials and instruction for lower tracked students. Untracked heterogeneous classrooms provide an atmosphere where all students can achieve and have access to high quality curricula and teaching.*

Homogeneous grouping, sometimes referred to as tracking, has been a part of the United States school system for over a century. Tracking places students into groups based on similar personal qualities, performances, or aspirations. Tracked students are often placed according to perceived abilities. Tracks range from high or excelled down to low or remedial classes (Rosenbaum, 1976). Once a student has been placed on a tracked course they will usually remain in it until they have completed their secondary schooling (Oakes, 1985). Research on the effects of tracking has fueled a heated debate. This paper will give a brief history of tracking and the research associated with it. Research and literature that both opposes and supports the tracking system will then be presented. Main argument for both sides of the issue will be explored and analyzed.

Opponents of tracking argue that tracking is a discriminatory practice. They also argue that there are detrimental psychological effects for lower tracked students. Opponents call for school reform that moves away from the social injustices of tracking. They argue that all students have the ability to achieve and should be given equal opportunity to do so.

Proponents of tracking defend it as an effective and needful part of the school structure. They argue that students are placed into tracks according to their merit, and that the gap between students of color and white student in higher tracked classes is due to the ability of students not discrimination. Proponents also argue that students can achieve at higher levels when they are placed in homogeneous groups.

The recent advent of the *No Child Left Behind Act* of 2001 (NCLB) calls for higher standards of achievement for all students. The social injustices associated with tracking make

the achievement of all students improbable.

Alternatives to tracking will be presented toward the end of this paper. These alternatives are viewed to aid all students in academic achievement and success. One such alternative is cooperative learning in heterogeneous grouping, which allows for an atmosphere that is conducive to learning through peer interaction.

This paper is limited in what can be presented. Research has been conducted on the tracking system for over a hundred years. There has been research that both supports and refutes tracking. Opponents and proponents of tracking sometimes use the same research to argue different sides of the debate. This can at times confuse the research results and raise questions to the validity of some studies. Effort has been made to present research that clearly shows the effects of homogeneous grouping. Another possible limitation is in the presentation of tracking alternatives. This paper is focused on the effects of tracking and therefore only briefly offers strategies that can be employed in heterogeneous classrooms.

For the purpose of this paper tracking will be defined as the act of placing students into homogeneous classrooms or courses for instruction in the U.S. elementary and secondary school systems. Tracking sorts children into groups of similar personal qualities, performances, or aspirations (Rosenbaum, 1976). Tracking or ability grouping sorts students into high, average, and low classes. This sorting can start as early as kindergarten and it continues through high school (Oakes & Lipton, 2003). Tracking has been described as a sorting machine for school systems (Oakes, 1985). This machine was used as a way to connect the schools to the economy, particularly in the

formation of a caste system with an upper class and a working class (Spring, 2005).

### Literature Review

Students are typically placed on a track by three kinds of information; (a) standardized test scores, (b) teacher and counselor recommendations, and (c) student and parent choices. In a study of twenty five schools, Jeannie Oakes (1985), found that schools typically had three different types of tracking including: vocational or academic, college bound and not college bound, and fast or slow tracks within a curriculum. There are also other types of tracking that have been observed in schools; these include student intelligence, college prospects, English competence, and student behavior (Oakes & Lipton, 2003). Students with disabilities and other special needs are also subject to the tracking system (Mastropieri & Scruggs, 2004).

Tracking is not just found within U.S. schools. Tracking can be found in the United Kingdom school system as well (Kehily, 2002). The large English influence in the U.S. school system is one possible reason tracking was introduced. Tracking has become a common element in the school system and seems to be completely ingrained. In 1999, over eighty percent of U.S. public schools still had some form of traditional tracking (Mallery & Mallery, 1999).

One of the first recorded homogeneous grouping accounts was in 1867 in St. Louis. Similar practices began to appear during the same time in New Jersey and Massachusetts (Goldberg, Passow, & Justman, 1966). Studies on the effects of tracking are presumed to have taken place as early as the late 1800s. Guy M. Whipple conducted the first major recorded study on the effects of tracking in 1916. Studies and debates about ability grouping continued into the 1920s and 1930s. Major studies slowed down in the forties and fifties, but the debate was refueled in the 1960s during the civil rights movement (Goldberg et al., 1966). After completing a study in 1966, Goldberg, Passow, and Justman concluded, that after nearly eighty years of research, the debate was still inconclusive. There was not sufficient evidence for either side in regards to the benefit, or detrimental effects, of tracking for lower and higher tracked students.

Studies on the effects of tracking have continued and the debate is still just as strong today. In the twenty-first century, many

educators view the development of separate tracks in high school as a means to serving individual differences. In contrast many minorities consider different tracks as another means to provide an inferior education (Spring, 2005). The discrimination of minorities through tracking has been studied heavily, and strong evidence has shown that there is an overwhelming disparity in the number of politically identified minority students in lower tracked classes (Broussard & Joseph, 1998; Frazier, 1997; Goodlad, 1984; Lucas 1999; Mickelson, 2001; Oakes, 1985; Oakes & Lipton, 2003).

While many administrators view tracking as fair and objective, there are obvious color lines (Tatum, 2003). These color lines may very well be unintentional, but they still remain. In the book, *Transforming the Multicultural Education of Teachers: Theory research and practice*, Michael Vavrus (2002) explains that an institution can mean well but still be racist. These institutions have characteristics of White privilege and racism while not purposely being racist. Many schools in the U.S. are guilty of the discriminating against students through the practice of tracking. In 2001, The Office of the Superintendent of Public Administration for the state of Washington released a document entitled *Call to Action: Mandating an Equitable and Culturally Competent Education for all Students in Washington State* (2001). In this document, members of the Multi-Ethnic Think Tank stated that the socioeconomic gap in society has a strong correlation to the placement of students in tracked classes. They claim that there is a higher placement of low socioeconomic students in lower tracked and special education programs. They further state that there is a large disparity in the number of these underserved students in higher tracked classes such as in gifted and advanced academic placement courses. The research on the disparities that arise from the tracking system seem to be common knowledge, yet this system still continues.

Using tracking as a way to discriminate against minorities is believed to have evolved from the *Brown v. The Board of Education* United States Supreme Court decision of 1954. Although segregation was ruled to be unconstitutional, racial exclusion is still practiced inside desegregated schools today (Vavrus, 2002). In the book, *Jim Crow's Children: The Broken Promise of the Brown Decision*, Peter Irons (2002) wrote of his personal witness of segregation in integrated



schools. In one particular high school, Irons noticed that about half of the school population was black. Yet, in the advanced placement classes that he observed, there were only a few students of color. This disproportion is often justified through performances on intelligence tests and other standardized tests that are normed on middle-class White students. The tests used to determine placement are culturally discriminate themselves (Banks, 2001).

Another reason for the strong continuation of tracking is due to middle-class parents using their privilege to pressure and demand to have their students in tracked classes. There is a great fear that if schools are detracked higher tracked students will be held back in their education because of the lower tracked kids. Social class still effects track placement. This includes aspirations and prior achievement and also other associated structures such as race and ethnicity (Lucas, 1999). In a three year study of ten high schools committed to detracking, none of the schools were able to eliminate tracking completely because of notions and ideas related to intelligence, differences in race and social status, and apparent privilege related to the previously mentioned differences (Oakes & Wells, 1998).

The social injustice of tracking has become evident and policy makers have begun to react to this disheartening practice. However, court decisions alone have not been able to overcome this deep tradition. It has been suggested that the policy makers and courts alone cannot overcome practice of tracking. A reliance on social scientists to provide more evidence for the psychological and sociological affects of tracking has been suggest as one way to try to convince the dominant culture in the U.S. that schools need to be derailed from the tracking system (Welner & Oakes, 1996).

Discrimination is only one of many negative aspects of tracking. Jeannie Oakes (1985) claims that it is due to the traditions of well meaning people that prevent them from seeing the hellish consequences of tracking. She goes on to state many assumptions regarding the apparent need for tracking; parents are afraid that their bright students will be held back by slower learners, homogeneous classrooms will foster a more positive image for the lower tracked students, many people still believe the selection process is fair and accurate, and that teachers will have an easier time teaching to common ability students. Despite these assumptions, Oakes states that research has not shown that homogeneous

grouping is beneficial to any of the grouped students.

Ability grouping has been shown to be harmful in a variety of ways. It can cause teachers to think that lower tracked children have less ability then they really do. It can deceive parents into thinking that the school is offering a way for brighter kids to move along the curriculum at a faster rate, or that tracking provides some kind of benefit to the students learning, when this is not the case. It also can be damaging because tracking typically does not offer an opportunity to move between tracks when appropriate, trapping kids in a track throughout their schooling (Goldberg et al., 1966). This trapping of kids is due to lower tracked classes preparing students for less academically challenging jobs, so even if a students wants to move up the tracking system, he or she is left without the required skills and knowledge to do so. They will always play catch up to their peers once they have been placed into a low track (Rosenbaum, 1976).

Guidance counselors play a large role in the placement of students. Their recommendations cause many students to think that they should be in lower tracked classes. Students learn that school does not serve their needs and are socialized into lower tracks that trap them in a fatalistic culture that tells them social institutions will not respond to their needs (Rosenbaum, 1976). Teachers also greatly affect the placement of students. This can lead to low track placement of a student due to a teachers misunderstanding of a child's ability. For example, a teacher can assess a students nonstandard English and assume that the child is not at a developmental stage deemed appropriate. This can lead to the teacher recommending a students placement in a lower tracked class. A capable student is then improperly labeled and placed in a program of continual low achievement, not because of the child's ability, but because a teacher misinterpreted an accent (Ovando, Collier, & Combs, 2003). Teachers can also mistake behavior problems or nonconforming students as slow or academically challenged. This results in unjust low level tracking because of the teacher's misunderstandings of ability (Oakes, 1985).

The tracking of students can have very detrimental psychological effects. Once students have been placed in a track, from which they often will stay in for the rest of their schooling, they are labeled according to the status of that track such as gifted, average, or remedial (Oakes & Lipton, 2003). This labeling and tracking level

produces a caste system within the schools among the students. Students in lower level classes quickly begin to view themselves in a lower status position among their peers. The higher tracked classes are viewed as the smart kid classes and the lower tracked classes become known as the dumb kids classes (Rosenbaum, 1976). The higher tracked students have more positive views of themselves and the lower tracked students begin to think less and less about their ability. These students begin to develop self-fulfilling prophecies of low achievement. Students feel that they are in the stupid classes for stupid kids (Oakes & Lipton, 2003). Lower tracked students begin to accept their lot in life because their placement was just (Lucas, 1999).

Lower tracked classes appear to lead the students into more and more problems. The low self-esteem found in lower tracked classrooms produces more misconduct and higher drop out rates (Goodlad, 1984). It does not take long for the children to begin to play the part outlined for them. They are often viewed as the problem kids to begin with and the atmosphere in a lower tracked classroom is expected to reflect that. However, in a study of twenty-five schools from across the United States, Oakes (1985) found that the lower tracked classes caused negative results in children and not the other way around. This finding challenges the assumption that the kids are bad or problematic to begin with. Many of them are simply misunderstood and incorrectly placed in a detrimental tracking system.

The view that students in low tracked classes have less ability and that they are the troubled kids leads to the next negative aspect of tracking. The students that need the most get the least (Oakes, 1985). An overwhelming majority of lower tracked students come from low socio-economic conditions and many of them are also members of traditionally marginalized ethnic groups. They come from a history of poor societal support, only to receive the same treatment in the schools they attend. They are labeled by the school system and then given an inferior education. Students in different tracks receive different information. High tracked classes have more time engaging with the material. Not only are higher tracked classes given more time to engage in material, they also have the most up to date texts, better equipment, and more qualified teachers. As early as sixth grade the inequality in teaching is apparent in the

curriculum design. Material is often taken out for lower tracked classes (Oakes, 1985).

Jeannie Oakes' (1985) study provides critical evidence for the need to detrack the U.S. school system. Her study challenges the assumption that the higher tracked student's academically challenged peers will hold them back. Oakes found that bright students did well regardless of the make up of the class. The heterogeneous classrooms she studied were more like high tracked classrooms in content, teacher student relationships, and student-to-student relationships. However, these findings are not new. A study conducted in 1966 found that there was not much of a difference in academic achievement between homogeneous and heterogeneous classes (Goldberg et al., 1966). These two studies, combined with the studies that show the unjust treatment of the lower tracked students, illustrate how tracking has negative affects on low tracked students. They also support the notion that the detracking of schools is indifferent to higher tracked students (Oakes, 1985).

Another common misconception is that students are a like in homogeneous classrooms. This is not the case. Even in high tracked classrooms, there are students that move at different paces and struggle with material on different levels (Oakes & Lipton, 2003). A homogeneous classroom does not contain identical students; they only contain perceived abilities by authority figures. Perhaps the only thing that is identical among students in the same tracked class is that they've been given the same label. Regardless of how precise the selection process is for homogeneous grouping, the separation arrangement itself has little, if any, educational value. Goldberg, Passow, and Justman (1966) concluded at the end of their study that the grouping of the students is not what makes a difference; it is what is taught and learned in the classroom that produces academic achievement. This conclusion eloquently explains that the content of instruction has much more of an affect on student achievement than does the grouping of students into tracked classes.

In fact, there are very few positive or beneficial components related to the practice of tracking. One of the possible benefits is for teachers. Oakes (1985) concedes that traditional teaching, or lecturing, may be easier in high tracked classrooms. However, she quickly follows this up by stating that students get more from cooperative learning in heterogeneous

classrooms. While tracking may make teaching easier for some teachers, it is extremely harmful for many students.

With the emergence of studies that refute the benefits of tracking, the popularity of the tracking system is beginning to go down. Although more and more educators and policy makers believe that schools cannot teach or achieve social justice unless they eliminate discriminatory grouping practices (Oakes & Lipton, 2003), the full detracking of schools is far from reality. Tradition, it seems, still holds a tight grip on the future of the youth in the United States. Although research provides evidence of the detrimental and social unjust effects of tracking, it often goes unheard because of how much of a part of the educational system tracking has become. It has become an organizational device for hiding awareness of educational problems rather than providing a means for correcting it. Tracking provides a way to deal with the variability in human learning. It takes the easy way out through grouping, rather than teaching to each student's ability (Goodlad, 1984). Despite the various studies that show the injustices caused by tracking, there are many proponents that argue that tracking is an educational necessity.

One of the most outspoken proponents of tracking is Tom Loveless, associate professor at Harvard University's John F. Kennedy School of Government. In 1999 he produced several forms of literature that argue in defense of tracking. In one article he refuted previous anti-tracking research by stating that it was thin (Loveless, 1999). Loveless directly refers to Jeannie Oakes study from 1985 as well as to the many other studies that show that tracking has very serious negative affects on youth. In his book entitled, *The Tracking Wars* (1999), Loveless defends his position as a supporter of tracking, he provides some conditions that he feels support the need for tracking in the education system. He points out that tracking is different today because tracking takes place within subjects, not across the whole school curriculum. He says that the research done on tracking is outdated because it no longer applies to today's school system. Other tracking proponents have also supported this opinion (Teiso, 2003). Loveless claims that tracking is guided by prerequisites courses, prior achievement, and teacher recommendations, not intelligence tests. He goes on to state that the researchers that say there is no real academic achievement difference in tracking are researching the old ways of tracking, not the new

subject centered tracking. Throughout his refuting of research, however, Loveless provides only the research of tracking opponents.

*The Tracking Wars* (1999) also addresses the discrimination claims of tracking opponents. Loveless remarks that the low grades and test scores associated with lower tracked classes reflect the ability of the students placed in them. He says that the test scores themselves are proof of this. He further states that the disparity in minorities is due to low achievement not discrimination. He suggests that racial gaps are established by the eighth grade so tracking has very little effect on the ability of minorities because tracking is primarily a high school practice (Loveless, 1999). As stated earlier, studies have shown that tracking begins as early as kindergarten (Oakes & Lipton, 2003) and that the inequality of tracking is apparent as early as sixth grade (Oakes, 1985). Loveless offers no research on this topic for his side of the debate. He also argues that tracking cannot be that detrimental to society's youth because there are so many people protecting it. Tracking reform takes place mostly in urban and poor schools, and the fact that many wealthier suburban schools have not attempted it shows that society's elite is protecting the tracking system. Loveless boldly states that if the elite want tracking for their children then how could it be bad for society, the elite would not harm there own children. These statements clearly show the obvious discrimination and narrow mindedness of society's self-proclaimed elite.

Other arguments are made such that the tracking debate has never taken into consideration that principals, teachers, and parents know what their doing and implies that it is time to end the debate and let them decide what is right for the children (Loveless, 1999). This again proposes that the elite of society know what is best for all children. One of the last arguments made is that the detracking of schools confuses curriculum. Loveless states reading would take place in classes such as math, and that math would take place in other classes throughout the curriculum. This last claim seems to be grasping for reason. Math does include elements of reading, such as story problems, and math is required for many other subjects such as science. With the emergence of higher academic standards in today's school system, it is essential that all students be given every opportunity to master the skills necessary, regardless of the outlined class, to show their comprehension of subject material (Oakes & Lipton, 2003).

Loveless is not alone in his defense of tracking or his disregard for the research conducted by opponents. Claims have been made that detracking schools has proven to be ineffective or difficult to accomplish (Grusky, 2001). There have also been studies that report that highly gifted classes benefit from ability grouping, which allow students to quickly move through material (Tieso, 2003). These studies call for a distinction between tracking and ability grouping although both produce inequality. One report states that the NCLB legislation is used as a means to keep gifted children from getting too far ahead (Tieso, 2003). There is also a study that claims tracking can be conducted in such a manner that all students, both in high and low level tracked classes, can reach higher levels of achievement (Gamoran, 1992). While there may be some isolated cases where tracking produces achievement in high and low tracked classes, the fact still remains that it is a discriminatory practice embedded in the U.S. school system.

The higher standards required of all students through NCLB and the corresponding state standards demand that students show *proficiency* with reading, writing, and math. The Multi-Ethnic Think Tank (2001) of Washington State asserts that all children can achieve at high academic levels and are entitled to learn in a multicultural context. The ability of all children to attain high academic achievement has been echoed by others (Haynes, Ben-Avie, & Ensign, 2003). How best to enable all students the opportunity to demonstrate their abilities seems to be the debate. The research findings on tracking have clearly reported injustices to lower tracked students thus the debate over its effectiveness should end and other strategies should be employed to ensure the academic success of all students.

There seems to be no easy way out of the charge educators have to ensure the achievement of the children they serve. Lev S. Vygotsky (1978 /2005) explained that students could achieve much more when they are given assistance from others than they could ever do alone. Elizabeth Cohen (1994) declared that there is no recipe book that will alleviate teachers from their teaching responsibilities. She further stated that students could accomplish a tremendous amount when they are allowed to work together. Children have a greater chance to succeed when they interact and learn from a variety of people, including their peers. As schools move to an untracked system, cooperative learning through groupwork is an

effective way to promote the learning of all students (Cohen, 1994).

Cooperative learning through groupwork is one example of an alternative to tracking. Cohen warns that cooperative learning involves more than simply placing students into groups (Cohen, 1994). Her work on cooperative learning has shown that every child needs a role in order to achieve and that the teacher needs extensive practice and training to become effective in helping all children achieve through the art of groupwork (Cohen, 1994).

All-inclusive classrooms begin with an environment that is sensitive to the different learning styles, languages, and personalities that students bring to school with them. Examples of strategies that can be employed in heterogeneous classrooms include reading-as-thinking, which involves students engaging in rich thought provoking text with their peers. Students learn and share strategies for reading and thinking about what they read. Another inclusive teaching practice is representing-to-learn. This classroom strategy involves journal writing and drawing as well as more in-depth genre writing. Other examples of classroom strategies for inclusion include small-group activities, classroom workshop, authentic experiences, reflective assessment, and integrated thematic units. All of these different methods promote choice, responsibility, expression, community, diversity, and technology in the classroom and in the educational experience of all students (Daniels & Bizar, 2005).

For children to achieve educators must believe that all children can and deserve the right to reach higher levels of achievement. Jacque Ensign (2003) echoed this when she eloquently stated:

If, as educators, we are really committed to social justice, then not only will we believe that all children can learn well, but we also will embrace the conviction that all children deserve to learn well. If our society is ever to address the inequities in it, we must begin by examining how well we prepare all our children for succeeding in society. (p. 105)

Part of the self-examination that Ensign refers to includes a realization of the effects of tracking in the school system. The research provides clear evidence that tracking produces inequities. The school system can help to eliminate inequity by eliminating the structural element of tracking.

### **Conclusions**

Since the mid 1800s tracking has been a part of the U.S. school system. Research that analyzes the effects of tracking has been conducted since the early 1900s (Goldberg et al., 1966). The tracking research has fueled a heated debate around the benefits and consequences of homogeneous grouping. The debate continues today. Tracking is still a large part of the school system and can be seen in some form all across the country. Over eighty percent of U.S. schools place their students into an academic track beginning in middle school and continuing throughout the high school years (Mallery & Mallery, 1999).

There is a large collection of research that indicates tracking is at times used in a discriminatory manner (Broussard & Joseph, 1998; Frazier, 1997; Goodlad, 1984; Lucas 1999; Mickelson, 2001; Oakes, 1985; Oakes & Lipton, 2003). Opponents of tracking point to the large disparity of politically defined minorities in lower tracked classes. Research has also shown that tracking is far more damaging than just its racial undertones. Tracking traps lower tracked students in a system of failure and inadequacy (Goldberg et al., 1966). Lower tracked students are given substandard resources and have less expected of them. Lower tracked students are also labeled as low achievers, remedial, or troubled. Research shows that lower tracked students begin to fulfill these labels placed on them. They begin to believe that they do not have the ability to achieve as well as their peers (Oakes, 1985). These negative psychological effects will follow the students through out their lives.

Perhaps the most telling research states that higher tracked students do not benefit from homogeneous grouping. This challenges one of the loudest arguments of tracking proponents, that tracking allows the higher achieving students to achieve more and at a faster rate. High achieving students in heterogeneous classes have shown the same amount of achievement at the same rate as upper level tracked students. Students that are traditionally labeled as lower tracked candidates benefit greatly from heterogeneous classrooms. These students have a higher self-esteem and are able to find a greater measure of achievement in comparison to their homogeneous lower tracked peers (Oakes, 1985).

Proponents aggressively defend tracking as a viable component of the U.S. school system. They argue that tracking is not discriminatory; it simply reflects the different abilities of different

students. They argue that students achieve at the level they do because of ability not atmosphere (Loveless, 1999). Proponents claim that research on tracking is outdated and is therefore not valid (Loveless, 1999; Teiso, 2003). They also point out that tracking reform is generally done in low achieving schools. The fact that higher achieving schools do not generally attempt reform is proponent evidence that tracking works. Proponents also claim that detracking the school system would confuse the curriculum and make learning more difficult for all students (Loveless, 1999).

One tracking benefit that both opponents and proponents agree on is the ease that tracking provides for the teacher (Loveless, 1999; Oakes, 1985). Research supports the notion that teachers have an easier time planning and designing curriculum for homogeneous classes, however the ease for a teacher should not outweigh the harm to a student. Research suggests that more students would benefit from a detracked school system and therefore reform is needed to help these students. Teachers, as advocates for students and social justice, should be willing to put forth more effort and administrators should support them.

While policy makers and legislators are beginning to pay closer attention to tracking research, unified school reform that moves toward a detracked school system still seems to be along way off. In-service teachers and administrators need to be aware of the negative affects of tracking and provide safe tracked-free classrooms and schools. Instead of waiting for direction from the top, teachers and administrators should do all they can to help the students in which they have stewardship over.

### **Recommendations for Practice**

There are many different strategies current teachers can take in detracked heterogeneous classrooms that will help to ensure the achievement of all students (see Table 1). These resources contain information that can be used at the school level and the classroom level.

The goal of educators should be to ensure the achievement of all of their students regardless of previous ability perceptions and labeling; heterogeneous classrooms provide a means to accomplish this goal. Alternatives to tracking have been presented and research should continue to provide additional strategies that can be used in heterogeneous classrooms. There is evidence of inequity in education due to tracking. Tracking should therefore be replaced

Table 1: Resources and Recommendations for Practice:

Books	Description
Goodlad, J. I. (1984). <i>A place called school: Prospects for the future</i> . New York: McGraw-Hill.	This book was specifically written for school board members, legislators, administrators, teachers, and anyone else interested in school reform that provides an atmosphere where all students can learn. Goodlad intertwines research with a close critique of schools and the school system. He provides recommendations for change in the school system as well as the classroom. He specifically addresses detracking, curriculum design, organizational rearrangement, and teacher preparation.
Oakes, J. (1985). <i>Keeping track: How schools structure inequality</i> . New Haven: Yale University Press.	Oakes provides invaluable research on negative effects of tracking. This book presents data that shows the discriminatory element of tracking as well as the harmful psychological effects and misconceptions associated with tracking. This book calls for school reform that eliminates tracking, the structural element of school that is closely related to student inequities.
Cohen, E. G. (1994). <i>Designing groupwork: Strategies for the heterogeneous classroom</i> (2 <sup>nd</sup> ed.). New York: Teachers College Press.	Examples and teaching strategies for effective groupwork are provided in this volume. Cohen discusses the advantages and problems associated with implementing and using groupwork in the classroom. She provides simple step-by-step approaches to successful planning, implementation, and evaluation of groupwork activities.
Daniels, H., & Bizar, M. (2005). <i>Teaching the best practice way: Methods that matter, K-12</i> . Portland, Maine: Stenhouse Publishers.	Seven effective methods are discussed and described in this book for use by teachers striving to include all students in the learning process. These strategies include: Reading-as-Thinking, Representing-to-Learn, Small-Group Activities, Classroom Workshop, Authentic Experiences, Reflective Assessment, and Integrative Units.
Mastropeiri, M. A., & Scruggs, T. E. (2004). <i>The inclusive classroom: Strategies for effective instruction</i> . Columbus, Ohio: Prentice Hall.	This book provides necessary information regarding legal issues and characteristics of students with disabilities and other special needs. A variety of practical teaching and learning strategies are described to help teachers manage an inclusive classroom.
Oakes, J., & Lipton, M. (2003). <i>Teaching to change the world</i> . Boston: McGraw Hill.	This book covers such topics as learning theories, curriculum design and content, assessment, classroom management, family and community connection, and school culture. All of these topics provide information on building democratic classrooms for students. There is also a chapter dedicated to discussing heterogeneous classroom and the possibility of teaching all students effectively.

by strategies that encourage and challenge all students to reach high standards of achievement.

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### Howard Gardner's Multiple Intelligences Theory: Eight Ways of Seeing a Classroom

*This review looks at the history of intelligence constructs, Howard Gardner's Multiple Intelligences theory (MI theory), its application in educational settings, and the results of using MI theory in the field in a number of creative ways. Professional educators recognized the theory as a scientific confirmation of what they already knew—that students learn differently and have different intellectual strengths. Teachers use the understandings derived from MI theory to teach subjects from multiple approaches, to reinforce learning, and to extend the reach of education to include those who had been excluded by rigid and too-narrow definitions of intelligence. Students frequently respond by taking charge of their own learning and exercising their natural intelligences in imaginative ways.*

Since the advent of civilization, every culture has prized different aspects of human intelligence. The natives of the Caroline islands in the Pacific hold long-distance navigators in great respect. The ancient Celts of Ireland regarded the brotherhood of astronomers with awe, for they understood the times and seasons, and ordered the year. The devout Muslims of Iran hold those scholars who memorize the entire Koran in high regard. Yet, in modern American society, there is a curious discontinuity between those skills which are highly regarded in the popular culture and those skills which are taught in the public schools. Professional athletes are exalted, popular musicians are celebrated with dionysiac frenzy, and cinema actors are worshipped. Yet rarely in the public school syllabus are their skills examined or taught, and those students who aspire to such endeavors must pursue their dreams as extracurricular activities.

Why should this be the case? How is that highly-prized aspects of a culture are not taught as part of public education? Why should the skills required to demonstrate learning *outside* the school differ so fundamentally from those skills required *inside* the school? (Hearne & Stone, 1995). Part of the answer lies in the narrow aspect of what has been regarded as intelligence in western European society. Since the beginning of public education in the United States, the trivium has been reading, writing, and arithmetic, all other study is peripheral. In consequence, when intelligence tests are given, or when IQ is calculated, these aspects of intelligence are given priority. For the past century, intelligence in Americans has been calculated in terms of linguistic/verbal ability and logical/mathematical understanding.

Generations of students have been told that they simply were not smart enough to pursue a professional career, or an advanced degree. As Robert Ornstein put it, "Cultures have radically different approaches to the training and the cultivation of the mind, and when these differences arrive at simple-minded testing sites, lives are ruined" (2003, p. 166).

As a result of recent legislation, those simple-minded testing sites will wield greater power than ever before. The government of the United States is determined to move away from the old system of winnowing out only the most promising students in the public education system, and is now insisting that all graduates of all schools be quality learners. This includes minorities who have historically lagged behind the White majority in test scores, immigrants who may not be fluent in English, and the learning-disabled. The challenge looks insuperable.

A key to meeting the challenge may be found in recent studies of how learning is actually accomplished. One crucial aspect which is commonly neglected is feelings. Learning cannot be divorced from the organism doing the learning. The student is certain to have feelings about the subject being taught, as well as the means and the person used to teach it. If his feelings are positive, the learning may progress; if the feelings are negative, learning is impeded (Taylor, 2001). Significantly, stress is one of the negative factors which can make learning difficult, if not impossible—and there is a very strong link between meaninglessness and stress (Caine & Caine, 1994). Attempting to *teach* students by forcing them into memorization of disconnected facts, formulae and arcane trivia in order to pass a very important test with lifelong

consequences is so wrongheaded it approaches grandeur.

Another necessary component of meaningful learning is a sense of *embeddedness*, a sense of wholeness that arises when the student sees how academic subjects relate to each other and to human beings. Every practicing professional understands this—literature is deeply embedded in history. Art, science, and mathematics are, also. Art relies upon the knowledge contained in chemistry and science for the formulae that help create lasting paintings, pottery, and sculptures (Caine & Caine, 1994). Now science aims the Hubble telescope at deep space and brings back portraits of galaxies that look like gauzy geometrics, abstract washes and frozen explosions painted in the colors of starlight, nebula, and corona.

Split-brain research reveals another part of the learning puzzle. The left and right hemispheres of the brain are significantly different (Springer & Deutsch, 1985). In a healthy individual, however, the two are inextricably interactive, whatever subject a person is dealing with. The left brain tends to organize information by reducing information into parts, while the right brain tends to appreciate and work with information as a whole, or as a series of wholes. (Caine & Caine, 1994). This interconnectedness of concepts allows us to deal with the world in a way that other creatures' minds cannot—our brains move from parts to wholes and back again incessantly, with understanding from each informing the comprehension of the other. This concept, that parts and wholes always interact, is crucial to working with and comprehending the world. Everything is part of something bigger. Everything is made up of smaller parts. Parts and wholes are interactive—they give meaning to each other, and derive meaning from each other. For example, vocabulary and grammar are most readily understood when they are embedded in genuine, real-language experience (Caine & Caine, 1994). It is simply the way the brain works.

One theoretical framework shows great promise in reconciling the public school's concept of intelligence with that of the world outside. It includes those cultural aspects formerly ignored or slighted in public education, takes advantage of science's new understanding of the human brain, and has shown great promise in reconciling art with science, and feeling with cognition. In 1983 Howard Gardner delineated his multiple intelligences theory, asserting that

intelligence was not adequately assessed by intelligence tests. He stated that "if we are to encompass adequately the realm of human cognition, it is necessary to include a far wider and more universal set of competences than has ordinarily been considered" (Gardner, 1983, p. x). Dissatisfied with the restriction of the definition of intelligence to merely the verbal/linguistic and logical/mathematical aspects considered in the standard intelligence test, he defined intelligence as "the ability to solve problems, or to create products, that are valued within one or more cultural settings" (Gardner, 1983, p. x). He posited eight domains of intelligence; the verbal/linguistic, logical/mathematical, spatial, musical, bodily/kinesthetic, interpersonal, intrapersonal, and naturalist. Everyone is born with all eight of these intelligences, he said, and everyone develops his or her combination of intelligences differently.

It should be noted that Gardner restricted his definition of intelligences to domains in *real life*—taking paper-and-pencil tests does not qualify as a domain of intelligence (1993). In promulgating his theory, he illuminated an entirely new range of possibilities for educators. As Mindy Kornhaber put it, his theory validated every educator's observation that people learn in a variety of ways (2004). Since 1983, the MI theory has been studied and implemented all over the world. It appears that the theory of multiple intelligences is that rarity so frequently referred to and so seldom seen — a paradigm shift. This paper will examine the basis for the theory and the effect it has had in application in the field of public education.

### Intelligence Defined

Gardner was not the first to attempt to elucidate the phenomenon of intelligence. Since Binet first attempted to quantify the activities of the human brain in 1893, there have been repeated attempts to fix a precise working definition to the mysterious activities of the electric pudding within the human skull. The father of American educational psychology, Edward Thorndike, believed that our mental capacities cluster in three intellectual commonalities. Thorndike (1968) specified three clusters of mental ability; social intelligence, concrete intelligence, and abstract intelligence. His mechanistic, behavioral concept of education was dedicated to turning all teaching into a scientific profession, with all educators adhering to the scientific method and spirit and with the

all-important scientifically designed test at the heart of the process (Spring, 2005). Ellen Lagemann notes that “Dewey has been revered... (but) Thorndike’s thought has been more influential within education. It helped to sharpen public school practice as well as scholarship about education” (Lagemann, 1989, p. 185).

Other intelligence theorists have attempted to model intelligence to a unitary specification. Charles Spearman, in his work *The abilities of man: Their nature and measurement* (1927), speculated that everyone has a general intelligence factor, defined as *g*, as well as a specific task related ability, labeled *s*. Spearman’s idea of a single general factor to represent what all tests have in common never seemed to reach full agreement, with *g* being variously described as a kind of mental energy, a generalized abstract reasoning ability, or an index measure of neural processing speed (Neisser, Boodoo, Bouchard, Boykin, Brody, Ceci, et al., 1996/2005). As theoretical neurophysiologist William Calvin points out, intelligence is framed in curiously narrow terms much of the time, as if it is some more-is-better number that can be assigned to an individual in the same manner as a batting average (1996).

Dissatisfied with attempts to limit intelligence to a single unitary factor, J. P. Guilford proposed an alternate model of human intelligence. Guilford proposed a multifactor theory of intelligence, rather than the prevailing unitary model. His structure-of-intellect model involved 120 factors derived from three categories of intellect: five areas of operation—cognition, memory, divergent production, convergent thinking, and evaluation; four content areas—figural, symbolic, semantic, and behavioral; and six products—units, classes, relations, systems, transformations, and implications (1967). Guilford pioneered the multi-factor approach to intelligence and broadened the view of this concept. By including such factors as social judgement—the evaluation of others’ behavior—he provided the foundation for including abilities such as interpersonal and intrapersonal intelligence into present concepts.

More recently, Robert Sternberg has proposed a triarchic model of intelligence that emphasizes unique aspects of human adaptability not found in previous theories. This Triarchic Theory posits three facets of intelligence; *analytical* intelligence, similar to the standard psychometric definition of intelligence; *creative* intelligence, which involves insight, synthesis

and the ability to react to novel stimuli and situations; and *practical* intelligence—the ability to grasp, understand, and solve real life problems, also known as *street smarts* (1985). Sternberg objects that Gardner’s definition of intelligences includes facets that should be termed *talents* (Miele, 1995).

In Gardner’s seminal work *Frames of mind: The theory of multiple intelligences*, seven primary types or styles of intelligence are described—linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, interpersonal (knowledge of others), and intrapersonal (knowledge of self). Some years later (1997) he added an additional domain, the naturalist intelligence. He and his compatriots are currently studying two additional domains, the existentialist intelligence and the moralist intelligence.

It must be admitted, and Gardner (1983) admits it, that these intelligences are fictions. They may be useful fictions for discussing processes and abilities that are continuous with one another—like all of life. Nature, however, does not allow such sharp distinctions into rigid categories. Intelligences are separately described and defined in order to illuminate scientific issues and to yield an approach to practical problems. These intelligences are *not* concrete realities and may be treated as such *only so long as we remain aware that this is what we are doing*. These eight types of intelligence, then, may allow us an understanding of human intellect that the conventional IQ test ignores, distorts, or glosses over. It should be understood that in the study of skills and abilities there is commonly a distinction between *know-how* and *know-that*. For example, many people know how to ride a bicycle, while relatively few can explain the physical and engineering processes behind such a feat. It is useful to think of the various intelligences chiefly as *sets of know-how*—as procedures for doing things. Propositional knowledge must be left to another’s study. It also must be emphasized that strength or weakness in one area of intelligence does not predict strength or weakness in any other area of intelligence, and that the various intelligences work autonomously as well as together in complex ways.

### Linguistic Intelligence

Language is a pre-eminent instance of human intelligence, and has been the most thoroughly studied intelligence. Every human with the requisite modicum of intelligence learns language, even the deaf. Some cultures place

greater emphasis upon an oral tradition, while Western European civilization, since the advent of Gutenberg's printing press, places relatively greater value on the written word. In our educational institutions, language invades and frequently dominates every field of learning except mathematics. However, language is most commonly used as a tool to achieve practical ends. Language is used by Jay Leno to entertain, by Martin Luther King, Jr., to inspire, by Carl Sagan to instruct, and by Nelson Mandela to persuade. The language itself may not be mesmerizing or top-quality, but the purposes for which language is used serves to improve the quality of, or at the very least, to affect listeners in some real way (Armstrong, 1993).

### **Musical Intelligence**

Our lives are saturated with music. Our most important rites of passage—weddings and funerals—would be incomplete without music. From ee-i-ee-i-oh to Mendelssohn's *Wedding March* to the *Nunc Dimittis*, our lives are bounded by music. Yet musical intelligence is curiously absent from IQ tests. "Moreover, precisely because it is not used for explicit communication, or for other evident survival purposes, its continuing centrality in human experience constitutes a challenging puzzle" (Gardner, 1983, p. 123).

Musical intelligence, when it manifests itself in its most striking form in a Bach or Beethoven, seems to be something godlike, practically external to human existence. Its power to evoke emotion gives it a mystical aspect unlike other intelligences, and indeed, it can serve to illuminate all others. In *Teaching and Learning through Multiple Intelligences*, a student recalls a class he had which was called music appreciation, but which he did not think of as a class at all. He just thought of it as a time when the class sang songs together, and where they also learned that English can precisely communicate the writer's thoughts and feelings. He remembers "We were learning history through the songs of the nation.... We were learning math, discovering the relationships between parts, and that composition followed mathematical rules. And, we were learning to listen; if you don't listen you can't learn" (Campbell, Campbell, & Dickinson, 1999, p. 144).

The ability of music to link different kinds of learning has been used by advertisers for years, and every citizen of the United States will almost involuntarily supply the lyrics to advertising

jingles, television show themes, and old popular songs, upon hearing nothing more than the initial musical phrase. Yet education seems curiously reluctant to tap into this powerful source, despite its known value as a mnemonic and its effect on the learning environment. Music can have an effect on pulse, blood pressure, and muscle tension. Music that plays at or near 60 beats per minute improves learning and memory. It actually slows down brain waves and increases optimum functioning (Prigge, 2002).

### **Logical-Mathematical Intelligence**

The mathematical intelligence begins in the natural world, with the child counting blocks or cookies, but it progresses rapidly into the ethereal, with mathematicians debating pure abstractions. Nonetheless, many students seem incapable of advancing beyond the boundaries of elementary arithmetic, with algebra and trigonometry remaining terms of mysterious portent throughout their schooling.

Logic and mathematics have had different histories, but have recently become indissolubly intertwined. In consequence it is now impossible to draw a line between the two, for the two have become one. "They differ as boy and man: logic is the youth of mathematics and mathematics is the manhood of logic" (Gardner, 1983, p. 135). With the advent of digital calculation and the rise of computer sciences, this link is poised to grow even stronger. Curricular adaptations to strengthen the teaching of logic in schools would seem to be called for.

### **Spatial Intelligence**

"There is something special about spatial ability" (Gardner, 1983, p. 175). Spatial intelligence is simple to describe with the use of diagrams, graphs, or patterns, but verbal descriptions only serve to confuse. Indeed, dualists speak of two systems of representation—a verbal code and an imagistic code. Put simply, spatial problems call upon the power to create a mental image, or to correctly apprehend a given image.

This spatial ability is not limited to the visual arts, though its highest flowering may be seen in painting and sculpture. An infant aspiring to toddler-hood, pulling herself up on furniture and gauging the distance to the next support, is demonstrating spatial abilities. Similarly, the freeway driver who hurtles through traffic at more than a mile a minute, navigating around other vehicles going off and coming onto the road, is demonstrating spatial ability. Unlike

logical/mathematical intelligence, an intelligence that begins in the real world and progresses to the abstract, spatial intelligence remains tied to the concrete world of people and objects.

### **Bodily-Kinesthetic Intelligence**

In 1637, French mathematician René Descartes published the second volume of his philosophy, *Meditations* 2, and in it formulated his famous dictum, *Cogito, ergo sum*—"I think, therefore I am" (1958). In consequence, intellectual activity has come to be identified almost exclusively with logical-mathematical and linguistic ability. Physical activity has become lower-class, the province of manual laborers and athletes, and athletes are often regarded as dumb jocks. Working with one's hands in manual arts is given a second-class status in comparison to the higher world of the humanities and sciences. Even today, with many Americans spending time working out on the Nautilus, weight-training, or playing racquetball, bodily culture is not regarded as having anything to do with the mind. Multiple intelligences theory seeks to heal this old division between body and mind by regarding physical activity as an intelligence in its own right (Armstrong, 1993). Students who are restless, who drum and tap through a lecture, may in fact be signaling their eagerness to learn, that body movement is essential to their thinking processes. For them, observation is beside the point—participation is the pathway to their minds. These athletes, dancers, actors, and builders need to learn with their bodies. Bodily-kinesthetic intelligence includes coordination, speed, and dexterity in controlling the body's movement in fine- and gross-motor patterns (Mettetal, Jordan, & Harper, 1997).

### **Interpersonal Intelligence**

Interpersonal intelligence is an ability to understand how social groups work. Everyone except sociopaths would seem to be gifted with this intelligence, and its growth can be plotted throughout childhood and adolescence. The pre-school child learns that she can only understand her own place among others with clues from the external community; the child is impelled to focus on others, as a clue to herself. By the time she enters school the child understands that she sees things in a certain way that might be different from others' perspectives, but has the capacity to understand others' points of view. With greater maturity the importance of friendships deepens, and the pre-adolescent

begins to appreciate complex personal interactions, both real and possible.

By adolescence, interpersonal intelligence begins to coalesce, the two understandings—that of one's own person as well as knowledge of others—may merge to form a sense of self; the maturing person marks out a role with which she herself is comfortable in terms of her own feelings and ambitions, and develops as a person in a way that makes sense in terms of the community's overall needs (Gardner, 1983).

With maturity this interpersonal intelligence encompasses a greater portion of life's possibilities. An individual may find his life's work concentrated in this field as a counselor or therapist, as a lawyer or executive officer in a corporation. Issues of importance might include generativity—the transmission of values, understanding, and the possible richness of existence to the next generation (Gardner, 1983). The British psychologist N.K. Humphrey placed special emphasis on the creative capacities involved in our understanding of the social world. He went so far as to make the claim that the chief creative use of human intelligence lies not in the traditional areas of science and art, but rather in simply holding society together. He points out that social primates are necessarily calculating beings, forced to forecast the consequences of their own behavior as well as to calculate the likely behavior of others, and to estimate possible benefits and losses, all in a fluid context where the relevant evidence is subject to change, even as a consequence of their own actions. Only an organism with extraordinary intellectual skills can juggle so many variables in such a changeable context (Gardner, 1983). Yet, curiously, our public education assumes that this intelligence is peripheral, or cannot be taught except through such punishments as detention for transgressing the social order of the school.

### **Intrapersonal Intelligence**

The intrapersonal is closely tied to the interpersonal, for the reasons pointed out earlier; that as children we may only understand ourselves in relation to others in our family and community; as adults we define ourselves by our social status and our place in clubs, organizations, corporations, and churches. Linked to this, but not identical to it, is that inward sense of oneself apart from community.

Psychologists speak of the internal adjustments a person makes as *self-actualization*, or *integration*. Intrapersonal intelligence may be

thought of as a scientific attempt to incorporate the feeling, emotional aspect of human nature to the intelligence equation. In recognizing that humans are more than their logical responses to the demands of everyday life, issues such as personal identity and motivation may be recognized as an integral part of a being's adaptation to its environment (Shepard, Fasko, & Osborne, 1999). It would be an error to assume that only adults can arrive at such self-understanding. Children frequently exhibit an uncanny, intuitive understanding of themselves, and can possess amazing strength of personal autonomy. Intrapersonal intelligence has been defined generally as the capacity to self-reflect, to have an accurate and truthful model of oneself, and to be able to use that model to operate effectively in life (Gardner, 1993).

#### **Naturalist Intelligence**

In 1996, Gardner added a new intelligence to the original seven, the Naturalist Intelligence. Students endowed with the naturalist intelligence are able to discriminate among living things such as animals and plants. In addition, they are especially sensitive to other natural phenomena, such as cloud and rock formations. This ability was crucial to our evolutionary forebears as hunters, gatherers, and farmers, and it continues to be important to such careers as botanists and naturalists, as well as chefs. The kind of discernment shown in this intelligence may also be pivotal in our consumer society, helping people distinguish high-quality sneakers, microwaves, vacuums, and automobiles from the mass of lower-quality goods (Gardner, 1996).

Historically, many people of world-changing intellect have exhibited this intelligence, whether artists like John James Audubon, or scientists like Galileo, Jacques Cousteau, Rachel Carson, and Charles Darwin. Through their patient insistence upon close attention to the patterns they perceived in the natural world, they enlarged the understanding of everyone who followed them.

#### **MI Theory Applied in the Classroom**

As soon as Gardner's theory of Multiple Intelligences (MI) was in print, teachers all over the United States felt a shock of recognition. The MI theory fit so well with what teachers had already observed in their own classrooms that programs to implement it sprang up like mushrooms in springtime (Kornhaber, 2004). There was no attempt to coordinate these programs, or make them fit a universal template.

Just as Gardner maintains that every person has his or her own special cognitive profile, so too have educators shown that there is no single best way to apply the multiple intelligences concept (Campbell et al., 1999).

It must be noted that the Multiple Intelligences theory is basically a psychologist's view of intelligence, and was not intended as a revolutionary educational tool. For Gardner, the multiple intelligences theory is not an educational end in itself. Instead, it is a powerful tool for understanding students and their learning abilities (Hopper & Hurry, 2000). This tool has tremendous appeal for educators, who used it as a means of categorizing and understanding their own educational repertoire. As one teacher said, MI "allows us to work from our heart and our head together" (Kornhaber, 2004, p. 69). It is possible to categorize the varieties of MI applications into four broad subdivisions—curriculum design, teaching methods, learning activities, and assessments.

#### **Curriculum Design**

We may visualize any topic as a room with at least five doors or entries into it. Students may choose different entry points, or different routes to follow once they have entered. Teachers who are aware of the various entries can use them to introduce new materials; as students explore other entry points, they have a chance to acquire those multiple perspectives that serve to inoculate against stereotypical thinking (Gardner, 1993). Multiple intelligences theory helps teachers see that any subject can be taught in any number of ways. When youngsters are matched to congenial approaches of teaching, learning, and assessing, they enjoy a great likelihood of educational success (Hopper & Hurry, 2000, p. 28).

Some school principals have seen Gardner's multiple intelligences theory as a framework for enhancing instruction without any curriculum overhaul. The first such multiple intelligences school in the U.S. was Key School in Indianapolis, Indiana. There teachers, parents, or members of the local community mentor students in 17 crafts or disciplines, each one called a *pod*. Each student chooses one of these pods to attend four times a week to work on material related to one or more intelligences (Campbell, 1997). These pods are open to every student in the school, so children of different ages work together.

A school in Great Britain planned a project exploring 'using multiple intelligences in the

classroom,' carried out with the assistance of teachers in local primary and secondary schools, across a wide range of subjects. The seven secondary teachers and three primary teachers involved were unfamiliar with Gardner's Multiple Intelligence theory and its potential application in the classroom. Teachers were introduced to the theory through a planned schedule of training, and shown various ways of approaching learning through the intelligences. Workshops gave teachers a chance to explore their own intelligence profiles, to gain an understanding of the theory and formulate plans for exploring the use of MI theory in their classrooms (Hopper & Hurry, 2000).

Using Gardner's theory as a framework for a number of learning activities, teachers were pleased to find that students used them to understand their own intellectual strengths and weaknesses. Pupils quickly became aware that they could use different ways to learn, and began to see the possibilities of becoming responsible for their own learning (Prescott, 2001). One pupil was struggling with the science course, unable to comprehend the questions on the set examinations. *He simply could not grasp what the question was asking.* Then the class studied weather, using techniques borrowed from MI. The boy was able to use drawing and drama, two of his special strengths, and produced a video presentation at the end of the study. The video production and use of his drama skills in his Science project changed him. According to an observing teacher, it was like unlocking a door or opening a floodgate on a river, allowing something to flow out of him (Hopper & Hurry, 2000). Here a pupil was allowed to use his spatial and bodily/kinesthetic intelligences to gain access to a level of understanding which had been denied him in the traditional lecture/examination format. His efforts earned him an additional bonus of increased self-confidence.

ESL (English as a Second Language) teachers from eight states participated in an action research study to determine the impact of using multiple intelligence theory in daily classroom activities. Lessons began with a brain-teaser or riddle for each group of students. Students worked collaboratively to solve the riddles, after which they practiced describing commonly known objects to each other. This activity was later moved to large-group discussion, and then students were encouraged to reflect on their new learning and apply it to their lives outside the classroom. At the end of the

study, students in both the experimental and control groups demonstrated improved oral and written proficiency in the target language, but results showed that students in the MI-based instruction outperformed those in the control groups. They also indicated a higher degree of satisfaction and a more positive attitude toward their language study, were more enthusiastic about learning and exhibited fewer behavior problems (Haley, 2004).

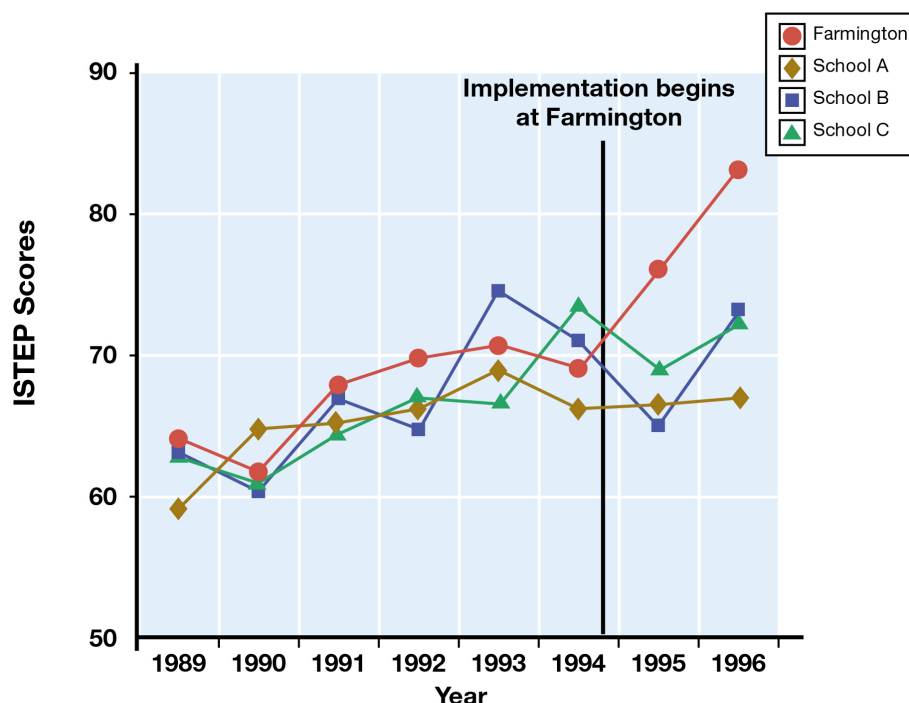
Similar improvements have been noted by teachers who introduce MI-based instruction into their curriculum for learning-disabled students. For too long, special educators' jobs have been defined as a deficit-driven activity, but MI theory looks for strengths rather than weaknesses. By emphasizing what the students want to know, and by encouraging them to complete challenging tasks based on their own interests, the learning-disabled students' passions are involved and their creativity and productivity are unleashed (Hearne & Stone, 1995).

In 1992 a K-5 elementary school in north central Indiana, Farmington Elementary (a pseudonym), received a new principal. Sheryll Harper was dedicated to meeting the needs of all students, and had visited schools that had adopted an MI curriculum. After a great deal of reading and discussion with her faculty, the decision was made to introduce an MI curriculum at Farmington. The planning process was completed during the 1993-94 school year and implemented the following school year (Mettetal et al., 1997).

A block scheduling plan, termed *flow*, grouped all outside activities—library, music, activity room, and gym—into two half-day sessions, leaving large blocks of uninterrupted class time for the other days. Flow also let all the teachers in a particular grade level share their planning time. An activity room contained games and activities to stimulate each of the seven intelligences. Additional enrichment clusters brought children of all ages with a common interest together for four one-hour sessions, with topics ranging from storytelling to folk dancing (Mettetal et al., 1997).

In such a reorganization, Ms. Harper realized that accountability was paramount. She enlisted the aid of two other researchers to assist her in investigating the application and outcomes of the MI curriculum. In the study, several methods of data collection were combined, including observations, interviews, and mailed surveys. An emphasis was placed on the triangulation of data to ensure their validity (Mettetal et al., 1997).

Figure 1. Mean ISTEP Scores of Third Graders from Four Schools



The first year was difficult for some teachers, who found applying MI in their classrooms to be daunting. Some were trying to provide more choices to students along the lines of multiple intelligences theory, while others seemed overwhelmed by the task of designing those learning tasks and evaluations. There were several key components to what the children were told, for example, that there are many different kinds of intelligence and everyone is good in some but weak in others. Students were also told that all eight types of intelligence are important and that none is more important than the other. Significantly, the pupils responded in an almost uniformly positive fashion. “‘It gets you so that you’re not putting anybody down—you’re not putting yourself down!’ said a fifth grader” (Mettetal et al., 1997, p. 118).

Most parents were positive about the new curriculum, and many stressed that adult occupations use all of the intelligences but that school does not. Several parents mentioned that they had not been strong students in the verbal-linguistic and logical-mathematical areas but had found satisfying occupations that emphasized other intelligences. Even more important, perhaps, was the change in teacher’s thinking. Just learning about MI theory made teachers examine their students in a new light and

evaluate ability in a different way (Mettetal et al., 1997).

As in most American schools, Farmington School teachers and administrators were concerned about the impact of their new curriculum on traditional standardized achievement tests, which in Indiana is ISTEP, or Indiana Statewide Testing for Educational Progress. Teachers may privately debate the validity of such tests, but parents and school boards are unhappy when scores decline. Principal Harper was also concerned, because the MI curriculum was not designed to increase standardized test scores. During the week of ISTEP testing in the implementation year, Harper noticed the positive attitude of students. They seemed to have much more self-confidence than usual, and felt better about themselves as scholars. Harper felt that the student’s attitudes might have a positive impact on test scores.

Rather than declining, Farmington’s scores during the first year of implementation were higher than they had ever been. In the second year of MI curriculum implementation, they were even higher (see Figure 1). Most of the data were collected after the first year of implementation, but some changes took longer to be fully implemented. The impact of MI concepts and curriculum may therefore have



been under-represented in the study (Mettetal et al., 1997). A similar study reported a 20% increase in student scores on a state performance test after a one-year implementation of MI techniques (McMahon, Rose, & Parks, 2004).

### Teaching Methods

MI helps teachers to appreciate each other's strengths, and draw on them—which in turn enhances students' learning (Kornhaber, 2004). At one elementary school, the teachers plan and teach in teams based on their own MI strengths. Each teacher takes responsibility for two of the multiple intelligences and makes a contribution to the curriculum accordingly. Students rotate from classroom to classroom, learning from three or four teachers during the course of each unit (Campbell, 1997).

Many teachers use MI theory to promote self-directed learning. Middle school students in one school learn biology by solving a mock crime. They investigate, gather evidence, and propose hypotheses that they must support. Once the crime is solved, they analyze the problem-solving approaches that led to the correct solution (Campbell, 1997).

In an eastern city, students became interested in cancer treatments after one of their classmates was diagnosed with leukemia. The students researched the literature on the subject, interviewed doctors, and visited hospitals to understand the disease and examine therapies. Projects such as these typically span two weeks to two months. Some teachers design three or more projects for a year's curriculum. In this way, they claim, students can cover more information in much greater depth than would be possible with regular classroom approaches (Campbell, 1997).

The apprenticeship is an ancient means of knowledge transmission which has been given new relevance by MI theory. Through apprenticeships, students learn something frequently forgotten in today's hurry-up society, that mastery of a valued skill is gained gradually, with effort and discipline (Gardner, 1993).

The great advantage of apprenticeships, of students learning by example in real-life situations, is that the learning is heavily contextualized. The reason for what is being taught is self-evident—it results in goods and services which can be produced for a profit (Gardner, 1991). In addition, because the trade or craft provides a living for everyone working in it, there is a premium on efficiency, both in production and training, as well as a great

emphasis on clear communication and skillful teamwork. Apprenticeships offer information in depth, most of which is pertinent in an easily recognized way to performance and products of an importance to society that is readily quantified (i.e., by a paycheck). Apprenticeships permit aspiring youngsters to work with accomplished professionals, which establishes personal bonds as well as a sense of progress toward a goal. An apprentice can also see a hierarchy of accomplishment, with workers situated at different levels, so he can see where he has been and where he is headed (Gardner, 1991). Such apprenticeships may be offered as part of the school curriculum, or as an extracurricular opportunity for enrichment.

University of Minnesota professor of rhetoric Dr. Lyman Steil contends that the great majority of people are inefficient listeners. After hearing ten minutes of an oral presentation, most listeners hear, comprehend, evaluate and retain about half of what was said. Another 25 per cent is lost during the following 48 hours. Most people manage to retain only about a quarter of what they hear unless they have worked to develop their listening skills (Campbell et al., 1999). This would indicate that a typical school week of 25 hours of lecture results in a little more than six hours of real subject comprehension. Rather than insisting that their students learn to listen more efficiently, some teachers have decided to adopt the role of coach or facilitator. They pose certain problems, create certain challenges, place the student in certain situations, and hope to encourage the student to work out his own concepts, think of ways to test them, and enlarge his own understanding (Gardner, 1991).

### Learning Activities

Designing lessons using MI theory seems to be an exercise whose only bounds are a teacher's imagination. In one high school math class, students learn algebra by using their bodily-kinesthetic intelligence. When they study how to graph equations, they use the school's courtyard, where they identify X and Y coordinates in the lines of the big, square cement blocks that form the pavement. Then they plot themselves as points on the large cement axes. Their teacher claims that when her students physically pretend to be graphs, they learn more about equations in a single session than they do in a month of textbook study (Campbell, 1997). Students who have trouble understanding math concepts embodied in book diagrams show an

astonishingly ready grasp when the same concept is presented kinesthetically, when the student *becomes* the point on a graph. The linking of physical activity with mathematical understanding is not limited to plotting graph points in the schoolyard, or counting cookies and blocks. Another teacher asked his class to determine how many Lego blocks it took to cross the carpet (Carreiro, 1998). Linda Campbell encourages her students to see the patterns in everything from “floor tiles to the shapes of galaxies, from bee hives to modern paintings, from the cross-section of the tree to the layout of the orchard, and from the eggs in a carton to atoms in a molecule” (Campbell et al., 1999, p. 48).

Teachers in a coastal city were concerned that immigrant students were not being properly welcomed and accepted into their learning community. After creating a curriculum with an international focus the teachers became so excited over their unit plans that they invited parents to attend their classes. They even altered the class schedule for a week in order to hold the classes in the late afternoon and evening for the parents’ convenience. The week was a huge success, the students appreciated the cohesive curricular focus. Hundreds of parents—including immigrant parents—attended (Campbell, 1997).

### **Assessments**

An assessment is an opportunity for a student to demonstrate what he or she has learned, and to exhibit higher-order thinking skills. It allows them to generalize what has been learned, share examples, and apply the new understanding to their own experience. The teacher explains the necessary criteria for quality work, demonstrating understanding, and skills, but leaves students free to use original drama, role plays, their own songs, or another approach (Campbell, 1997). In one middle school, students evaluate their own and each other’s learning, work in groups to assess one another’s projects, and include their assessments in their portfolios (Campbell et al., 1999).

Gardner and his research team have endeavored to design straightforward means of evaluating students’ portfolios, both in terms of their educational development and individual characteristics. They have come up with five dimensions of assessment:

*Individual profile.* What does the project reveal about the strength, weakness, and inclinations of the student? This profile includes the student’s intellectual tendencies as well as his

management of the work in terms of perseverance, risk taking, and inclusion of imaginative elements.

*Mastery of facts, skills, and concepts.*

Projects can be gorgeous wonders, yet have little or nothing to do with what is being taught in school. Usually, a bargain is driven between teacher and student: the teacher asks the student to draw on school knowledge in making the project; the student can select those facts and concepts she wants to include.

*Quality of work.* Every project is an expression of a genre, and each genre possesses specific criteria of quality to be used in their evaluation. For example, songs are not assessed in the same way as paintings. As a student continues to work in a specific genre, she learns to think *in* that domain.

*Communication.* Projects allow students to communicate with peers, teachers and other adults, and themselves. Sometimes the communication is overt, sometimes less obvious, but whatever the character of the project, the student’s need to communicate clearly and skillfully is distinct from the work of creating.

*Reflection.* One of the crucial features of intellectual growth is the capacity to stand back from one’s own work and evaluate it. Teachers and students can review work as a team, assess progress, analyze goals, and see the work in relation to prior accomplishments. The student can come to adopt these reflective practices as his own, so that he is empowered to judge his own work when there is no one else to consult (Gardner, 1993).

### **Conclusions**

The theory of multiple intelligences may well serve as the framework for a rethinking of public education in the United States. At present our national emphasis is upon greater accountability for schools and teachers in the form of rigorous standardized testing. These tests, however, are still based on the intelligence quotient thinking of a century ago, with an emphasis upon fact retention, verbal and linguistic skills, and computational abilities.

Today’s students cannot be prepared to deal with the world of a century ago. The world they inhabit and inherit will be a vastly different place, with greater population pressures upon diminishing resources, less allowance for nationalist violence or tribal conflict, and greater speed of communication and a concomitant increase in fellow feeling among mankind. It will also be a world marked by fluid,

multidimensional problems of pollution, scarcity, and accelerating cultural change.

Multiple intelligences theory, with its emphasis upon learner-centered classroom practices and concern for the education of the whole person, can promote inclusiveness and an appreciation of diversity. MI theory appreciates the simple, obvious fact that every student learns differently and takes advantage of that, providing diverse learning experiences in order that one subject may be learned in many different ways to provide a realistic, robust understanding instead of hollow knowledge based upon recitation of facts and formulae (Haley, 2004).

One result of the implementation of multiple intelligence practices in schools appears frequently in the literature—students feel more enthusiastic about learning, and show appreciation for the increased variety of instructional styles employed (Kornhaber, 2004). In consequence, classroom behavior problems are minimized, and teachers feel that their classroom management skills are vastly improved (Haley, 2004). Also, because the teacher must actively seek out information as to each student's intelligence strengths, the student is helped to understand that *who they are* is important to their teachers (Daniels & Bizar, 2005).

Every student in school needs inspiration, and every student needs to enjoy a feeling of worth. MI theory helps educators understand that what is world-shaking inspiration for one student may be baffling to another. A drama student whose strength lies in verbal/linguistic intelligence, for example, will enjoy Shakespeare's *Romeo & Juliet* for the beauty of the poetry, while his fellow student, who has poor linguistic skills but strong abilities in bodily/kinesthetic intelligence, will only memorize his lines of poetry in order to take part in the swordfights. The traditional means of conferring worth upon students restricted all learners to the same pedagogical litany and insisted that proper responses must fit certain narrow parameters. Invariably, this resulted in a few students being regarded as having value, because their intelligence types aligned with those emphasized by the school system's testing regimen—that is, verbal/linguistic and logical/mathematical. The rest of the students, all those of different and less-valued intelligence types, could count on being reprimanded for not trying hard enough (Daniels & Bizar, 2005).

The understanding engendered by MI theory places the responsibility for learning equally

upon the student and the teacher. The student is responsible for owning his or her own education, and the teacher is responsible for seeing that every intelligence domain in the classroom is valued, and addressed as frequently as possible. When students are given more choices, their motivation rises and they tend to expend more energy and time mastering a field of study (Elias, 2004). The teacher serves as facilitator and coach, helps to correct misconceptions and guide students away from frustrating dead-ends, and helps them evaluate their learning at the end of a project or period of instruction.

The great weakness in instituting multiple intelligence processes in schools is that evaluating learning is so difficult, at least by comparison to the standard curriculum. When the very concept of learning is restricted to a limited number of facts and formulae, evaluation is a simple matter—either the student can regurgitate the facts for a test, or he/she cannot. With MI instruction, students usually become involved in creative endeavors in groups. Each student contributes a crucial portion of the overall work, and the finished product may be breathtaking. The teacher must assign a grade to each member of the team, but there is no clear delineation of responsibilities for the final product. Even the team members cannot say for certain which idea belongs to whom, or which member of the group contributed the most. At present, this evaluation of learning is done in terms of a debriefing; each student submits a log of activities performed during the project, and the teacher questions them about productive and reflective skills attained (Gardner, 1993).

This difficulty of assessing learning in narrow traditional terms need not be seen only as a deficit, however. IQ testing began as a single instrument intended to be used for a circumscribed purpose, but it has grown into a multinational industry. Schools formerly administered such a test as an embellishment to an established and well-thought-out curriculum, but now entire schools have been designed for the express purpose of improving performances on similar standardized, norm-referenced tests. "It is not an exaggeration to say that we have let the testing tail wag the curricular dog" (Gardner, 1993, p. 70).

In society, we do not have tests to determine who will become a leader—the leaders emerge as a consequence of their skills combined with circumstances. There are no true-false quizzes to determine who has written the newest bestseller. Perhaps we can develop school environments

where the natural and acquired strengths of individuals will emerge in their daily solutions of problems and creation of new products. Perhaps our schools can become places where the distance between what students are doing and what they will do in the future has narrowed (Gardner, 1993).

### **Recommendations for Practice**

What multiple intelligence theory does is allow a teacher to regard each student as an individual, with an individual's strengths and weaknesses, and then teach the curriculum toward the student's strengths. It has been clearly and scientifically established that people have minds that are uniquely individual, and very different from one another. Rather than pretending that everyone has, or should have, the same kind of mind, MI instruction tries to make certain that everyone receives an education that maximizes her intellectual possibilities (Gardner, 1993).

Any teacher interested in introducing MI instruction should first of all look at existing programs to see what already incorporates multiple intelligences. Linguistic intelligence, of course, is part of almost every facet of a school curriculum. Students may keep a journal as part of language arts. Drawing and writing are similar activities, and illustrating their own journal entries is a simple way of bringing in spatial intelligence (Daniels & Bizar, 2005). Encourage them to share their journals with others, and reflect upon the topics that they enter. This will incorporate interpersonal and intrapersonal intelligence (Faculty of New City School, 1994).

Examine the sharing of information in the classroom. When students work with hands-on activities, this introduces bodily kinesthetic intelligence. When students are encouraged to respond to material by making presentations, their interpersonal intelligence is used, since the student doing the presentation will be very aware of her audience and their reactions. When students make up rhymes or songs for mnemonic purposes, they are incorporating musical intelligence (Faculty of New City School, 1994).

For teachers who want to do more, determine student's MI domains. A short quiz is appended (see Appendix) which can be understood by most students above grade five. Other tests are available for younger students. Students should be encouraged to score themselves, and to share the results of the quiz with others and the teacher. Most students are pleased to be taken into account, to have someone asking about them

and their interests. Responses that are not congruent with what a teacher already knows about a student may need to be followed up with a personal interview, but it cannot be assumed that an educator's evaluation of a student is the correct one. People have hidden depths at every age, and the noisy boy may have a hidden desire to paint pictures, and the quiet girl may be an avid outdoorswoman, with a naturalist's intelligence.

The instructor can use the information from the quiz to determine what the student's strengths are, and keep that in mind when constructing lessons or considering how to interest students in the next portion of the curriculum. For example, imagine that the classroom has been divided into work groups in preparation for a multiple intelligence approach to a new book. One group uses intrapersonal intelligence to put themselves into the main character's place, and writes a presentation of the character's thoughts. Another group—the musical intelligence group—finds out about the music which was popular during the historical period of the book, and makes a presentation to the class of music the main character might have heard. A third group whose strength lies in the domain of spatial intelligence, illustrates the protagonist's adventures, or draws a map showing where the main character traveled. Another group with particular strengths in the domain of mathematics could be given the task of calculating the mileage and speed of historical modes of travel in the book. A group interested in bodily-kinesthetic intelligence might create a dance to illustrate a feature of the story, or stage a short play to dramatize a portion of the story. A group who favors naturalist intelligence might research the region the main character travels through, or lives in, and report on the forests, rock formations, and edible plants of the country. For those students whose strengths are in interpersonal intelligence, ask them to conduct an interview with the main character. One student plays the part of the protagonist and the other students create a sheet of interview questions. Every student approaches the story from his or her strongest domain, meets uniform content requirements, and is able to share what they learn from the book with all the others (Faculty of New City School, 1994).

The great beauty and strength of MI theory is that it begins where the students are. It begins wherever the teacher is comfortable making a start. Any teacher may begin anywhere, and build upon successes. Every intelligence cannot

be addressed in every lesson, but every day offers a new opportunity to show students a way of using their innate abilities to forge their own success, own their own educations, and build a deeper and broader understanding of their world.

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## Appendix

### Multiple Intelligences Research Project “Your Seven Kinds of Smart”

Check (x) each statement that applies to you.

Verbal/Linguistic Intelligence TOTAL= \_\_\_\_\_

- ☐ Books are very important to me.
- ☐ I hear words in my head, before I read, speak, or write them down.
- ☐ I am good at word games, like Scrabble or Password.
- ☐ I enjoy entertaining others or myself with tongue twisters, rhymes, or puns.
- ☐ English, social studies, and history are easier for me than math or science.
- ☐ I have recently written something that I am especially proud of.

Logical/Mathematical Intelligence TOTAL= \_\_\_\_\_

- ☐ I can easily compute numbers in my head.
- ☐ Math and/or science are among my favorite subjects in school.
- ☐ I enjoy brainteasers or games that require logical thinking.
- ☐ My mind searches for patterns and regularities in things.
- ☐ I am interested in new developments in science.
- ☐ I believe that almost everything has a logical explanation.

Visual/Spatial Intelligence TOTAL= \_\_\_\_\_

- ☐ I often see clear visual images when I close my eyes.
- ☐ I am sensitive to color.
- ☐ I enjoy doing jigsaw puzzles.
- ☐ I like to draw or doodle.
- ☐ I can easily imagine how something might look from a bird's eye view.
- ☐ I prefer looking at reading material with lots of illustrations.

Bodily/Kinesthetic Intelligence TOTAL= \_\_\_\_\_

- ☐ I participate in at least one sport or physical activity on a regular basis.
- ☐ I like working with my hands on concrete activities (like carpentry, model-building, sewing, weaving).
- ☐ I like to spend my free time outdoors.
- ☐ I enjoy amusement rides and other thrilling experiences.
- ☐ I would describe myself as well coordinated.
- ☐ I need to practice a new skill, not just read about it or see a video about it.

Musical/Rhythmic Intelligence TOTAL= \_\_\_\_\_

- ☐ I have a pleasant singing voice.
- ☐ I play a musical instrument.
- ☐ My life would not be so great without music.
- ☐ I can easily keep time to music with a simple percussion instrument.
- ☐ I know the tunes to many different songs and musical pieces.
- ☐ If I hear a musical selection a couple times, I can usually sing it fairly accurately.

Interpersonal Intelligence TOTAL= \_\_\_\_\_

- ☐ I am the sort of person that others come to for advice.
- ☐ I prefer group sports (like softball) rather than individual sports (like swimming).
- ☐ I like group games like Monopoly better than individual entertainment.
- ☐ I enjoy the challenge of teaching others how to do something.
- ☐ I consider myself a leader, and others have called me a leader.
- ☐ I like to get involved in social activities at my school, church, or community.

Intrapersonal Intelligence TOTAL= \_\_\_\_\_

- ☐ I regularly spend time alone, reflecting or thinking about important questions.
- ☐ I have opinions that set me apart from the crowd.
- ☐ I have a special hobby or interest that I like to do alone.
- ☐ I have some important goals for my life that I regularly think about.
- ☐ I consider myself to be independent minded or strong willed.
- ☐ I keep a personal diary or journal to write down my thoughts or feelings about life.

Naturalist TOTAL= \_\_\_\_\_

- ☐ I have a garden and/or like to work outdoors.
- ☐ I really like to go backpacking and hiking.
- ☐ I enjoy having different animals around the house (in addition to a dog or cat).
- ☐ I have a hobby that involves nature.
- ☐ I like to visit zoos, nature centers, or places with displays about the natural world.
- ☐ It's easy for me to tell the difference between different kinds of plants and animals.

**Areas of Strength (4 or more checks)**

**What I learned about myself that I did not know before**

**Source: Adapted from Armstrong, T. (1993).**

### **Dual-Language Immersion Promotes Bilingualism for both Language-Majority and Language-Minority Students**

*Language-minority children constitute one of the fastest growing population segments within the public education system. Schools must implement effective pedagogical approaches that positively address the linguistic and cultural needs of these students. To ensure academic success, these students must learn within a supportive environment that fosters maintenance of their native language while learning English. Furthermore, dual-language immersion programs allow language-majority students the opportunity to become bilingual and experience the cognitive advantages associated with bilingualism. Therefore, based upon the review of the literature this paper argues that dual-language immersion programs are the most effective models for teaching English to minority-language students while promoting bilingualism for English-speaking students through a pluralistic, additive pedagogy.*

Bilingual education is a highly politicized topic as proponents and opponents debate whether language-minority children should learn English within a bilingual setting or immersed as quickly as possible into English-only environments. Unfortunately, children are caught in the crossfire as different factions argue between pluralistic and assimilationist educational policies. This issue will continue to be at the forefront of public education since the 2000 U.S. Census indicates public schools are becoming more diverse as increasing numbers of language-minority students are entering the public education system (Ovando, Collier, & Combs, 2003). Because of this influx, issues concerning language-minority children become pressing as questions arise on how to successfully meet students' cultural and linguistic needs. Program models need to be mutually compatible and based upon language learning theories for the development of academic components that support and supplement each other (Ramirez, 1985). In other words, programs need to be based upon sound theory and empirical evidence to support that theory.

As the language-minority student population increases, bilingual education is being jeopardized by those who advocate English-only instruction in schools despite numerous studies that have shown cognitive advantages for students who are bilingual (Bialystok & Hakuta, 1994; Cummins, 2001; Kessler & Quinn, 1980; Thomas & Collier, 1997; Tunmer & Myhill, 1984). Educators must be cognizant of appropriate English-language learning methods and several options exist for educators. Bilingual programs such as ESL, sheltered English, transitional, maintenance, and dual-language

immersion are possible options for schools as are the traditional submersion, English-only programs. However, two-way, dual-language immersion programs "can be effective models for teaching academic subjects, for teaching other languages to English-speaking students, for teaching English to students from other language backgrounds, and for fostering positive cross-cultural attitudes and self-esteem among students" (Christian, 1994, p. 13). Within dual-language formats, Anglophone children can develop a foreign-language alongside their non-English-speaking peers without suffering academically (Genesee, 1987; Harley, Allen, Cummins, & Swain, 1990; Lucido & McEachern, 2000), while language-minority children benefit because they are able to utilize the transfer of literacy skills from their native-language to English in a supportive learning environment (Cummins, 2001; Takahashi-Breines, 2002).

No Child Left Behind (NCLB) legislation, compounded with the influence of Ron Unz's English-only initiatives in California, Arizona, and Massachusetts (his initiative failed in Colorado), promotes English learning as the only educational goal (Shannon, 2002). As a result, many schools have migrated from programs that used to encourage additive bilingualism to ineffective English submersion programs, but NCLB legislation left open the possibility to implement dual-language programs if they included English-speaking children for the sake of learning English and a second language (Crawford, 2002). Even some opponents of bilingual education, such as Rosalie Porter (1999), support dual-language immersion because these programs enhance the prestige of the minority language and offer a genuine



opportunity for expanding bilingualism to the general populace. As educators are concerned about dwindling resources for bilingual education, in addition to the constant scrutiny by unconvinced legislators about the benefits of bilingual instruction, dual-language immersion programs that involve Anglophone children appear to be the perfect solution for language-minority children. As Valdes (1997) states: “Linguistic-minority children will still be able to begin their education in their first language, while the presence of Anglophone children will ensure community support” (p. 392).

In order to successfully implement dual-language immersion, several steps must be taken to achieve academic success for all students. Nicole Montague (1997) addresses several key components that are critical to success in dual-language programs:

- (a) definition of the model to be used; (b) a gradual phase-in of the program; (c) development of instruction that reflects the population in the classroom; (d) quality of materials in each language of instruction; (e) teachers committed to attaining bilingual education training; (f) dedicated administrators with a clear understanding of research as well as community needs; and (g) definition of the role of elicited response. (p. 409)

Montague (1997) further explains that dual-language programs reach beyond bilingual teaching by validating students’ home culture and language and are “tantamount to learning if we expect our children to move beyond Maslow’s initial levels in the Hierarchy of Needs” (p. 418). Therefore, this paper argues that dual-language immersion programs are the most effective models for teaching English to minority-language students while promoting bilingualism for English-speaking students through a pluralistic, additive pedagogy.

### History

National recognition and acknowledgement of the special educational needs of LEP (Limited English Proficiency) students occurred after the passage of the 1968 Bilingual Education Act (Ovando et al., 2003). This legislation established new federal policies targeted specifically towards language-minority children that emphasized increasing the English-language skills for second-language learners. Eventually, funding was provided towards those programs

that promoted innovative approaches, which utilized students’ native-language as the basis for instruction (Crawford, 2002).

Prior to the 1974 *Lau vs. Nichols* Supreme Court decision and the 1975 *Lau* remedies, bilingual education focused on programs designed to integrate second-language learners into mainstream classrooms as soon as it appeared these students had the necessary language skills to survive. The 1974 *Lau* decision mandated that public schools provide special assistance for language-minority students, and the subsequent *Lau* remedies specified procedures to properly identify and assess the English-language proficiency of ELL (English Language Learner) students. These guidelines redefined the role of bilingual education by moving beyond transitional approaches to providing “ongoing bilingual/bicultural instruction after students are proficient in English, resulting in students who can function equally well in both languages and cultures” (Ovando et al., 2003, p. 65). As a result, these regulations promoted fluent bilingualism for language-minority children by maintaining the integrity of their native language.

Congress reauthorized the Bilingual Education bill in 1978, and it allowed for the participation of English-speaking children in bilingual programs conducted in minority languages. By providing funding for “integrated bilingual classes, foreign-language education for language-majority students was enhanced, and at the same time, a few policy makers viewed native-language maintenance for language-minority students as a national priority for the first time” (Ovando et al., 2003, p. 59). Incorporating language-minority and language-majority children within the same classroom created an impetus for the foundation of dual-language programs and established much needed support from the English-speaking community. Furthermore, in 1980, recommendations were detailed in a new set of *Lau* regulations that specified and proposed other methods of instruction, which included transitional, maintenance, and two-way models for language-minority students (Ovando et al., 2003). These new laws were seen as too strict and, in 1985, new *Lau* regulations were determined by the 1981 *Castañeda v. Pickard* decision, which stated:

- (1) school program[s] must be based on “sound educational theory;” (2) the program

must be implemented effectively, with adequate resources and personnel; and (3) the program must be evaluated and determined to be effective, not only in the teaching of language, but also in access to the full curriculum—math, science, social studies, and language arts. (Ovando et al., 2003, p. 66)

In addition, the federal court mandated that school districts monitor the long-term academic progress for ELL's to assure they are receiving equal educational opportunities. Developmental bilingual education, as it was introduced in 1984 under Title VII of federal legislation, was another way to describe an enrichment program that would accomplish the educational standards outlined in the *Castañeda v. Pickard* decision. This program was

designed for both language minority students and native English speakers. This term emphasizes the linguistic, cognitive, and academic developmental processes in both L1 and L2 that are ongoing throughout the school years in a developmental, or dual-language, or two-way bilingual immersion program. (Ovando et al., 2003, p. 80)

These programs were intended to integrate language-minority and language-majority students within school in order to facilitate academic success while achieving biliteracy and bilingualism for both groups of students.

Official policy centered upon dual-language immersion in 1994 when the Improving America's Schools Act (IASA) followed the recommendations of the Stanford Working Group, a group of language-minority advocates and researchers. They proposed dedicating bilingual education funds to be earmarked for enrichment and innovation programs. Implementation of two-way bilingual programs was strongly encouraged because of their proven effectiveness for both language-minority and language-majority students. As stated by the U.S. Department of Education (1995):

The additive bilingual environment of developmental bilingual education programs is designed to help students achieve fluency and literacy in both languages, meet grade-promotion and graduation requirements by providing instruction in content areas, and develop positive cultural relationships. (As cited in Ovando et al., 2003, p. 62)

However, policy was altered under No Child Left Behind legislation (NCLB) in 2002. The Bilingual Education Act was replaced with Title III of NCLB, which has led to the return of traditional, ineffective, submersion methodologies. Whereas the goals stated in the 1994 IASA strongly encouraged increasing the percentage of promising dual-language programs while promoting bilingualism and biliteracy, these are conspicuously absent in NCLB (Crawford, 2002). As a result, classrooms are increasingly denying comprehensible native-language input within content areas. NCLB, however, does permit for dual-language programs as long as it includes English-proficient students within a language instructional program for the purpose of "enabling all students to become proficient in English and a second language" (Crawford, 2002, p. G4). In other words, if native-English speakers participate with language-minority students in a Title III-funded program, schools can still advocate for bilingual approaches such as dual-language immersion. Ironically, combining equal numbers of language-minority and language-majority students within the same environment is the foundation for dual-language immersion programs.

### **Characteristics of Successful Dual-Language Immersion Programs**

In order for dual-language immersion programs to be successful, several factors need to be addressed to ensure long-term academic success. Parental awareness is highly important when planning a dual-language program and parents need to know what the structure and "goals of the program" are while being "prepared to make the long-term commitments of time and involvement that successful participation in such a program entails" (Cloud, Genesee, & Hamayan, 2000, p. 28). Also, language-minority parents must be informed that their children are going to receive instruction in their native language prior to, or in accordance with, English. Parents need to be aware of the expected achievement goals during the early and later grades so they are not surprised by the outcomes. In communities with a large representation of the mainstream population, members of the majority English-speaking populace are usually quite influential (Cloud et al., 2000). It is critical for them to see the dual-language program as an asset to the whole community. Administrators also have to fully embrace the dual-language concept as part of the entire school system

instead of as an isolated entity. Teachers need to know that the school board and superintendent fully support the aims of the program and are dedicated to its success.

Teacher competencies that are required to ensure success for dual-language programs include knowledge of language development; knowledge of culture; knowledge of subject matter; delivery of instruction in meaningful and varied ways; command of instructional resources; assessment skills and maintaining linkages with families. Quality of instruction, parental involvement, and individualized attention towards students are all highly important. If the curriculum is watered down, does not reflect the students' personal lives, or students are not provided individualized instruction, dual-language immersion will be unsuccessful. Furthermore, teachers need to

consider that some students are learning content through a language they do not speak natively. This means that the language used by the teacher must be modified somewhat, especially in the early grades, in order to respond to the needs of those children who are in the early stages of the acquisition. (Takahashi-Breines, 2002, p. 214)

Within dual-language programs, equal distribution of language-minority and language-majority students should exist and teachers need to cater their instruction so students are fully engaged.

Dual-language programs need to consider the proportion of students who represent each language group and establish quotas because it is highly desirable to maintain a balance between the two groups (Cloud et al., 2000). Attrition does occur and oftentimes results in a lower number of students enrolled in the program in the upper grades. Some schools account for this problem by setting up at least two different classes in earlier grades, knowing students will leave the program. Many programs prohibit new students from enrolling after the third grade unless they can demonstrate adequate proficiency in the minority language. This helps to eliminate the language gaps between those students who have received at least three years of instruction to enhance their bilingual proficiency and those who have not received dual-language instruction. If language-majority students are not performing at expected levels and parents become agitated, their children can "constitute powerful forces that can change the attitudes of a

community, a school superintendent, or a school board" (Cloud et al., 2000, p. 33). The integrity of the program must be maintained even if English-speaking students show early signs of falling behind in their language development. Eventually, they will attain high levels of the majority-language because they live in an English-speaking society. Since many aspects of language development occurs within the community, fostering language equity within schools contributes to language equality among students (Ovando et al., 2003).

Understanding the status of each language spoken within the school, as well as in the surrounding community, is extremely important in dual-language programs. If both languages are given equal status, students are more likely to develop high academic achievement. Schools must make every effort to include both languages in school activities and announcements, and partnerships should be created with institutions where a language other than English is used. Disparity cannot exist between the two language groups: English-dominant students are expected to achieve the "same levels of proficiency in the non-English language as non-English-speaking students are expected to attain in English" (Cloud et al., 2000, p. 38). However, it must be understood that numerous minority languages likely to be taught within dual-language programs are not held in high esteem by the dominant culture. Dual-language programs are designed to nurture and propagate respect for minority cultures and languages. Because English is the language of power, and likely to be used by children when they are on the playground or lunchroom, every effort must be made to promote the ideals of the non-English language to increase the status of the minority language (Cloud et al., 2000).

Two major patterns exist regarding language allocation in dual-language bilingual education programs: 90/10 and 50/50 models. 90/10 models are when

90 percent of the instruction is carried out in the non-English language and 10 percent is carried out in English, and 50/50 programs, in which the percentage of instruction in each language is roughly equal. The goal of these programs is for majority Anglophone children to develop a high level of proficiency in a "foreign" language while receiving a first-rate education, and for minority children who do not speak English to benefit from having instruction in their

mother tongue, as well as by interacting with English-speaking peers. (Valdes, 1997, p. 391)

The 90/10 models typically begin in Kindergarten where the minority-language is used 90% of the time and the majority-language the remaining 10%. As children pass through the program, the percentages of minority and majority-language use gradually converge” (Smith & Arnot-Hopffer, 1998, p. 106). Once students reach the fifth grade, classes are conducted in a 50/50 model. However, as with any academic subject, program quality is the foundation for achieving long-term academic success. Simply implementing dual-language immersion does not guarantee success. As Valdes (1997) states:

Poor quality bilingual programs do not work any better than poor quality ESL or submersion programs. Language-minority children are typically at considerable educational risk for reasons that have nothing to do with their bilingualism, so they need the best quality instruction available to insure their continued progress. (p. 404)

### **Research**

Supporters of dual-language instruction rely on studies that show positive cognitive and academic effects of bilingualism, understood as the concurrent development of two languages: “Academic skills, literacy development, concept formation, subject knowledge, and learning strategies all transfer from L1 (native language) to L2 (second language) as the vocabulary and communicative patterns are developed in L2 to express that academic knowledge” (Ovando et al., 2003, pp. 129-130). This statement applies to all situations, whether it is the native-English speaker or the language-minority student. Even staunch critics towards bilingual approaches, such as Rosalie Pedalino Porter, recognize the benefits of dual-language immersion for both minority and majority-language groups. Porter (1999) supports dual-language immersion because it offers native-English speakers the opportunity to learn another language at an early age within the same setting as minority-language speakers. She further states that these programs promote mutual learning, enrichment and respect. Dual-language immersion programs are “considered to be the best possible vehicles for integration of language-minority students, since these students are grouped with English-speakers

for natural and equal exchange of skills” (Porter, 1999, p. 154). Dual-language immersion fosters and promotes the cognitive advantages seen in students who are bilingual.

Various researchers have concluded that bilinguals possess certain cognitive advantages over their monolingual counterparts in addition to the high levels of academic achievement experienced by students educated within dual-language formats. Researchers Kessler and Quinn (1980) cite numerous studies from various sociocultural contexts that indicate bilinguals possibly have advantages over monolinguals in certain measures of cognitive flexibility, creativity, and divergent thinking. Their research indicated that during hypothesis formulation, bilingual sixth-graders scored substantially higher on science problems than their monolingual peers on hypothesis quality. Tunmer and Myhill (1984) have argued that fluent bilingualism results in increased metalinguistic abilities that facilitate the acquisition of reading skills, which in turn lead to higher levels of academic learning. Bialystok and Hakuta (1994) support the idea that people who are bilingual possess a different mind structure than the monolingual. They state:

While it may involve a value judgment to describe it as richer, or more complex, it seems evident that the mind of a speaker who has in some way attached two sets of linguistic details to a conceptual representation, whether in a unified or discreetly arranged system, has entertained possibilities and alternatives that the monolingual speaker has had no need to entertain. The enriching aspect of bilingualism may follow directly from its most maddening complication; it is precisely because the structures and concepts of different languages never coincide that the experience of learning a second language is so spectacular in its effects. (Bialystok & Hakuta, 1994, p. 122)

Bilingualism can result in a myriad of cognitive advantages for all students. Dual-language programs allow English speakers to learn another language alongside their language-minority counterparts and share the cognitive benefits associated with bilingualism.

Dual-language models are based upon research that indicates language-minority children benefit when educated in their native-language without detrimental effects in the

performance of language-majority students. Research indicates that language-majority students benefit from dual-language immersion and do not suffer academically when instruction is conducted in a minority language (Genesee, 1987; Harley, Allen, Cummins, & Swain, 1990). As stated in Cummins (2001): "In virtually every bilingual program that has ever been evaluated, whether intended for linguistic-majority or minority-students, spending instructional time teaching through the minority-language entails no academic costs for students' academic development in the majority-language" (p. 38). Cummins' conclusion are supported by research conducted by Frank Lucido and William McEachern (2000) who concluded that when schooled bilingually within a dual-language format, English reading scores on the ITBS (Iowa Test of Basic Skills) were higher for those children who were more bilingual. Lucido and McEachern (2000) state: "One could conclude that balanced language development appears not to have any negative influence at all on reading comprehension. In fact, in this study the more balanced bilinguals were actually among the highest scores" (p. 91). Dual-language programs enable English-speaking students to effectively learn a foreign language within a format while simultaneously allowing language-minority students to achieve long-term academic success.

Correlation exists between the length of time minority-language children receive quality content instruction in their native-language and their academic achievement in English. Jim Cummins (2001) explains:

Many bilingual students experience academic failure and low levels of literacy in both their languages when they are submersed in an L2-only instructional environment; however, bilingual students who continue to develop both languages in the school context appear to experience positive cognitive and academic outcomes. (p. 174)

The transfer of literacy skills between L1 and L2 is referred to as the interdependence hypothesis and it pertains to any language learner whether one is a native-English speaker learning a foreign language or a language-minority student learning English. This theoretical explanation states that students who have achieved academic language proficiency in their native language will tend to make stronger progressions in acquiring literacy in L2 (Cummins, 2001). These studies suggest, "in contexts in which their culture and identity

are supported, children can develop enhanced cognitive abilities, as well as key academic linguistic skills, which will then transfer to their acquisition of academic English" (Valdes, 1997, p. 404). The most effective method for enabling the transfer of literacy skills, as found by Thomas and Collier (1997), are dual-language immersion programs.

Researchers Wayne P. Thomas and Virginia Collier (1997) conducted a longitudinal study of five large urban and suburban school districts located throughout the United States where large numbers of language-minority students attend public schools. This study conducted from 1982-1996, included 50,000 individuals and gathered data from over 700,000 student records. The researchers mentioned that most short-term studies that examined different language programs, such as ESL and transitional bilingual education, find little difference between various English-language learning programs; however, this longitudinal study found:

Only those groups of language-minority students who have received strong cognitive and academic development through their first language for many years (at least through Grade 5 or 6), as well as through the second language (English), are doing well in school as they reach the last of the high school years. (p. 14)

In other words, the key to high school completion and academic success is students' consistent gains in every subject area during each year of school sustained over the long term. Maintaining native language instruction allows language-minority students to perform at grade-level with their peers and maintain the criteria implicit in the *Castañeda v. Pickard* decision.

It takes second-language learners several years to be able to acquire a language. Thomas and Collier (1997) report that it takes a minimum of four to seven years for children to test within the 50<sup>th</sup> percentile with L1 maintenance support and seven to ten years with no L1 instruction. Language-minority children, who have received all of their schooling exclusively through English, might only achieve six to eight months' gain each school year as they reach middle and high school compared to the ten month gain experienced by the typical native-English speaker. It is important to understand that "developing L2 academic language is not watering down the curriculum; instead, students actively participate in lessons through

meaningful, contextualized language that stimulates students' cognitive and academic growth" (Ovando et al., 2003, p. 129). When students have attained grade-level norms, those schooled in dual-language programs stay at or above grade-level; however, those schooled only through L2 (English) underperform their peers in the upper grades. Furthermore, studies conducted by Lindholm and Gavlek (1994) found that English-background students educated within dual-language formats, at least through the fifth or sixth grade, were 67% to 100% rated as fluent in Spanish on the SOLOM (Student Oral Language Observation Matrix) by the fifth grade; math achievement results from the 54<sup>th</sup> to 91<sup>st</sup> percentile in English and 37<sup>th</sup> to 96<sup>th</sup> percentile in Spanish. The authors concluded that their results demonstrate "the success of the bilingual immersion model in achieving the desired outcomes of bilingual proficiency, achievement at or above grade-level and positive psychosocial competence (among all students)" (Lindholm & Gavlek, 1994, p. 98).

Three main predictors are used to ascertain long-term academic success for language-minority children. The first predictor is that academic instruction needs to be cognitively complex and on grade-level in the students' first language at least through the fifth or sixth grade, and cognitively rich instruction needs to be offered in L2 for part of the day in every grade throughout students' schooling. Thomas and Collier (1997) found that those students schooled in well implemented, dual-language formats outperform their monolingual counterparts. Dual-language students are able to maintain these gains as they progress through the upper grades even if the program is discontinued after elementary school. The second predictor is the use of current approaches to teaching the curriculum through two languages. Students are interacting in classes that utilize cooperative learning strategies within a curriculum that "reflects the diversity of students' life experiences across sociocultural contexts both in and outside the U.S., examining human problem-solving from a global perspective" (Thomas & Collier, 1997, p. 16). Students are acquiring the language through academic content that directly relates to their personal life experiences outside the school. The third predictor is the transformed sociocultural context for language-minority students. The goal is to transform the classroom for ELL's so that they are in a supportive sociocultural context similar to that which the monolingual, native-English speaker's

experience. Once schools achieve this, they have created an additive bilingual context that is universally recognized as a superior model for education. Thomas and Collier (1997) state: "When native-English-speaking children participate in the bilingual classes, language-minority students are no longer segregated for any portion of the school day" (p. 16). The academic community will eventually perceive these classes as enrichment instead of remedial. If these criteria are accomplished, language-minority children will receive a quality, cognitively rich education within a supportive environment designed for long-term academic achievement for every student.

Thomas and Collier (1997) found that dual-language immersion formats are the most effective pedagogy for promoting the sociocultural, academic, cognitive, and linguistic components of students' development. These developmental aspects are interdependent of each other and if one

is developed to the neglect of another, this may be detrimental to a student's overall growth and future success....It is crucial that educators provide a socioculturally supportive school environment that allows natural language, academic, and cognitive development to flourish in both L1 and L2. (p. 44)

High quality dual-language programs allow for the development of all four components to ensure students' success. Academic development is conducted in the native language in content areas to allow the student to develop naturally with his/her grade-level peers. Linguistic development follows the interdependence hypothesis where students are able to move beyond the Basic Interpersonal Communication Skills (BICS) and obtain Cognitive Academic Language Proficiency (CALP)- the decontextualized aspects in L1 that are pertinent to achieving academic literacy in L2 (Cummins, 2001). Cognitive development is allowed to occur naturally and parallel with that of native English-speakers to avoid a slowdown for language-minority children that can last several years if schooled exclusively in English. Dual-language programs provide validation and respect for minority cultures so students feel comfortable knowing that they are in a supportive learning environment. Uniting language-majority and language-minority students within dual-language immersion will

“help expand the nation’s overall language competence by conserving and enhancing the language resources that minority students bring to school with them and promoting the learning of other languages by English speakers” (Christian, 1994, p. 3).

### **Dual Language Programs**

Throughout the U.S., several schools operate dual-language programs. Those that are successful possess the necessary components previously mentioned. When developmental and dual-language immersion guidelines have been neglected, dual-language programs will not succeed.

Ester J. de Jong (2002) examined the Barbieri Two-Way Bilingual Education program (TWBE) in Farmington, Massachusetts, which is a K-5 elementary school with 560 students: “45% qualify for free or reduced lunch and almost one-third of the school is of Hispanic origin” (de Jong, 2002, p. 3). The theoretical design of the program is focused upon three different components-cognitively rich, reflects personal lives and supportive learning environment-which are based upon the theory proposed by Thomas and Collier (1997). The Barbieri program first considers

theories of bilingualism for minority students, which emphasize the importance of both strong native language literacy skills for learning a second language and high levels of proficiency in two languages in additive bilingual programs. Secondly, it looks at successful instructional practices of teaching a foreign language to language majority students, in particular the Canadian early immersion programs. Finally, it builds on theories that regard language learning as a sociocultural phenomenon in which student interactions are central to the learning process. (de Jong, 2002, p. 2)

The Barbieri program operates within a context that places high value upon bilingualism and it benefits “from longevity and stability, well-trained and certified teaching and support staff, clear curriculum guidelines, and explicit academic, linguistic, sociocultural goals” (de Jong, 2002, p. 16). The program provides L1 development for all students where 50% of program material is taught in both languages as of third grade and integrates both language-minority and majority students. Exam scores of Barbieri students demonstrated the effectiveness

of the program as indicated on the 2000 Fourth Grade Massachusetts Comprehensive Assessment Systems (MCAS) standardized test.

The norm referenced-assessment, MCAS, is designed to measure content and skills stated within the Massachusetts Curriculum Content guidelines. This assessment uses open response, multiple-choice questions and includes a writing sample for the language arts in order to ascertain student levels of achievement. The scores of English students are compared to student scores in standard curriculum (non dual-language) throughout the district and state and the scores of Spanish speakers are compared to any student classified as LEP. The MCAS indicates that English-speaking and Spanish-speaking students are scoring at or above both the state and district averages in Language Arts, Mathematics, and Science and Technology.

In addition to the MCAS, students’ test scores on the Stanford Achievement Test (English) and the Aprenda Spanish Achievement Test show similar results. Grade-level scores are indicated by a score of 50 Norm Curve Equivalency (NCE). On Spanish achievement in reading, Spanish speakers scored a 71 in 2000 and 73 in math in 1999; the English speakers scored a 59 in reading in 2000 and 90 in math in 1999. On the English Achievement, the Spanish speakers scored a 38 in reading in 2000 and 57 in mathematics; the English speakers scored a 65 in reading in 2000 and 81 in math in 1999. Despite the fact that data supports the basic principles of the program design, and it shows that most of the program’s language and academic goals are being satisfied, it also draws attention to the continuing achievement gap in the program between native-Spanish speakers and English-speakers (de Jong, 2002).

Barbieri program evaluation data has been used to identify potential shortcomings of the program and to justify subsequent program changes. For example, the school made the decision to teach math in both languages in 1997, moving from ability to heterogeneously grouping. The English math achievement data for all students has verified that giving both languages equal status has positively affected students’ performance. In order to address the gap among Spanish speakers in language arts, the program has re-considered the integrated language arts classes in addition to taking a critical look at the Spanish as a Second Language component of the program. As stated by de Jong (2002): “Higher Spanish proficiency levels for the native English speakers will

support higher expectations and qualitatively better language input for the native Spanish speakers” (p. 15). The program has looked at ways to better assess students in both languages and make effective connections between the two languages during instruction. Skills taught in one language will be reinforced and extended within the other language. Administrators examined if L2 instruction for Spanish speakers were appropriate (grade-level) and cognitively sufficient. As a result, the school will offer more individualized and targeted instruction in small groups.

The key to the success of this dual-language program is the flexible implementation of models determined on an individual basis where each student receives individualized attention based upon his/her needs. In order to increase the program’s effectiveness, teachers focus on the quality of L1 literacy instruction, especially for the native Spanish speakers, because educators were concerned about watering down the instruction for minority-language speakers. Having lower expectations for one group of students will negatively affect the achievement for any student (Thomas & Collier, 1997). This example illustrates the strength of connecting theory with actual program design as well as the implementation and importance of adhering practices with academic outcomes (de Jong, 2002).

Rebecca Freeman (2000) reviewed the Julia de Burgos Middle School in North Philadelphia, which is a dual-language bilingual program designed to serve predominately native-Spanish speaking students. This school was created to serve the Puerto Rican community, and “the goals of dual-language education at Julia de Burgos are to provide students from two language backgrounds with opportunities to become bilingual and biliterate, achieve academically through two languages, and develop improved cultural understanding and intergroup relations” (Freeman, 2000, pp. 203-204). However, unlike many pre-K or Kindergarten dual-language formats, Julia de Burgo’s is conducted in a middle school that serves grades six-eight. Additionally, this program lasts only three years and studies indicate that it takes a minimum of four to six years for dual-language programs to achieve intended goals (Thomas & Collier, 1997). Many teachers have expressed concerns that this program needs to be implemented in earlier grades and continue through high school in order for it to reach its full potential (Freeman, 2000).

Students at Julia de Burgos are considered to be bilingual despite large deficiencies that exist in their spoken and written Spanish as well as English skills. Since many students have not attained academic fluency in their native language, they will have extreme difficulties in attaining the language skills necessary to academically achieve high standards in a second language (interdependence hypothesis).

Convincing students at Julia de Burgos Middle School about the importance of maintaining their native language has become problematic. The principal explains dual-language “is a concept that is more receptive to the Spanish-dominant Latino kids...It is not as receptive to the English-dominant Latino kids” (Freeman, 2000, p. 205). In addition, Spanish is looked on as the “hick” language by Puerto Ricans who were born and raised in Philadelphia and are monolingual English. The attitudes of the students reflect that Spanish is indeed the lower-status language. The Spanish curriculum has been watered down and is taught as a beginning Spanish course. Freeman (2000) reports that teacher expectations are not consistent with each individual student and teachers’ willingness to buy into the program have not been accomplished. This program was instituted as a top-down approach and “the dual-language policy was handed down to the teachers to implement when the proposal was funded” (Freeman, 2000, p. 212). Teachers had no input on the design of the program and the funding is only for five years, which means it could radically change after that time. The main predictors used to determine the eventual success of dual-language programs have not been attained at this school. Academic instruction is watered down with unclear achievement goals; the unequal language status, in addition to wavering teacher and educator support, creates an ineffective learning environment; and students’ life experiences are not utilized to their full potential. Without adhering to the predictors, the sociocultural, academic, cognitive, and linguistic components crucial to students’ academic development will not be attained.

### Conclusions

The 1968 Bilingual Education Act was born out of 1964 Civil Rights legislation and the subsequent War on Poverty in the 1960’s. Throughout the ensuing decades, numerous court decisions mandated that schools provide additional assistance for language-minority children because they were not receiving



adequate educational opportunities compared to their English-speaking peers. Once it was discovered that Anglophone children learned a foreign language more effectively in dual-language formats, more attention was placed on native-language maintenance for language-minority students. After the 1994 IASA directed funding towards additive language-learning programs, schools were encouraged to implement dual-language immersion. However, policy was once again changed with the passage of No Child Left Behind in 2002.

No Child Left Behind (NCLB) has altered the basic structure of classrooms that were designed to improve the instruction of LEP students as stated in the 1994 IASA by replacing the Bilingual Education Act with Title III and schools have returned to ineffective English submersion programs. Not only are language-minority children affected, language-majority students miss an opportunity to become bilingual. LEP students represent a threat to schools as federal funding through NCLB is directly related to the performance of all students, including language-minority individuals, on standardized tests. As indicated by the standardized test scores of children attending the Barbieri two-way immersion program in Farmington, MA, language-majority students consistently scored above the state and district averages compared to their peers. If school's test scores do not meet adequate yearly progress, schools face the possibility of losing federal education funds. Research needs to be done to show what effects NCLB are having on educational funding targeted towards language-learning programs. Despite the fact that Title III of No Child Left Behind (NCLB) replaced the Bilingual Education Act, provisions remain in place that will ensure the survival of dual-language immersion despite the ongoing assault on bilingual education in general.

Every society has common skills and abilities that successful members should master. Within the United States, these skills include speaking and writing the English language. Unfortunately, English submersion is the most common methodology used when teaching language-minority children despite the vast amounts of empirical evidence that explicitly states dual-language immersion formats are the most effective methodologies for teaching language-minority students English and language-majority students a foreign language (Cummins, 2001; Takahashi-Breines, 2002; Thomas & Collier, 1997). In fact, dual-language programs support

native language maintenance, pluralism, bilingualism and biliteracy for all students. The move away from dual-language programs to English-only philosophies is centered on assimilationist ideologies and results in policies that create a monolingual populace while failing to take advantage of the benefits inherent within bilingualism (Bialystok & Hakuta, 1994; Cummins, 2001; Kessler & Quinn, 1980; Thomas & Collier, 1997; Tunmer & Myhill, 1984). Research indicates that ESL pullout and other approaches are the least adequate methodology and the most expensive as well. Furthermore, they fail to adequately equip children with the academic language necessary to achieve high academic standards in school. Consequently, all students suffer as a result (Ovando et al., 2003).

Research indicates that people who are bilingual exhibit certain cognitive advantages over their monolingual counterparts. More studies need to be conducted that explicitly show whether or not bilingual, Anglophone students, schooled within dual-language immersion, consistently score higher in all content areas compared to those schooled within traditional classrooms. Furthermore, more research must be performed to compare the cost benefits of dual-language programs compared to ESL pullout. In addition, research should be conducted to examine whether or not countries that promote bilingualism score higher on tests compared to students in the United States. Is the fact that those countries that promote bilingualism the resulting contributing factor in higher academic achievement?

### **Recommendations for Practice**

The United States has no official language policy despite efforts from people to pass an English Language Amendment (ELA) that would declare English as the official language. If the ELA is eventually passed into law, the resulting implications would be extremely profound. James Tollefson (1991) states:

In a detailed analysis of its likely effects, a Congressional study concluded that bilingual voters' pamphlets and ballots would be banned nationwide and the bilingual education programs could use languages other than English only for the specific purpose of fostering fluency in English. (p. 121)

As a result, an assortment of other programs that use languages besides English would be in jeopardy or eliminated. These include: “interpreters in the physical and mental examination of immigrants; translators in federal civil and criminal proceedings; and foreign language personnel in community health, alcohol, and drug abuse programs” (Tollefson, 1991, p. 121). The United States has a plethora of languages that should be viewed as valuable resources and assets to society. If the U.S. is going to adopt an official language policy then it should center on achieving the goal of creating a bilingual populace and return to the recommendations stated in the 1994 IASA instead of relying on traditional English submersion programs. Proponents of dual-language immersion and policies that support bilingualism, in general,

Posits that bilingualism, especially when used in educational programs, emergency services, and ballots, greatly helps non-English speakers make the transition from their native language to English. Further, the group posits that bilingualism is necessary in educational and other social service agencies to assist with the assimilation of non-English speakers; otherwise, non-English-speaking citizens and residents will be alienated from participation in public affairs, thereby posing a threat to national solidarity. (Banks, 2001, p. 279)

When people cannot participate in the functions of society because they cannot speak or understand the language, they will become further alienated from the mainstream. Schools and classrooms that fail to successfully meet student’s cultural and linguistic needs are ignoring the basic support these students require to succeed in school. Thomas and Collier’s (1997) research states that it takes language-minority children seven to ten years to successfully learn English without native-language maintenance and only five to seven years in programs with first language support. Schools need to adopt dual-language immersion programs to help these children achieve high academic standards. If this is accomplished, language-majority students will further enrich their educational experience by becoming bilingual.

The goal for educators and teachers is to create an environment suitable for all students to succeed and excel in schools. When schools fully

implement “a critical pedagogy that activates students’ prior experiences, incorporates community knowledge, and addresses sociocultural issues of concern to students” (Ovando et al., p. 192), which are inherent in dual-language immersion, an abundance of critical cultural and linguistic information could be used to enhance the learning process for every individual student.

Schools need to identify the importance of language as a cultural marker. Language is often

The basis for the creation and maintenance of cultural group identities. Language is an important part of an individual’s identity and is often a significant factor in determining in-group and out-group status and perceptions. Languages are often symbols of group boundaries and the sources of intergroup conflicts and tensions. (Banks, 2001, p. 129)

Schools need to construct dual-language strategies that are based upon the research conducted by Thomas and Collier (1997), which will create additive, bilingual learning environments that will foster positive learning experiences for every student.

When implementing dual-language immersion programs, schools must first identify the minority language to be taught alongside English and choose a model that best serves the student population. It is mandatory that language-minority children represent fifty percent of enrolled students. After selecting a language, schools need to ensure that teachers are highly qualified to teach both languages, especially the minority language. School districts should start these programs in kindergarten, but this is not mandatory, however, it gives schools more time to prepare and hire additional bilingual teachers for the upper grades. The curriculum should be cognitively rich and appropriately reflect the student population. In kindergarten and first grade, classes should be taught entirely in the minority language and once students reach second grade, English can be introduced about ten percent of the time. By third grade, the percentage of English should increase to around thirty percent so by the fourth and fifth grades language allocation reaches fifty/fifty. From fifth grade until twelfth, students will be able to maintain fluency within the minority language as long as it is taught around fifty percent of the time. Furthermore, school administrators and parents must be fully

committed in order to realize the long-term benefits of dual-language immersion.

The 2000 U.S. census indicates that other languages besides English are becoming more predominant within public schools. Providing language-minority students instruction in their first language will enable them to maintain grade-level performance in subjects along side their grade-level peers. Dual-language immersion programs provide an opportunity for students to learn contextualized material that relates to their personal lives and helps ease the transition to U.S. society. When enacting dual-language programs, schools need to follow the program characteristics outlined by Cloud et al. (2000). Successful dual-language immersion programs, such as the Barbieri program, have the empirical evidence to substantiate claims that these programs are highly successful for both language-minority and language-majority students. As long as educators can convince Anglophone parents that bilingualism is beneficial for their children and community, and they understand about the cognitive advantages that bilinguals possess, their support will enable language-minority students to experience the supportive education crucial for academic success.

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## School Canon and Critical Literacy

*The canon is formed and informed by culture. Dominant culture has pushed all but its own perspective from the center, which runs counter to democratic ideals. Utilizing Ada's critical literacy model, Vygotsky's Zone of Proximal Development, and numerous peer reviewed articles and books exploring the interplay between canon and culture, it is my assessment that students can benefit from the use of a community of learners utilizing critical literacy when studying canonical works. Through critical literacy and a transformative multicultural approach, students can make broader gains in critically assessing texts as well as the world around them.*

The *Oxford English Dictionary* (2005) defines the canon as “a body of literary works traditionally regarded as the most important, significant, and worthy of study; those works of esp. Western literature considered to be established as being of the highest quality and most enduring value...” (para. 15). According to the definition, the canon reflects the pinnacle of knowledge, ideas, and art. Our nation traditionally holds Western styles and values as not only central, but also as normal and universal, making any deviation marginalized from that which is cultured (Banks, 2001). Approaches to the canon in the classroom vary greatly, but there is a tendency by teachers to interpret and present a text from a traditional dominant perspective, excluding the perspectives of students that do not fall within prescribed norms. In my use of the word *dominant*, I mean that members of one group have better access to resources, by sole virtue of group membership (Tatum, 2003). The systematically disadvantaged group could be singled out based on race, gender, disability, sexual orientation, socio-economic status, or other characteristics. This absence of multiple perspectives goes against the principles of a democratic society and can be corrected through critical literacy and a transformative multicultural approach to the texts.

### Literature Review

Traditionally, the canon is the authority on knowledge. It is deemed monolithic, “fixed and finite” in the same way that truth is considered immutable, both in content and meaning (Levine, 1996, p. 37). However, the canon is a constructed system designed to illustrate a particular orientation to human experience. Foster (1994) observes that

truths are many, and some truths conflict. This is not the alleged truism that the one and only ready-made real world has many true descriptions, but rather it is the contention that among the many true descriptions, some are in conflict. (p. 123)

There is not only one standard viewpoint to perceive the world, but rather a multiplicity of perspectives that are available, and sometimes those perspectives conflict. Poulson (1998) suggests that “the key difference tends to be between people who place high value on exclusive cultural traditions and the maintenance of authority and the status quo, and those who value challenge, diversity and change” (p. 14). One side of the argument takes the position that like culture, the canon is in constant flux, recalibrating itself to the various influences on its composition. On the other hand, the camp that adheres to the tradition of cultural exclusivity holds tight to the status quo because their idea of truth harmonizes with the dominant framework. For this way of thinking, to allow a perspective other than the dominant is to discredit all scholarship that has determined as authoritative up to this point.

The exclusion of contrary perspectives is normalized by the dominant culture (Applebee, 1996; Banks, 2001; Cummins, 2001; Edelsky, 2004; Falcón, 1995; Giroux, 1991; Levine, 1996; Vavrus, 2002). By expecting students to blindly accept what is told to them we create a complacent citizenry, unthinking and accepting of whatever fate is doled out. This threatens democracy. One of public education's founding ideas is to ensure our society is educated to make informed decisions and participate in the democratic process (Landau, 2004). To do so, future citizens need to be critical thinkers,

honing skills through different perspectives and relating them back to their own experience. If democracy and equality are valuable ideals to teach our future citizens, it should follow that the way in which we approach the literary canon in school would include voices that are traditionally pushed to the periphery, as well as including students' perspectives as an important aspect of learning. In doing so, we prepare our students to be critical thinkers when it comes to any text, both inside and outside the classroom. This research is based on exploring the reasons to include minority perspectives, whether through texts or students' personal experience, and secondly, the benefits of such an approach.

### **Culture Informing Reading**

Texts that are widely read are important signposts of a culture, but perhaps more definitive is the way in which such texts are interpreted by the culture. Banks (2001) notes that any change in one aspect of the culture will effect all the other aspects of the cultural system—every part is linked to the larger context. The socio-cultural connectivity of morals, values, and subsequently texts interact with all parts of the system, and thus the cultural-historical context dictates the way in which a text is read at any given point in time (Edelsky, 2004). Levine (1996) illustrates this concept in regards to the canon with Nathaniel Hawthorne:

More crucially, even when critics esteemed the same works, they commonly did so for different reasons. That is, though Hawthorne remained canonized throughout, the reasons for his canonization—the meaning of his writings and the cultural values he ostensibly represented—varied markedly because of the culture, the values, the very assumptions of his readers changed through the generations, which in turn altered the ways in which they read Hawthorne and the meanings they found in him.... The canon changes constantly because historical circumstances and stimuli change and people therefore approach it in myriad ways, bringing different perspectives and needs to it, reading it in ways distinctive to the times in which they live, and emerging with different satisfactions and revelations. (p. 93)

Readers might agree on which texts are worthy of canonization, but the interpretation varies with each generation and the circumstances within which the readers find themselves. There is no

authoritative read, as each generation uncovers a new way to read the same text in light of its current culture and relevant discourses. Because the traditional canon is subject to an individual's personal read and what he or she brings to the text, giving students the skills with which to approach an idea from many directions can enable them to better relate to the text and how it fits in the larger scope of knowledge. The message conveyed can vary as different perspectives come to the text, leaving the concept of the traditional canon as singular in meaning questionable.

Culture and canon are not independent concepts, but rather symbiotic, each benefiting from its interaction with the other. Bullivant (as cited in Banks, 2001) stated that “culture is not static, but is subject to the circumstances (environment) in which a society finds itself” (p. 71). Society dictates to a large extent the evolution of sanctioned culture, be it through law, through literary texts, or through the current moral and philosophical orientation of people. Bullivant's claim also reflects the idea that culture inherently is in constant change. Concurrently, Levine (1996) also notes that the canon revision is “and has always been, a debate over the culture and over the course that culture should take” (p. 100). Determining the path of culture is the larger issue at hand. Revisionist approaches to the canon are controversial because shifting the knowledge base from the status quo to an alternative perspective puts the dominant culture at risk. Thinking about traditional texts in new ways often questions the current social structures, placing doubt in previous assumptions endorsed by social norms. Because of this interaction, as well as the increasing diversification of our nation's population, critics of the multicultural movement fear “eroding hierarchy and the encroachment of a democratic society into the academe, as reflected in both the curriculum and the student body” (Levine, 1996, p. 11-12). Empowering students to question the status quo and take alternative theories to a text not only gives them the ability to make an informed decision on their own, but also allows questioning of social norms.

As new perspectives break through, conflict can arise between the traditional viewpoint and the new approach. According to Foster (1994), “our goals, values, and interests enter into such choices, but they do not always dictate a unique choice. Equally serviceable and correct systems can be devised and may conflict. The world

stands really malleable” (p. 124). The framework of culture, technology, new discoveries, and shifts in moral responsibility all dictate the ways in which a text will be read and interpreted. The text under scrutiny may be the same, but not the way in which it is considered. Poulson (1998) brings the issue of being blind to the values one holds as common sense, assuming them as universal:

Values are frequently invisible to those who hold them, who see their particular world-view as constituting common sense and position that most reasonable people would support. Problems arise when we are unaware of the deep differences in beliefs and values which underlie the debates about English, about education, and about the workings of wider society. However, if we regard our own values and beliefs as normal, reasonable and common-sense, and fail to recognize that they *are* beliefs and values and part of a continuum of acceptable beliefs within a society at any particular moment, then we may be unable to accept that there are other versions of common sense that hold for people with different beliefs and values. (p. 15)

Value projection is so ingrained that unless the reader consciously thinks about *how* he or she is thinking, he or she automatically interprets the world in light of his or her own belief system. This infusion of values veins through the entire cultural system, notes Applebee (1996) in regards to the curriculum:

The point in highlighting...conflicting traditions is to remind ourselves that the curriculum we provide is always value-laden. It is better to be aware of the values that underlie our curricular choices than to pretend that our choices are somehow value-free. (p. 121)

In acknowledging the values behind the texts chosen for a canon, one acknowledges the canon, along with culture, as a constructed entity subject to change as values change (Levine, 1996). Written into the ideals of our nation's culture are the concepts of fairness, democracy, and opportunity. The assumption is that these values are enacted throughout the culture, but the values are ostensible—spoken of but not fully put into practice.

### **Context, Exclusion, Disparity, and Democracy**

The knowledge of human experience is available in a myriad of texts in the traditional canon as well as in texts that have, despite their richness, been excluded from lists for the sake of covering “what every American ought to know” (Hirsch, 1987). There is a hesitation by some educators to deviate from the prescribed curriculum, but one must be aware of the classroom in which he or she teaches. Diverse perspectives can be represented by the student body, but if the class is homogeneous, it is the teacher's responsibility to supplement various perspectives, be it from his or her experience and knowledge or from texts, to give a wider context with which to approach a concept. Students need learning experiences to which they can connect. Applebee (1996) argues: “as long as curriculum is thought about as knowledge-out-of-context, students will be assessed on such knowledge, and new approaches to teaching and learning will make little difference in what students learn” (p. 126). Until the approaches to the texts are oriented to a more realistic world view rather than the culturally dominant perspective, new approaches to old material and perspectives will produce the same alienating effects to marginalized groups. When students are often unable to connect to a curriculum that has no meaning or relevance to their experiences, they can subsequently disengage. According to Martin (1994), the “lenses with which schools fit our young are, with few exceptions, still ground by the educated white man to his specifications” (p. 152). Conversely, taking the old approach to new texts is perhaps even more detrimental than exclusion of multicultural texts in that it uses the multicultural voice to make the same old statement—endorsing the dominant culture. Multicultural texts are often used in an additive method, or that which Falcón (1995) refers to as *attachments*:

Multiculturalism here constitutes the selective application of educational materials attached to the current curriculum without a process of institutionalization and transformation at all levels of education. The dominant society, owing to its power within, tends to make the selections and attachments of educational materials to the curriculum. (p. 115)

Non-conflicting attachments, selected with the dominant culture in mind, are the token voices that do not challenge established values. Any

change that might be possible with the introduction of a new text is suffocated by the lack of meaningful transformation of the school structure. Texts are taken as discrete pieces, out of context and inserted for a diversity week or a celebration of heroes and festivals, without getting anywhere near a transformative approach that incorporates “various perspectives, frames of reference, and content from various groups that will extend the students' understanding of the nature, development, and complexity of U.S. society” (Banks, 2001, p. 62).

Multicultural additions are sometimes used to perpetuate disparity via gatekeeping, as discussed by Vavrus (2002): “In schooling processes racism resembles a form of academic gatekeeping where multicultural perspectives and students of color have restrictive inclusion in White-dominated knowledge bases, policies, and procedures” (p. 80). Gatekeeping limits entrance into an academic program by making steep criteria that intentionally filter students or materials out of the process. Falcón (1995) argues that “education with its enormous racial disparities is not simply the result of a lack of resources, as some would suggest, but is more importantly a result of a colonial education” (p. 119). It is no accident that a certain group may lack resources—disparities among ethnic groups are an intentional aspect of colonialism. This disparity is reflected in the traditional canon. That is not to say that the canonical texts themselves are entirely disparate, but rather the traditional read of canonical texts is one way the dominant culture perpetuates the status quo. Many traditional texts are appropriate for exploring issues of dominance such as colonialism, but the traditional read will rationalize rather than challenge the dominant power structure.

Conflicts over “traditions of knowing” (Applebee, 1996, p. 120) exist because the traditional United States canon systematically excludes perspectives contrary to the dominant culture (Applebee, 1996; Banks, 2001; Cummins, 2001; Edelsky, 2004; Falcón, 1995; Giroux, 1991; Levine, 1996; Vavrus, 2002). The assumption of a merit-based system is that everyone has an equal chance and earns what they get. However, throughout United States history, canonical texts exclude certain groups and their perspectives from the curriculum, thereby alienating them from their sense of language and community and highlighting inferiority of one group beneath another through the argument of class meritocracy (Spring,

2005). Meritocracy in this sense is the proclamation that because a higher status group has power, it is best suited to make decisions that affect all people, rationalizing the power differential as earned rather than inherited. As I have stated earlier, the canon does not stand on its own, separate from culture. It informs and is informed by the culture at large. In regards to texts, Giroux (1991) notes

how distinctive practices actually frame such texts by looking at the elements that produce them within established circuits of power. This implies analyzing the political economy of publishing companies, the forces outside of the schools that render certain texts legitimate objects of knowledge. (p. 54)

Even though the canon debate has largely focused on the classroom and the texts utilized therein, Giroux turns the discussion toward the external structures that have input on what gets codified in anthology textbooks. Selections are not arbitrary; every piece is chosen by members of the dominant group to communicate part of the value structure and the place of students within a larger social context.

### **Cultural Literacy**

Critics such as E. D. Hirsch (1987) argue against multicultural approaches to the canon, favoring the agenda of *cultural literacy*, “represented not by a *prescriptive* list of books but rather by a *descriptive* list of the information actually possessed by literate Americans” (p. xiv). The information and the perspective from which Hirsch's list come from are both prescriptive and value-laden. Hirsch posits that “no matter how value-laden some of these common elements were in their origins long ago, they now exist as common materials of communication” (p. 107).

However, critics of Hirsch note that every literary element is value-laden at every step in the process, from creation, to normalization, to consumption. Emphasis on a list of discrete points of culture distills interaction and applicable knowledge down to singular discrete points taken out of context. The act of sanctioning one discrete part of knowledge as part of cultural literacy while leaving out another discrete aspect removes the possibility of challenging and transcending the status quo. With the status quo knowledge base left unscathed, it is easiest for educators to continue teaching the traditional curriculum and dismiss



new approaches to the material as too difficult or simply not relevant. In regards to cultural items that might be too specialized or too common, Hirsch notes “the inclusion or exclusion of such borderline items must be matters of judgment” (pp. 137-138), acknowledging the creation of a list by a person, not by chance or history. Personal value bias could consciously or unconsciously work its way into the selection process, prescribing that which is supposed to be a description of common elements of our culture.

The *common elements* of cultural literacy with which Hirsch (1987) is concerned are “to decide what 'American' means on the other side of the hyphen in Italo-American or Asian-American” (p. 98). By drawing a line between the hyphen and American, Hirsch differentiates the cultures of ethnic minorities and an assumed *larger common culture*. This differentiation signals the cognitive rift that critics of multiculturalism such as Hirsch have between *American culture* and *multiculturalism*; critics fail to recognize that the two *cultures* reflect the symbiotic relationship between culture at large and the people who participate in it. American culture has always been comprised of many different peoples and many cultures, but only one set of values have consistently received airtime. Our “common culture” is moving away from being Anglo-dominant to a culture that more broadly represents its citizenry.

The traditional approach to the canon fails to reflect the many peoples that comprise our nation. Argues Martin (1994): “Had Western Culture long since incorporated a wide range of standpoints, our differences from the white man might require no comment. In the present situation, however, denial promotes denigration” (p. 154). The exclusion of marginalized viewpoints is a void in the corpus of our culture as a nation that has gone on for far too long. Our nation's culture is informed by all of the people within it, and it should follow that the way in which the canon is read should also be developed by these various voices to make visible the possible gaps in representation in other arenas. As Edelsky (2004) notes:

Of course, classrooms where students can experience and also become explicitly aware of democratic principles and values will not, by themselves, create a democratic silk purse out of the current sow's ear. But they will help students perceive what is missing. (p. 14)

Students might learn about the concept of democracy, but it is a decontextualized abstraction because explicit democracy in action embedded in diverse curriculum perspectives are hard to come by. The texts students read should reflect the democratic notion of many voices, be they from the students in the classroom or the texts therein read, if democracy as an ideal is a value educators wish to communicate.

### **Perspectives And Social Impact On The Canon**

Educators prepare students for the manifold lifestyles and schools of thought they might encounter by exposing students to a wide array of high quality writers from different perspectives. If the traditional canon and its implications are left untouched, our students are left unprepared in the increasingly globalized marketplace. Current technologies and a deepening reliance on the international market make the world increasingly close knit. Literature expressing the experience of traditionally marginalized perspectives can be used to explore reasons behind the power differential between dominant and marginalized groups. Giroux (1991) advocates that students “[rethink] the relationship between the center and margins of power as well as between themselves and others” (p. 62) through reading texts against, inside, and outside traditional perspectives and re-writing differences. By analyzing the ramifications behind the books, rather than merely the books themselves, readers turn a critical eye toward why the text is meaningful in transmitting cultural ideas as well as normalization. Teachers must recognize that the texts they choose can reinforce one set of values over another (Applebee, 1996). By discussing only one dominant perspective, oppressed cultures are silenced, their knowledge rendered unimportant and thus omitted.

Although some scholars would argue that social goals fall below academic goals (Stotsky, 1999), learning, and thus, academics, do not occur in a vacuum. Stotsky (1999) looks skeptically on encouraging students to draw from their own experiences or using class time to discuss social issues. However, Dewey (1938) emphasizes the importance of interaction for learning. Interaction, in this sense, “assigns equal rights to both factors in experience—objective and internal conditions. Any normal experience is an interplay of these two sets of conditions” (Dewey, 1938, p. 42). According to Dewey, it is in the students' interest for teachers to encourage

Table 1: Comparison of Bloom's Taxonomy and Comprehensible Input and Critical Literacy

Bloom's Taxonomy	Comprehensible Input and Critical Literacy
<b>Knowledge:</b> Identify, list, recall <b>Comprehension:</b> Translate, categorize, sort, define	<b>Descriptive Phase:</b> focus on the text and the information found therein.
<b>Application:</b> Utilize, transfer, apply <b>Analysis:</b> Compare, contrast, justify	<b>Personal Interpretive Phase:</b> relate text to own experiences and feelings. Interpretation of text is negotiable.
<b>Synthesis:</b> Summarize, interpret, develop	<b>Critical Analysis Phase:</b> critically analyze problems and issues within text. Relates text to larger social implications.
<b>Evaluation:</b> Debate, critique, judge	<b>Creative Action Phase:</b> translates the results of previous phases into an action.

Note: Adapted from Bloom, B. (1971); Cummins, J. (2001).

the connection of the academic objective conditions and the personal internal conditions. Applying abstract concepts to one's own life utilizes higher order thinking skills, such as analysis, synthesis and evaluation (Bloom, 1971). Drawing a comparison between an abstract concept and one's own life, interpreting the meaning, and then bringing it all together in an evaluative manner are skills that demonstrate a deeper mastery of the content than simply manipulating vocabulary and grammar rules. Connecting abstract concepts to one's own life and analysis of the text's cultural framework are skills that let the reader step outside traditional readings of a text and uncover a deeper critical awareness. Critical awareness does not simply spring forth—methods of critical literacy serve as a framework for readers to deeply question the relevance of a text to their own experiences.

### Critical Literacy

Ada's critical literacy model (as cited in Cummins, 2001, pp. 50-52) is a methodology that encourages students to: (a) bring their own experiences and feelings to the text as a perspective for interpretation; (b) analyze and relate the text to larger social issues, and; (c) in light of previous phases, make a concrete action for change. As charted in Table 1, the descriptive phase is concerned with the information contained in a text. If reading stops at this phase, that is to say, a text is read without a context, only knowledge and comprehension is covered; concepts deeper than vocabulary and lists are left untouched. Moving on to the personal

interpretive phase encourages students to relate the text to their own experience, feelings, and reactions. Wolfe (2001) notes research that supports that including emotions in the learning process results in stronger memories for the issue at hand. The interpretive phase allows for every student's voice and perspective to be taken as valued by classmates and instructors, bolstering self-esteem as well as contributing to the pool of information available for all students to use. Also worth noting in the personal interpretive phase is the applicability of varying perspectives to a single text. Multiple truths are available, each dependent on the reader's approach to the text. The personal interpretive phase puts the power back in the student's hands, as he or she is the authority on how the text relates to his or her life. When the student's reading is just as valuable as the read by a critic or expert, the interpretation of canonical knowledge is subject to the reader, whoever he or she might be.

The critical analysis phase encourages students to utilize abstract thinking skills through deeper study of social issues and problems that arise from the text. Students draw inferences and raise questions that broaden the discussion to a wider social scope, utilizing higher order thinking skills and unpacking broader social implications demonstrated in the text. The student can uncover and examine the socio-cultural assumptions that may or may not exist in a text by raising questions that relate to the world at large. Parallels might be found between inequities in a canonical text, such as the power struggle in a colonial setting, and inequities in

the current social structures. Comparisons between the text and real life can set a tone that without critical analysis, would let normalized inequities remain unnoticed.

In the creative action phase, the students gather all the information from the previous phases and turn their energies toward “discovering what changes individuals can make to improve their lives or resolve the problem that has been presented” (Cummins, 2001, p. 52). This action can take many forms, from writing letters to newspapers or organizations to creative writing that analyzes the subject at hand. It is doing something, making something in light of the information gleaned. Thus when educators teach students how to look at the world with a critical eye, evaluating our positions within the larger social structure, they are giving students opportunities to use higher order thinking skills (Cummins, 2001).

Cummins (2001) takes the position that “children are not passive recipients of knowledge and language, but rather partners with adults in the co-construction of their realities” (p. 45). Through exploration of concepts such as the zone of proximal development and critical literacy, Cummins builds a framework in which students can have a sense of empowerment as well as become active critical thinkers. The zone of proximal development (ZPD) is the distance between actual development and potential development with guidance from someone more capable (Vygotsky, 2005). The ZPD is a space where experimenting and development can happen, but if options are narrow, such as limiting the input of student perspectives, the ZPD and thus the possibility of additional development also narrows. However, if the ZPD is consciously arranged to allow for student voices and interaction, such as in the personal interpretive phase, a critical orientation framework has begun to take shape.

Transmission pedagogical approaches look at language out of context, consider knowledge as inert or static, and assume learning progresses in a hierarchal pattern from simple to complex. Hirsch's (1987) cultural literacy, for example, applies a transmission approach to the canon. Within the cultural literacy model, the knowledge of a culture is distilled into a list of people, places, events, and ideas and poses the list as what educated people should know. This list, compiled by Hirsch and his colleagues and taken from a small sample that does not represent the nation at large, is what they decided is worthy of being known; thus they assume the

role of the fount of knowledge, filling the heads of students with what they should know. Critical pedagogical orientations, on the other hand, view language and meaning as inseparable, encourages the development of new knowledge, and take advantage of the ZPD through group collaboration and inquiry (Cummins, 2001). Collaboration and group learning is central to this pedagogical approach. The teacher acts as a guide rather than the bearer of authoritative knowledge, and students are active in their own learning, rather than passively taking in information. The teacher is also a viable source of information as well, as he or she is a participant in the learning process, not a passive observer or referee. As a participant, the teacher has a wide variety of texts, as well as personal experience from which to draw, and this experimental knowledge is a great contribution to the group learning. Subsequently, the ZPD of the student broadens, giving more room to cross from the known to the yet to be understood. The pedagogical approach of utilizing the ZPD is akin to providing a larger, more structurally sound bridge where a rope bridge previously existed. The wider the ZPD, the better chances one has to cross the cognitive rift and comprehend new information. A person reading a text on his or her own can only get as much as his or her previous knowledge and experience allow. When exposed to different perspectives, be it from fellow learners of different experiential backgrounds, or from integration of texts demonstrating various perspectives, a student's ZPD widens, allowing for increased potential development.

### Conclusions

Exclusion is normalized by the dominant culture, which in turn is supported by the texts of the canon. The canon and culture interact with one another, a symbiotic relationship. The way in which one reads a text is informed by cultural lenses, and new ways will be found to read the old standards. With these new cultural interpretations, conflicts arise between traditional and new. The traditional tends to uphold the status quo, while the new approach often questions or assesses the traditional position. When the traditional position is put under analysis, disparities and exclusions become apparent.

Exclusion of marginalized voices show a one-sided, narrow perspective. This perspective can be damaging as it alienates marginalized students, and also it misrepresents the world for

which educators are trying to prepare students. One way that the message of the traditional approach is held intact is through the use of tokenized multicultural texts, which incorporates texts as an additive method, thereby grafting a multicultural piece onto the traditional curriculum. There is a lack of critical inquiry of the issues of disparity and how they might be perpetuated through the traditional approach to the canon. Meritocracy rationalizes the power differential between the dominant and marginalized groups as earned rather than inherited, but it is used as rationale for disparate conditions, assuming everyone has equal access to resources.

Hirsch claims in his concept of cultural literacy that his list of culturally relevant information is descriptive rather than prescriptive, but what he does not mention is the narrow scope with which he and his colleagues sanction discrete bits of data. Also worth noting is the wedge Hirsch attempts to drive between American culture and multiculturalism, as though the two are completely separate entities.

In contrast, our nation is comprised of many cultures, from its beginnings to the present day. By exposing students to multiple perspectives, educators not only more accurately reflect our country's contributors but also help prepare students for the increasingly globalized workplace. Students should learn how to analyze a text and make it applicable their lives, integrating abstract ideas and concepts with one's experience and making a more meaningful connection.

Critical literacy is a methodology that encourages students to bring their feelings and experiences to a text, relate a text to larger social issues, and make a concrete action in response. This approach involves the students as active participants, requiring their input and treating the students as viable, valued resources for one another. The use of a community of learners and readers widens the zone of proximal development available to students, rather than narrowing as would be the case with a traditional transmission pedagogy.

If our nation and its education system are truly based on the ideals of democracy and equality, it stands to reason that the way the canon is read should reflect the cultural diversity that has built our country, including voices that have been pushed to the periphery. By including these previously peripheral voices, the students then find personal meaning within canonical works and can thus start to see themselves as

part of the greater United States culture. Since the canon is informed by and informs culture, this transformative approach to the canon can lead to larger social change in the long run, as students from all cultural backgrounds will be better equipped for the increasingly heterogeneous and globalized community.

### **Recommendations for Practice**

In regards to the canon and the inclusion of marginalized voices, be they students' or traditionally marginalized groups, we as educators must take an active role in bringing these voices into the center. The following are some suggestions for approaching this undertaking:

#### **Create a Safe, Trusting Environment**

Foster a safe community in which students are confident that they can expose personal reactions without ridicule. This structure of trust must be established from the beginning, preferably from the first day of school. Have the class as a group brainstorm rules of respect and conduct. By doing this, they have a hand in creating their own rules by which the class is governed, and in doing so tend to be more emotionally invested (Landau, 2004). Group collaboration is an important aspect of the critical literacy piece, so creating group rules for a safe environment is necessary.

#### **Critical Literacy on Canon**

By approaching traditional texts from a critical literacy perspective, students can learn how to think about how they respond emotionally to a text and how to make connections between it and their own life and experiences. Encourage students to share their reactions and feelings toward a text. To make the connection between a text and one's own life and social issues that affect it is an invaluable cognitive tool that can be utilized long after school.

#### **Supplement Texts with Students' Perspectives and Experiences**

Read texts in light of the many perspectives in a classroom. In the best scenario, one can cull these perspectives from students' personal experiences. If these experiences are lacking, a diversification of texts can work to broaden the scope of the group experience, thereby expanding the ZPD and giving students room to expand. A class might be more homogeneous in one respect or another, be it by sex, race or

ethnicity, or other distinguishing factors. In this situation, it can be advantageous to supplement the curriculum with underrepresented perspectives. This, however, must be done with great care to avoid producing solely additive methods, which can become a heroes and festivals approach or, even worse, perpetuate negative stereotypes about a marginalized group.

### Value Systems Within Texts

With an awareness of the value-laden structures that build the canon, as well as the values that inform and influence each individual, students can utilize the critical thinking skills activated with critical literacy and apply them to larger social structures.

### Cultural Literacy with a Critical Literacy Approach

By taking an active, critical literacy approach to cultural literacy, students can unpack larger social implications within the texts that are traditionally taught from a transmission pedagogy. In doing so, students not only analyze the larger social implications of the text, but also explore the implications of what values are being promoted or excluded.

By taking a step away from the traditional transmission pedagogy, students can learn to not only question the structures that are normalized by the dominant culture, but also to see their own experiences and the experiences of other people as relevant and important. Critical literacy gives students the tools with which to analyze and make decisions about the structures that would prefer to prepackage and distribute information to support the status quo. The dominant traditional perspective has only so much room for interpretation: critical literacy is a more inclusive approach to the classroom that truly endorses democratic ideals in the learning community.

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Julie A. Zimmermann

### **Singing in the Classroom: Implications for Learning**

*This paper examines the benefits of using singing throughout the educational continuum from preschool through graduate school. While the use of singing in the classroom is most often associated with the primary grade experience, research reveals this practice can be effectively implemented at all grade levels. An analysis of peer-reviewed journal articles and books shows that singing contributes to brain development, memory retention, and literacy development. Social benefits include improved multicultural awareness of the student's identities as an individual, a member of a class community, and within the world. Practical applications are discussed.*

Music has long been considered a fun part of the elementary school experience or as an introduction to the arts. However, growing evidence suggests that music may provide much more than extracurricular enrichment opportunities in the school community at all levels of education. Music in the classroom can promote learning in ways that educators and researchers are now able to document: "Today, scientists and neuromusicologists – researchers who study how music affects the brain – are beginning to unravel the potential music has on the development of human beings" (Habermeyer, 1999, p. 3). Examining this potential sheds light on the virtues of using song and singing in the classroom to promote learning. This paper will examine the effects of singing as it relates to the brain and to literacy development. It will also discuss the use and applications of singing for the classroom teacher, and lastly, this paper will examine how singing is an activity that takes place in every language and every culture around the world, and has the potential to teach students how they participate as an individual, a member of the classroom community and as part of the global collective when they sing.

Educators across the country are continually in pursuit of instructional methods that will increase learning achievement for their students. In addition, teachers are becoming more aware of the need to connect curriculum to the cultural and linguistic needs of their students. The use of song and singing during classroom instruction must be seriously considered as a viable method to achieve both these goals throughout the academic process from preschool through graduate school. Historically, people have sung to children for many reasons. Soft lullabies and fun counting songs are often found in a child's early developmental experiences. Primary

teachers, camp counselors and childhood religious instructors are well known for supplementing class experiences with singing. Singing has the potential to create powerful learning experiences and is remarkably able to transcend age and race.

However, many educators are hesitant to introduce singing within the scope of their curriculum. Lack of musical training and a belief that they possess poor vocal skills are cited as possible reasons for their reluctance. Furthermore, many teachers are unaware of possible applications of singing as a teaching technique within their classrooms.

Research indicates that there are strong implications for the use of singing throughout the entire academic experience. The act of singing invigorates the body and aids the memory process. Studies show that it teaches powerful messages about patterns and enhances cognitive skills (Habermeyer, 1999; Page, 1995; Wolfe, 2001). Imagination is fostered while singing and improvements in language and literacy development have also been documented through the use of song. Singing increases self-esteem and increases social awareness of multicultural issues.

While much of the research on singing within the classroom has focused on the elementary school level, this paper will suggest curriculum ideas that are applicable at all levels, including college. Research of the innovative use of music in upper grades, while including singing, often has included other percussion instruments such as mariachis and drums. Instruments are not overtly discussed in this paper, although they merit examination. Varying opinions regarding the *Mozart Effect* were noted in several pieces of research. The *Mozart Effect* has been used as an inclusive term to signify the collective use of

music in general and its role in brain development. There has been some hype and attention over the *Mozart Effect* that later made educators suspicious of the value of using music in the classroom. Since the focus of this paper is on the specific use of singing, rather than music use in general, these findings are also not included within this review.

### **The Power of Singing**

Scientific studies on music and learning report impressive data. Singing affects the brain itself and the areas of the brain that control memory and emotion. Debra Viadero notes, in her article “Music on the Mind,” that researchers understand that there are 100 billion unconnected or loosely connected neurons in the brain. Each experience a child has strengthens the links between these neurons, creating pathways. She reports that some researchers believe that music learning may count among the kinds of experiences that lead to long-term changes in the brain’s hard wiring (Viadero, 1998).

While researchers continue to verify these hypotheses through scientific tests such as PET scans (Positron Emission Tomography), MRI (magnetic resonance imaging) and EEGs (electromagnetic encephalograms), it is recognized that singing promotes beneficial experiences for students. Singing encourages deep breathing which brings more oxygen to the brain. This activity invigorates and revitalizes students who participate, comparable to students’ invigoration at recess with fresh air and lots of vocalization (Page, 1995). Music also affects the parts of the brain that control emotion causing serotonin levels to rise. This may help relieve stress in students causing them to be more receptive to learning (Wolfe, 2001). Researchers also understand that music “strengthens the auditory cortex of the brain which is where most learning difficulties originate” (Habermeyer, 1999). This is another positive implication for the use of singing since the auditory cortex is one of the areas of the brain recognized for language development and memory. Other studies suggest that the actual size of the motor cortex and cerebellum are larger in musicians (Weinberger, 2004). It is also known that stimulating the use of this part of the brain through singing encourages the coordination of children’s bodies in such a way that many adults will fondly remember:

In addition to coordinating the two sides of the brain, music making is important in

coordinating the body. Children in almost every culture of the world do repetitive singing games involving jumping, skipping, and running. Thus, skills like handwriting are aided by the rhythm/movement activities that accompany singing in young children. (Lloyd-Mayer & Langstaff, as cited in Page, 1995, p. 39)

The benefits of memory development due to singing are impressive. Listening to classical music can increase memory and concentration, and studying a musical instrument is known to increase spatial reasoning (Habermeyer, 1999). This characteristic applies to the instrument that is the human voice as well (Friedrich & Shubart, 2004).

The retention of important information for students is of course, a continuing goal for the classroom teacher. Having this objective in mind, teachers can benefit by setting content information to music. The use of song lyrics containing curriculum information can be invaluable instructional tools. Most students find it easy to memorize the lyrics to songs, and will find it just as easy to memorize academic content set to music (Campbell, Campbell, & Dickinson, 1999). This model is successful for both elementary and secondary students. For instance, Page (1995) reminds us that most of us successfully learned the alphabet while singing the familiar ABC song and that teachers are making good choices by instructing new subjects using aural recitation through song, poetry and even rap. He emphasizes that children learn lyrics much faster than they learn cold facts. Other researchers add that music itself is an “aural language of its own which uses three components: pitch, rhythm, and sound” (Campbell et al., 1999, p. 133). The teacher who uses singing as an instructional tool is accessing these attributes to contribute positively to the learning process.

The rhythmic patterns of song also enhance memory. Melodies and rhythms are building blocks for the patterns of sounds. They help the brain remember other patterns such as shapes, graphs, and schedules, (Page, 1995) which has implications for instruction in mathematics and science as well. Singing in the classroom has clear benefits related to the retention of course materials. Finally, “singing songs not only helps many students remember important information, it also enlivens classroom learning” (Campbell et al., 1999, p. 140). When children are engaged in fun and entertaining lessons utilizing their own



voices and bodies they participate more in their learning and construct more meaning from these experiences.

While researchers continue to unravel the mysteries of the brain, we do know that different children may learn more effectively depending on the teaching style used. This phenomenon may be partially explained by tapping into different forms of intelligence that students possess. Understanding these intelligences will help educators optimize learning opportunities for their students.

Howard Gardner, who has researched the ways in which the brain and body learn, points out that there are many types of intelligences. He believes that people possess enhanced intelligences in eight areas. These intelligences are; bodily/kinesthetic, intrapersonal, interpersonal, spatial, mathematical/logical, verbal/linguistic, musical and naturalistic intelligence (1997). He asserts that accessing and using these different intelligences allows more learning to occur (Gardner, 1993, 1997). This may also explain why information learned through singing is retained longer as well, especially for those who possess musical intelligence. It may also explain, according to researchers, the fact that elderly people can still remember songs they learned in their early childhood (Habermeyer, 1999; Wolfe, 2001). This scientific discovery will not surprise parents who have witnessed first hand their children's ability to quickly learn songs, nursery rhymes and other rhyming games.

Using music and song is a powerful way to tap into the imagination and creativity of every child and allows them to personalize what they have learned in a way that they can recall and benefit from in the future (Pascale, 2000). The daily school experience becomes more energized through singing, and "by coordinating the rhythms of sound and movement in stories, song and poetry, children's' imaginations are captivated and the subject matter is made more vivid" (Easton, 1997, p. 89). Teachers can further enliven the concepts being taught by encouraging made up songs, cheers and silly rhymes that repeat information previously instructed.

Children experience a variety of emotions as a result of participation in singing. It encourages self-expression, helps teach phrasing and offers additional opportunities to practice communication skills. As a result, language development is influenced positively through this activity since singing becomes a natural way

to complement other learning activities such as writing and reading. Singing written music related to literature gives another opportunity for students to measure the relationship between words that are sung and the meaning intended by the author. Edden (1998) states that "the way in which the words are delivered alerts us to whether or not the message is being felt from the inside. As teachers, we need to help children understand what they are singing and feel what the songwriter wanted us to feel" (p. 146).

Singing and songwriting provide opportunities for students to actively engage in demonstrating their language skills. Learning letter sounds, phonemic awareness, understanding syllables and practicing rhyming can all occur through singing. It is also a productive way to learn to manipulate and combine words and sounds to form new words. As John Smith (2002) writes in his article "Teaching Reading," the "popular traditional song *Ooples and Boo-noo-noos* gets kids to create silly new words as they substitute the five long vowel sounds into the words *I like to eat, eat, eat, apples and bananas*" (p. 646). He argues that these songs are fun and allow children to participate in oral language skill development by following the melody of the song.

Students can investigate replacing words from tunes they already know to create their own original songs which is especially effective for primary-aged children because these exercises particularly help young students develop their emerging language skills. An example of this activity is to borrow a tune with a familiar song, count out the number of syllables in each phrase of the song, think up a new phrase with the same number of syllables and then replace the new words the student chooses into the familiar song (Cox & Boyd-Batstone, 1997). Another valuable suggestion is to have these newly created songs tape-recorded for the student to listen to and hear the pronunciation of the words, known as encoding language. This vocal work is best done without musical accompaniment such as guitar or piano so the children can hear themselves easily on the tape (Chacksfield, Binns, & Robins, 1975). Listening to the work they produced helps the students build their language development.

It is often said that music is a language of its own. It may also be said that there is music in language. Children are exposed to the lyrical sounds of singing in many settings, not the least of which is language itself. "Creating an early years environment rich in rhymes, poems,

chants, riddles and word games, drawn from a range of oral traditions, is not only valuable for laying the foundation of language learning but for music also” (Young & Glover, 1998, p. 116). This strong relationship between oral literacy and vocal music creates multiple opportunities for children to hear language use, whether it is listening to the jingle of a television advertisement, hearing music sung at church, or listening to the radio. These personal experiences from family and society should be included in the role of literacy development to advance language learning. Failing to do so ignores the rich culture and environment that a child brings to the classroom setting (Dyson, 2003; Ovando, Collier, & Combs, 2003). It also becomes a wonderful opportunity for the teacher to weave the school and home communities together, to help *all* children feel included, and to help learn about each others’ home lives.

Glasceta Honeyghan (2000) in her article “Rhythm of the Caribbean: Connecting Oral History and Literacy” also stresses the role of the family and society in becoming literate through singing. She connects her experiences as a child learning language through many of the common day events she shared with her family and friends. Some of the most memorable events that she chronicles deal with songs and singing. She writes of the women pulling peanut pods from the bushes while singing, first one voice starting and then many others joining. She tells of singing folk songs with other children and learning the lyrics of new songs while listening to the radio, “we learned many of the lyrics by heart from the radio, and it seemed our successes were due largely to the felt rhyme and predictable patterns of the songs” (p. 406).

Honeyghan (2000) further argues that schools can learn much by observing the literate practices students are exposed to outside of school. She suggests that teachers acknowledge that literacy already exists in the child’s world at home, although it may take a different form from that which the child might encounter in school. This is relevant and meaningful information because it has implications regarding literacy instruction that is offered to not only young learners who are emerging readers, but also to those who are English language learners (ELLs). Singing can be a powerful learning tool for these students as it draws them into culturally relevant learning situations while they are advancing their English language skills.

Singing can help these emerging readers and those who are learning English in several ways.

Those who are not yet speaking English can share songs in their own language with other students since “songs communicate across generations and cultural boundaries” (Cockburn, 1991, p. 72). Marisha Goldhamer (2001) additionally argues “people who don’t know English can succeed right away” (p. 76) because they can hum the melody and add words as they are able. Sharing and learning through song not only embraces the student, but immediately provides the child with a position of membership within the classroom. Victor Cockburn (1991) points out that creating songs that values a child’s first language while learning a new one gives everyone the pleasure of using words from two different languages. This method of instruction is especially potent in the bilingual classroom where songwriting expands the function of helping students learn each other’s languages.

Jill Bourne (2001) argues that bilingualism is part of school life and learning regardless of whether there is an official program in place. She stresses, “teachers must open up the classroom for new possibilities to reveal the *sub rosa* world of pupil interaction” even in the general education setting (p. 103). Her study was conducted in a primary classroom where children with multiple languages were present. These students were regularly tape recorded as they worked on their assignments. Eventually these pupils became very comfortable with the recording process and were taped singing in their native languages under their breath as they worked. During lunchtime many of the students put on *shows* for each other, often singing songs in their home languages. Bourne argues that there was great value in sharing these examples of the student’s mother tongue and that it helped the students continue to construct their own identities.

Singing songs while the teacher points to the words on an overhead viewer or large flip chart provides an activity that students enjoy and is rewarding. In addition to strengthening oral language skills, it helps to promote reading competency. John Smith (2002) describes this teaching concept more fully:

Pointing to the letters on the ABC song chart while singing the song helps my students’ establish visual representation for each letter. This also helps them learn that *lmnop* is not a single letter. Teachers can modify existing songs to suit their classroom needs. (p. 647)

This technique lends itself especially well to younger children and English language learners (ELLs) because they are just beginning to learn letter recognition and words in the English language. This method helps them by contextualizing the information being taught as well as offering the instruction in a low-anxiety setting. Another similar activity is choral reading. This technique teaches students to change the inflection of their voices to bring to life poems, short literary passages or famous quotations. Choral reading teaches expression and literary rhythm as well as reading fluency. It can be performed individually, or as a group and is a valuable way to help students use the entire range of the vocal abilities and prepare them to have more confidence singing (Campbell et al., 1999; Hill, Johnson & Noe, 1995).

Educators who are interested in creating child-centered teaching practices must evaluate many different techniques and choose those that embrace the child and foster growth. Cockburn (1991) reminds us that there is a universal love for singing that can be a great motivator for children as they learn to read and understand new words. Page (1995) further points out that students can learn in steps when taught through music:

Music making is a powerful aid for the child learning to understand language, first as spoken sound and then as printed word recognition. With words, this means the ability to give meaning to the spoken word and later, the printed symbol of the word. (p. 38)

Educators who do not personally know how to read music might feel discouraged from singing in the classroom. However, the process of singing and songwriting does not require this ability. Even singing simple rounds and two-part singing allows children to exhibit a great sense of achievement. Previously taped parts can augment this experience and allow children to hear multiple parts (Campbell et al., 1999; Chacksfield et al., 1975). There is no need for great orchestration or the ability to repeat what was accomplished, however, if a class desires to have their songs musically annotated, the music specialist can be invited into the classroom to work on that as an enrichment project (Cockburn, 1991) or at least they can record the composition by tape or other electronics. Playing the recording later and asking the students for

their opinions is another way to enrich the project (Page, 1995).

Singing within the curriculum is a compelling way to help children learn to write in addition to advancing their oral and reading skills. David Nicholson (2000) writes in his examination of Waldorf Schools, non-traditional schools which infuse singing throughout the curriculum on a daily basis, that “providing content in a variety of forms of representation offers students practice in thinking and communicating in various modes of expression and understanding” (p. 577). Students can work on songwriting projects alone and/or in collaboration with their classmates to create original pieces. Young and Glover (1998) suggest that “for older children, almost any kind of writing opportunity can be extended into song making – a song to go with a picture, or a poem” (p. 120). This method could also provide a low-stakes writing exercise for emerging writers and ELL students as a way to express themselves. Although songwriting for pleasure certainly benefits written language skills, it becomes a powerful study aid when coupled with classroom curriculum as the following quote illustrates:

I began to compose songs with the students that were based on curriculum. Topics and areas of interest to the class such as history, social studies, science and nature –using traditional melodies and writing techniques appropriate to each grade level. (Cockburn, 1991, p. 72)

Teachers who successfully use this technique recognize its ability to transcend traditional curriculum boundaries.

An exciting and emerging technique of content delivery that has the potential to be especially influential with youth is hip-hop music and rap. The powerful cultural aspects of hip-hop help us redefine the word *singing* within these studies. Hip-hop can successfully be used as a tool in K-6 classrooms to promote literacy skills. This technique has positive implications for older students as well. Knabb (2003) argues that educators should heed Howard Gardner’s advice to use nontraditional teaching techniques to account for different learning styles. Like other researchers who have been cited in this paper, she also suggests the benefits of rewriting songs. However, she especially favors choosing current popular songs as opposed to traditional well-known melodies to create the base for new songs used in the classroom. She feels this adds

an element of relevancy to her students. Although her study cites the use of hip-hop at the elementary level, she personally used singing to help teach her undergraduate students key anatomy and physiology facts. She maintains that this technique can be used successfully at the college level.

Knabb profiles Helen Davies, a recipient of the National Golden Apple for Teaching Excellence Award, at the University of Pennsylvania. Professor Davies successfully uses hip-hop and rap songs to teach about infectious diseases. Knabb reports that Davies' students appreciate this method of instruction, especially for remembering details such as symptoms and treatment methods. She concludes her study by suggesting that educators should have their students write their own lyrics to more actively engage them in the material.

Morrell and Duncan-Andrade (2002) appear to agree with Knabb. In their study they also promote the use of hip-hop music as a teaching tool. Their commentary reveals their dispositions to this technique:

We ultimately decided that we could utilize Hip-hop music and culture to forge a common and critical discourse that was centered upon the lives of the students, yet transcended the racial divide and allowed us to tap into students' lives in ways that promoted academic literacy and critical consciousness. (p. 88)

Additionally, they add that the texts in hip-hop are rich in imagery and metaphor and can be useful to bridge the world of the streets with the world of academia. The conclusion of these studies reveals that it is important for educators to *jump outside the box* and tap into the cultures of their students in order to affirm the everyday lives of those they teach.

The role and disposition of the teacher who uses songwriting and singing in curriculum must be considered. Cox and Boyd-Batstone (1997) state, "tasks such as composing songs and making creative projects take significant amounts of time for thinking, planning, making and publishing" (p. 185). While this may seem daunting, we are reminded that of all the media instruction offered in schools, "singing is the most easily initiated and the least expensive" (Sunderman, 1972, p. 20).

The teacher's attitude is crucial to the success of this classroom experience. If teachers are uncomfortable with the idea of singing with their

classes, their pupils will recognize this discomfort and the effectiveness of the instruction will be marginalized and ineffective. The result of this will be that singing may become *entertainment* and it loses its *soul* as a support for language arts and other areas of study (Cockburn, 1991). Professionals embracing singing in the classroom as an instructional tool must be dedicated to the effort to ensure success.

Educators can expect their students to derive personal and social benefits as well from the use of singing throughout the curriculum. On an individual level, there are compelling reasons to encourage this practice since "song singing is the highest form of musical expression. It aids the child in expressing the entire gamut of his feelings and emotions" (Sunderman, 1972, p. 20). An important aspect of students' growth and development is the ability to communicate. This positively affects their self-esteem and confidence. Students who are given the opportunity to practice communicating through songwriting may find a valuable way to express themselves. Paynter and Aston, (1970), educators who also believe in the benefits of song, offer these eloquent thoughts:

Like the arts, music springs from a profound response to life itself. It is a language, and, as a vehicle for expression, it is available to some degree to everyone. Music is a rich means of expression and we must not deny our children the chance to use it. (p. 3)

These personal benefits of increased self-esteem and confidence are noteworthy, but the positive outcomes derived from the intimate experience of singing as a classroom community are equally significant. The most obvious is the sense of cooperation and unity. Individual students are capable of making personal contributions that ultimately aid in creating the final communal product. Easton (1997) suggests this fact is a compelling reason for singing to be promoted so heavily in Waldorf schools. These schools believe that music helps children experience a full spectrum of inner feelings and gives them multiple ways to express themselves. Furthermore, she notes that they believe the act of singing helps children achieve a sense of inner balance as well as wholeness within their schooling community.

These classroom experiences appear to set the stage for a sense of harmony and hope for the participants. Espinosa and Moore (2000) relate that singing has become an important part of

their school life. They teach in an inner city school in Phoenix, Arizona. They desired to increase their sense of community and decided to sing together. They report, "It seemed that when teachers and children joined in singing songs that described peace, hope, love and injustice, then our spirits, our minds, and our actions joined together as one voice" (p. 65). Understanding and embracing one another promotes a truly multicultural education, one in which differences are valued as the norm, not the exception. Page (1995) has similar commendations for singing as a group, "When we sing together, our cooperation and interdependence become the perfect analogy for the interdependence and cooperation within nature. Children singing together are learning how to cooperate – literally how to live in harmony with one another" (p. 17). To further highlight the importance of group singing, Cockburn, (1991) also chimes in on the benefits of this type of group work and offers that a "folk song written by students in a classroom has value to his own community because of the shared effort in its creation and the familiarity of the subject matter to others in the community" (p. 72).

Teachers interested in multicultural education designed to benefit *all* their students will seek diversity in song as well. Victor Cockburn (1991) offers a concise perspective on how this is accomplished through singing,

Many classrooms today are composed of students from a mosaic of cultures. By exposing students to a wide variety of global folk music and songs and by combining languages and melodies from different cultures, the common thread of expression takes on another dimension. (p. 77)

Students' cultures can be honored in a number of ways. As pupils are presented with new song materials they should be informed about the song's traditional history. "Adding this essential element lends immense power to singing" (Page, 1995, p. 144). Presenting songs with their cultural legacies also fosters a deeper sense of appreciation for the music selection. Another way to promote a worldview is to invite students to bring in original songs loved by parents or grandparents. These selections honor cultural traditions and become classroom collections that are respected and treated as unique. They demonstrate both the diversity of folk music and the cross-cultural links we share (Cockburn, 1991, p. 74). Respecting of all forms of music,

such as hip hop and rap, which were discussed previously, is a powerful way to teach value and acceptance of singing as a multicultural experience.

Perhaps the greatest benefit derived from teaching singing as a looking glass into the multicultural world is the opportunity for the student to redefine culture in a personal way. Page (1995) suggests that by studying the music of many other cultures students have a great opportunity to begin to see that the culture they come from is not the *best* culture. It helps them recognize the interdependence of all cultures and people on earth. Accepting that music is a universal language affords the student the opportunity to see the important contributions that musical art provides in education. Reimer (2002) sums it up succinctly when she states, "If music exists in a diversity of music cultures, then music is inherently multicultural" (p. 19). Helping students achieve a worldview that values diversity and rejects homogeneity is an important goal of any educator desiring to present a multicultural education. This is clearly evident in the classroom where singing is utilized to develop curriculum, increase learning, and share information about the community and world around us.

### Conclusions

Committed educators have an obligation to prepare lessons for their students that engage them with content material in meaningful ways. Providing opportunities that increase the student's potential for long-term application of the materials learned is an important goal. Teachers must also consider multiple barriers that impact the quality of education their students' receive. Singing within the classroom has the potential to be a powerful method in the pedagogy *toolbox* that can address these teaching ideals and help diminish cultural and language barriers for all ages, including high school and college students.

Some educators may be reluctant to consider the use of song in the classroom. The misguided belief that singing is appropriate for primary grades only is fostered by a lack of knowledge in this field of study. Hesitate educators may have concerns regarding whether or not their students want to sing, are capable of singing, or will engage in inappropriate classroom behavior while singing. These perceived obstacles can be addressed by recognizing the importance of starting with short selections that may be simple rhythm patterns before moving on to more

challenging songs. It is essential to maintain a supportive and caring environment that does not judge vocal ability. Building confidence and appealing to the types of music that are relevant to the students help reduce these feelings of insecurity, lack of confidence and boredom (Page, 1995).

Research shows that singing *is* a sound educational practice at all levels of instruction and produces educational benefits for those students who participate. Singing affects the brain in dramatic ways. It brings more oxygen to the brain, which aids in brain functioning and enlivens and energizes the students. It also affects the area of the brain that controls emotion. Singing causes endorphins to flow, stimulating good feelings throughout the body and stimulating brain activity. These positive feelings create more receptive learners who become engaged in the instructional process (Wolfe, 2001). When singing is added to the curriculum, positive student outcomes can be expected, such as how the brain learns and processes new information as well as increased literacy development. Singing is known to strengthen memory which allows the student to recall important learning facts and it taps into children's imaginations (Campbell et al., 1999; Gardner, 1993, 1997; Pascale, 2000).

Singing encourages language development in equally important ways. It provides an opportunity for self-expression and communication. It teaches rhythm, rhymes and pattern recognition and helps the student learn letter sounds and phonemic awareness (Smith, 2002; Young & Glover, 1998). Benefits in literacy development are noted for both emerging readers as well as English language learners from the use of song in the instructional setting.

Socialization is a major part of the educational experience for students of all ages. The act of singing itself has the power to draw people together. It has the ability to cross cultural boundaries, and greater still, to build bridges that encourage cultural understanding between individuals and groups. Singing songs shared by students from other cultures is an especially intimate way to learn about one another. Sharing a song or chant together fosters positive outcomes that educators strive to achieve in their learning communities such as cooperation, empathy, and the care and awareness of those around us. Student awareness of self-identities within the classroom, community and the mosaic

of our cultural world are the benefactors of the use of song in the educational setting.

The use of song as a pedagogy tool is acknowledged as encouraging positive results in instruction in the educational setting. This is compelling evidence for teachers who are considering the implementation of singing within their own classrooms. The findings clearly define that the use of singing is indicated not only for grade school students, but for college students as well. Educators wishing to provide their students with the fullest academic experience must seriously consider the adoption of singing as an important teaching method that exemplifies best teaching methods.

### **Recommendations for Practice**

Singing in the classroom is beneficial for students of all ages, preschoolers to college graduates. It provides a unique and enriching way to support lesson materials and is one of the few classroom practices that costs very little to implement. Teachers need to approach the introduction of singing in the classroom with some general guidelines which are summarized below:

- provide a relaxed and supportive environment
- begin with a simple song or rap piece
- provide many opportunities to practice
- solicit pieces the students enjoy
- begin and end the day with song
- celebrate with songs
- signal transition times with songs
- honor and include culturally relevant pieces
- use curriculum rap songs for *fact memorization*
- use tape recorders and CD players to increase student/teacher confidence
- accompany students with instruments (such as guitar or piano) as you are comfortable
- encourage the use of original work as it relates to the curriculum planned
- provide musical selections from other cultures to teach awareness and appreciation with a world perspective

The first attempts should be with a simple song or rap taught in a relaxed setting that encourages participation. Building on a positive first experience will promote future successes. Many types of music should be introduced and selections the students enjoy should be solicited. This includes honoring and encouraging culturally relevant pieces as well as hip-hop or rap selections for older students. A supportive

and caring environment is essential regardless of the age of the students. Finally, there should be many opportunities to practice. (Baer-Simahk, 2002; Page, 1995; Young & Glover, 1998).

Starting with simple rhythm patterns then moving to familiar tunes that both the teacher and students know may be more comfortable for instructors who are concerned about their ability to carry a tune (Baer-Simahk, 2002; Page, 1995). Using recordings can be beneficial for reluctant teachers. However, it should be noted that having an individual student sing *to* a tape recorder is strongly discouraged since this undermines the sense of community that can be achieved by singing as a group within the classroom (Page, 1995). The use of a tape recorder or other electronic devices to support group singing is acceptable especially for those students and teachers for whom this support encourages more participation within the classroom.

For the elementary teacher, beginning and ending the classroom day with song is one way of introducing this method. Singing celebratory songs is another comfortable way to initiate classroom participation, however, it is recommended that this occur at least weekly for sustained results (Page, 1995). Transition times between core subjects provide natural occasions to incorporate a brief song to signal the move to the students. This method is used extensively in Waldorf Schools with much success (Daniels & Bizar, 2005; Nicholson, 2000).

Older students may prefer rap and hip-hop to traditional choral pieces. Many curriculum rap pieces are available on the Internet for immediate downloading. Examples include rap songs that teach geography facts or the parts of speech. There are also many books and publishers that provide teachers with suggested melodies, songs and encouragement. Although many resources are available for purchase, research indicates that materials written by the students' themselves has the potential to be the most influential in the learning process. Brain research reveals that the content learned through music and rhyme is most beneficial when the students are involved in the creation of the material rather than using songs composed by someone else (Wolfe, 2001). Thus, students should be encouraged to create songs or rap pieces that uniquely fit the desired learning goals.

Teachers can augment the singing experience with tape recorders and recordings, or use simple instruments such as guitars as they are comfortable. These may contribute to the teacher's sense of confidence, but are not

required for successful experiences. Teachers may also find that their students' enjoy using simple percussion instruments such as small shakers or sticks while they sing and may enjoy responding to a hip-hop or rap piece physically. Including movement is helpful to reenergize the students and is culturally relevant in many settings. Respecting this relevance conveys the message of openness we want students to experience with singing (Page, 1995). The rhythmic influence of these actions is worthwhile for the reasons listed above as well as the fact that "adding movement to the music or rhyme provides an extra sensory input to the brain and probably enhances the learning" (Wolfe, 2001, p. 166).

As discussed in the research, educators who are serious about their desire to introduce singing in their classroom curriculum must observe several cautions. Teachers must present their desire to sing with the group with sincerity, otherwise the process may be perceived as lacking in value. Teachers need to choose the song selections wisely as it relates to age appropriateness. Younger children may prefer simple songs and rounds, while older students may be motivated to alter songs that are currently popular. The power of hip-hop and rap for older students cannot be overemphasized.

Lastly, teachers must deliberately choose to sing pieces from around the world as well as varying styles of contemporary music. This forces students to refrain from labeling any one kind of song as *bad*, and helps them value different cultures (Page, 1995). By striving to encourage the appreciation of different songs in the classroom, educators provide powerful opportunities for students to learn about the perspectives of others in our world. Music and singing become the universal expression of the world. Teachers need to look beyond their own cultural backgrounds and those of their students to actively seek representations from other diverse communities. Ideally, students within the classroom from diverse backgrounds should be the first to share their culturally relevant songs and heritage. Pairing songs with interdisciplinary units may allow the student to connect more deeply to multicultural themes (Ovando et al., 2003). Thus, exploring the cultural background of the song brings meaning and context to the song itself.

Singing within the classroom has the potential to create a close and caring educational experience. In addition, students who participate in this activity will achieve educational gains.

Educators who are committed to authentic, experiential learning should seriously consider weaving the use of song into their curriculum so their students may enjoy these benefits.

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