**PUBLIC POLICY ESSAY**  **Mimi H. Jansen**

**Bridging Washington’s Trades Skills Gap with Partnerships**

Washington state is experiencing a renaissance of investment building and capital improvement growth in major urban areas, but the lack of highly-skilled trades workers is threatening to stifle these positive economic trends. State-registered apprenticeship programs do not have the necessary number of completers to fulfill the increasing demand for skilled workers by employers. Closing the trade skills gap through apprenticeship programs would not only fill much-needed jobs to ensure that investments stay in the state, it would most importantly provide good living wage job opportunities, comparable to a college career pathway.

Registered skilled trades apprenticeship programs in Washington fall short of much-needed support in major areas; particularly in unsatisfactory state investments and lack of effective programming utilizing key partnerships. These challenges present obstacles in providing essential education and training opportunities to fulfill trade and production employers’ demands for a skilled and committed workforce.

The Workforce Training and Education Coordinating Board’s *2013 Skills Gap Analysis Identifies High Employer Demand Fields* report compared the current supply with the average annual demand of five major occupational groups’ mid-level education level workers for 2016-2021 and came up with Projected Annual Undersupplies for the five groups listed (Workforce Training & Education Coordinating Board, 2013). The five occupational groups and their projected numbers of undersupply are: Installation, Maintenance and Repair (number 1 in terms of largest projected numbers of undersupply of -2526), Manufacturing, Production (projected numbers of undersupply of -355), Protective Services (projected numbers of undersupply of -186), Healthcare Occupations in Shortage (projected numbers of undersupply of -472) and Science Technology (projected numbers of undersupply of -247), (Workforce Training & Education Coordinating Board, 2013). Interestingly, in regard to the Construction industry, the report notes that “It is not currently possible to reliably project demand for the following occupational groups: -Construction- due to uncertainties about the overhang of construction workers unemployed during the recession. -Preschool workers - demand projections do not distinguish training levels below bachelor's degree” (Workforce Training & Education Coordinating Board, 2013).

Understandably, state educational and workforce agencies are heavily fixated on college accessibility and attainability. However, there should also be equivalent consideration of all career opportunities, including apprenticeship and training programs that aim to produce skilled workers in operations, maintenance, transportation and construction industries. There is a demonstrated need currently, and in the near future, for these industry trade skills. A uniform platform that promotes all postsecondary education opportunities in an evenly balanced way would go a long way in helping Washingtonians achieve gainful and profitable careers.

According to the Washington State Board for Community & Technical Colleges and Washington Student Achievement Council’s *A Skilled and Educated Workforce 2015* report, “Middle-skill jobs, those that require more than a high school diploma but less than a four-year degree, now comprise about half of all U.S. jobs. They generally offer solid wages and pathways to advancement. But in many cases, employers are finding mid-level positions difficult to fill even when overall unemployment remains high” (Washington State Board for Community & Technical Colleges/WSAC, 2015, p. 4).

Looking at the Mid-Level [Skills] Unmet Demand 2018–2023 of 2013 Completions and Total Projected Openings (in Washington state) graph, in the report, Production and Trades occupation groups has a projected unmet demand of 35%, or 3,259 mid-level workers (Washington State Board for Community & Technical Colleges/WSAC, 2015, p. 11). While not the higher percentage of 52% that is purported in the graph to fulfill unmet demand for computer science skilled workers, the still relatively high percentage of 35% projected unmet demand for Production and Trades occupation groups must still be addressed; even if only through a minimal investment in updating current systems (Washington State Board for Community & Technical Colleges/WSAC, 2015, p. 11). The report also goes on to state “The greatest demand lies in semi-skilled and skilled jobs in operations and maintenance.” (Washington State Board for Community & Technical Colleges/WSAC, 2015, p. 9).

The Washington Student Achievement Council, citing a pressing need to form “educational attainment goals” addressing the dual challenges of keeping up with the growing numbers in the state’s diverse populations and the increasing demand for a skilled and suitably educated workforce, released a report in 2013, of a “Ten-Year Roadmap” (WSAC, 2013). The report, a “collaboration with policymakers, educational partners, and stakeholders from across the state” (WSAC, 2013, introduction), states two overarching state-level goals of “All adults in Washington will have a high school diploma or equivalent” and “At least 70 percent of Washington adults will have a postsecondary credential” (WSAC, 2013, p. 1). While the report adheres to using the more inclusive term of postsecondary education, it is primarily focused on college and university education opportunities. This focus is reasonable given the wider gap of attainment of mid to high level skills for technology and health versus the skills gap for trades.

However, equal acknowledgement and mindful consideration by policy makers and educational agencies should be given to the attainment of trades skills also. Oftentimes “left out of the conversation” unless parents or family members are themselves in trades occupations, there is an obvious bias in thinking that college may be the only option leading to good-paying jobs. What is highly encouraging, in terms of recognition and creating awareness and access for trades training and education, is how the Roadmap report asserts that its “actions are designed to build on existing best practices and expand promising initiatives currently under way” (WSAC, 2013, p. 3). A couple of action steps outlined streamlining and expanding “dual-credit and dual enrollment programs to create a statewide dual-credit system available to high school students” (WSAC, 2013, p. 12) and improving “coordination of existing employer feedback mechanisms to postsecondary institutions and encourage innovative approaches to close existing workforce skill gaps in Washington’s dynamic economy” (WSAC, 2013, p. 18). The report also cautions that legislation would most likely need to happen in order to fulfill these action steps (WSAC, 2013, p. 13).

In keeping with the idea of partnerships and expansion of promising initiatives, there are successful programs in Washington state to emulate and model future registered trades apprenticeship programs after: the Aerospace Joint Apprenticeship Committee (AJAC) registered apprenticeship program and the WTIA (Washington Technology Industry Association) Workforce Institute’s registered apprenticeship program, Apprenti. Both programs depended on collaboration among stakeholders, including state lawmakers, educational agencies and employers, to formulate strong and effective programs. Their partnerships have created registered apprenticeship opportunities that are successful in training highly-skilled workers who are credentialed for their respective industries.

AJAC’s Apprentice Program, a “statewide, nonprofit 501(c)(3) aerospace and advanced manufacturing registered apprenticeship program” (AJAC, 2018), is multi-faceted and includes a natural progression from a variety of pipeline sources, including local high schools, technical colleges, and the military. Formed and funded by the state in 2008, AJAC’s comprehensive and innovative programming starts with employers and their workforce skills needs and then fulfills those needs through joint apprenticeship training and credentialing. AJAC ingeniously combines supervised on-the-job training experience with classroom instruction, calling on employers to provide mentors and, if there is not existing apprenticeship catered to their needs, to actually help design a specific apprenticeship tailored to their company’s labor needs. Companies can register as Training Agents with AJAC and can even enroll current employees to an AJAC program. Apprentices obtain “journey-level certification as master tradesman” and earn a living wage while attending the program. There is even a Youth Apprenticeship program in the occupation of Production Technician that AJAC has created where the “apprenticeship is 2,000 hours of paid on-the-Job (OJT) training and 3 college-level classes — leading to a high school diploma, journey-level certification and college certificate” (AJAC, 2018).

WTIA (Washington Technology Industry Association) Workforce Institute’s registered tech apprenticeship program, Apprenti, was launched in 2016 and was so successful that states nationwide were interested in adopting the program. Apprenti has now expanded to Oregon, Virginia, Michigan and California, with plans to go nationwide (WTIA, 2018).

Cooperative partnerships like AJAC and Apprenti, are flourishing programs to pattern similar registered apprenticeship programs by to help bridge Washington’s trade skills gap. Support for creating more of these innovative and impactful apprenticeship programs would give productive and hopefully prosperous, career choice boosts for future and current working Washingtonians.

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