

Hearing on Workforce Development

I. Background on JSK

A. Served as National Chairman of the National Tooling & Machining Association (NTMA) in 2007

1. My theme was “Filling the Pipeline” - it was focused finding and developing the next generation of skilled workers for the custom manufacturing industry
2. As past Chairman of the NTMA, I got a firsthand account of the workforce development challenges manufacturers around the country face. In our annual survey, 71 percent of our member companies report they have job openings. Of those, more than a third have five or more jobs currently unfilled. An astounding 93 percent of respondents said they are having challenges recruiting qualified workers. This comes on the heels of a national survey by accounting firm Deloitte showing that 600,000 skilled manufacturing jobs openings exist.

B. Have served on the Westmoreland-Fayette Workforce Investment Board since 2000.

1. For the last three years our WIB has had an initiative to reform the Career and Technical Centers (Vo-Techs). Here’s why we did that:
 - a) We in the manufacturing community as well as those industries that required skilled tradesman have long valued the output of our CTC’s, but for many years those schools have become marginalized in their efforts to provide what industry needs.
 - b) Hamill and many companies have benefitted greatly from having CTC graduates as their employees. At Hamill 59% of the machinist and other shop personnel are CTC graduates. Many on the management staff are as well. In fact, Hamill’s President is one!
 - c) We in manufacturing see CTC’s as the natural conduit or pipeline for our current and future workforce.
 - d) The Commonwealth has invested billions over the years in the system. The question now is do we abandon a broken system or do we work to reform and make it a high performance, relevant system that provides PA’s economy with a skilled and well

educated workforce.

2. After years of study, research, field trips to various CTC's, discussions with students, teachers, and administrators, we concluded the basic problems were the structure of, the governance of, and the funding of the schools. Here's what we found through our initiative:

- a) If you are labeled a "techer" - that's a pejorative!
- b) As a consequence of being "a step child" to the sending schools, the CTC's don't get the required funds they need to have effective programs.
- c) The fact that multiple sending schools can have conflicts of interest, "what's best for the CTC" is almost never considered by the sending schools.
- d) It's all about the bus rides! Four per day for most CTC students. If you ask the question who does the system serve? The answer is probably everyone but the students

C. For the first half of this year, I served on Governor Corbett's Manufacturing Advisory Council (GMAC). The council was convened by Co-Chairs, Carlos Cardoso, the CEO of Kennametal, and Alan Walker, the Secretary of DCED. It met each month for six months and looked at all aspects of manufacturing in the Commonwealth. Experts from across the country were brought in to provide background, but the bulk of report came from the experience of many manufacturer's in PA. It was no surprise that the business leaders wanted to talk most about workforce development.

1. There were 5 major recommendations, the first was focused on Workforce Development

a) Here is a summary those recommendations:

(1) Recommendations

Talent & Workforce

Manufacturers today face global competition for market share, research, ideas, and talent. Although manufacturing employment in Pennsylvania has been on the decline for years, this past year showed a tremendous growth of 12,100 workers, bringing the commonwealth's total manufacturing workforce to 574,600. The low number of new workers entering the industry, coupled with the growth in manufacturing, has left a staggering gap of available skilled workers.

BRIDGING THE SKILLS GAP

TO BUILD THE FUTURE

Sources: 1, 2: Deloitte and The Manufacturing Institute Sept 2011 Report "Boiling point? The skills gap in U.S. manufacturing"; 3. US Department of Labor; 4. PA L&I Online Job Postings

82% *Of manufacturers* **74%** *report a serious or*

*moderate skills gap in their employees*¹

*Of manufacturers report that the skills gap has negatively impacted their company's ability to expand*²

25% *Of manufacturing* **7,639** *PA*

*manufacturing job*³⁴

Based on detailed data analysis, a review of local, state, and national reports and the experiences of the Council members themselves, the most pressing problem now and for the near-term is finding people with the education and skills to fill the high-quality manufacturing positions currently available. Of equal importance is addressing the need for our future-manufacturing workforce to develop the leaders of tomorrow, a long-neglected issue, which has impacted the current talent crisis.

Recommendation Highlights:

workers are 55+ openings (June 2012)

Recommendations

- ✓ Develop an "Adopt a School" Program led by the manufacturing community
- ✓ Industry-led standardization of skill needs and curriculum
- ✓ Better connect job seekers with job openings in manufacturing sector
- ✓ Expand and better support career and technical education in Pennsylvania
- ✓ Support proven strategies to increase workforce pipeline for manufacturers
- ✓ Create measures and support systems for educators and school districts

10 Detailed Summary of Talent & Workforce Recommendations:

1. Develop an "Adopt a School" Program led by the Manufacturing community:

Establish a public- private partnership that will organize engaged manufacturers and school leaders to partner in support of educational pathways to manufacturing

careers. Through a strategic, inclusive process these partnerships will be built upon best practices and be certified and supported by the public- private partnership to ensure high standards, drive participant success and improve engagement with community-based manufacturers.

The following actions should be undertaken to support this recommendation:

1.1. Develop and implement a campaign, led by the Governor, to update the image of a career in manufacturing in Pennsylvania. Focus on dispelling the myths surrounding these careers by marketing the story of high-wage, high-tech, challenging, and secure careers.

1.2. Replicate proven programs within the Adopt a School Program including competitions and direct partnerships that increase training capabilities with initiatives like YES (Your Employability Skills) or BotsIQ. YES is a 120 hour, 1 credit elective high school program that is widely viewed as a best practice model among the manufacturing council members. With YES being approved under the Educational Improvement Tax Credit (EITC) program, and meeting the the PA Department of Education's Chapter 4 Academic standards, it is already being offered in a total of 26 school districts with a cumulative enrollment of 4,133 students with 1,161 program graduates. YES curriculum was developed by the manufacturing sector, which has led to more than 500 companies offering preferred interviews to YES graduates.

1.3. Support career exploration and exposure to challenging, high wage manufacturing careers through company tours, job shadowing and role models/mentors/speakers in manufacturing careers - highlighting younger workers.

1.4. Develop work-based learning activities including apprenticeships, internships and co-ops.

1.5. Connect with teachers to update and improve curricula through engagement with manufacturers. Employing strategies such as inviting teachers in the workplace can help teachers understand industry needs and opportunities.

1.6. Seek private sector resource commitments including funding, donation of space and equipment, employee volunteering, and utilizing company facilities for training and educational purposes.

2. Industry-led standardization of skill needs and curriculum: *Manufacturers should work with the education and workforce development community in Pennsylvania to define and communicate common standards and credentials that best meet their needs. The intent would be to simplify the marketplace for both training institutions seeking to meet the needs of manufacturers and potential employees working to improve the value of their skills and employability in the manufacturing sector.*

The following actions should be undertaken to support this recommendation:

2.1. Evaluate and consider adoption of common standards/credentials. This evaluation should include review of the National Association of Manufacturing Skill Standard, and any other viable standards identified.

2.2. Advance a unified manufacturing curriculum across education and

training systems driven by the manufacturing community, support partners such as the Industrial Resource Centers, Pennsylvania's Manufacturers Associations, Community Colleges and policy leaders in the departments of Education and Labor and Industry.

3. Better connect job seekers with job openings in manufacturing sector: *The commonwealth must better leverage available tools and data collection systems to create a process that accelerates the matching of the qualified labor pool with available manufacturing openings.*

The following actions should be undertaken to support this recommendation:

3.1. Require skills assessment for unemployment compensation recipients- this effort, in conjunction with improvements to the commonwealth's job matching system, will enable the matching of individuals' skills with current manufacturing job openings.

3.2. Assist employers to assess and communicate the skill needs of available jobs through the O*Net classification system. A standardization of job descriptions will improve efficiency of data-driven matching of qualified applicants with job openings.

3.3. To encourage a drug-free workplace, the commonwealth should consider implementing a "fast track" for applicants passing voluntary drug testing in order to receive public support for training.

4. Expand and better support career and technical education in Pennsylvania: *Secondary technical education has become a critical supplier of high skill, technical talent for high wage careers in the manufacturing sector and must be supported in order to sustain the future growth of the sector.*

The following actions should be undertaken to support this recommendation:

4.1. Ensure funding formula is not punitive to school districts for students participating in career and technical education. For example, explore other state models such as the Kansas model of providing additional state funding for each student attending a career and technology center.

4.2. Improve the vocational technical education system's approach, governance, and funding structure to reflect the needs of today's manufacturers.

4.3. Support extension and expansion of the Educational Improvement Tax Credit to provide an additional source of funding for career and technical education organizations. Allocation of EITC credits should be based on filling existing skill gaps, and high-value high-cost training programs such as machinist training. These high-cost training programs are often the first to be cut during budget reductions even though they are in high demand.

4.4. Improve use of data to forecast, identify and communicate job opportunities to assist both institutions and students' decision-making and planning.

4.5. Encourage teachers to learn alongside manufacturers through a structure similar to the previous School to Work programs. This would allow teachers to receive continuing education credits while experiencing manufacturing careers first-hand.

5. Support proven strategies to increase workforce pipeline for manufacturers: *Expand proven models to invest in developing a consistently qualified and highly*

skilled workforce. The council believes such a workforce is essential to retaining and expanding manufacturing operations in the state.

5.1. Expand and replicate programs such as the existing **PATHWAYS** for Career Success (formerly known as the 2+2+2 career pathway model) and others that have proven delivery of a skilled, technical workforce.

6. Create measures and support systems for educators and districts tied to effectiveness: *The manufacturing community understands the importance of a world-class public education system in Pennsylvania and believes transparency, standards, and fair evaluation are critical to the future of the manufacturing workforce in Pennsylvania.*

The following actions should be undertaken to support this recommendation:

6.1. Implement a transparent scorecard for schools that measures academic effectiveness.

6.2. Implement a system to evaluate and provide targeted support to educators with the ultimate goal of increasing teacher effectiveness.

II. Conclusion

1. Some serious, thoughtful legislation is required to restructure how CTC's are governed and funded.
2. There are models in Pennsylvania and other states where there are effective CTC's They should serve as a template for what needs to be done.
3. There are constituencies that will work hard to maintain the status quo. Therefore, the approach must be bi-partisan and have heavy input from industry
4. In order to achieve a substantive change in the CTC's I suggest that a third party create the legislation. I would suggest that Team PA be tasked with such an undertaking. I was privy to their efforts in facilitating the sessions for the GMAC and was thoroughly impressed with their professionalism.