



Martha Ponge
Director of Apprenticeship

A Career in Manufacturing May Be For You-- But, How Do I Find You?

When newspaper headlines regularly say things like “STEM occupations have above-average growth” and “Ninety-three out of 100 STEM occupations have wages above the national average,” why are manufacturers still having challenges attracting skilled workers? Could it be we are starting to identify these workers too late?

Manufacturers in the U.S. process materials to make all kinds of products, just a few include food products, pharmaceuticals, cars, and electrical components such as printed circuit boards.

In the very beginning of the manufacturing process engineers and designers create new products and improve existing designs. They also design the machines and technologies necessary to create those products.

Production workers enter the process to make the product. They do things like operate the machinery, oversee quality, and prepare the goods to be shipped to consumers.

Installation, maintenance, and repair workers help to keep the production equipment and the facility functioning properly. Because of the increased technology in manufacturing and the increased use of automated machinery, these jobs can be very high tech and require substantial and ongoing training.

Even transportation and material moving workers have moved into the area of high tech workspaces with automated lifting equipment and the use of logistics to coordinate the process and make it more efficient.

Manufacturing provides opportunities for workers with all kinds of backgrounds and education levels. Workers need a combination of education and training, which varies by occupation, according to the skill set which is required to do the job. It offers flexibility of job type, environment, and even schedule due to shift work.

Preparing for a manufacturing career will most likely include some specialized education, on-the-job training experiences such as internships, and even earning licenses or certifications prior to becoming employed. My question is why does this have to wait until after high school? What can we do before students leave high school that will prepare them to be part of the manufacturing community? One answer may be the use of pre-apprenticeship programs in the high schools.

Pre-apprenticeship programs include educational opportunities that are stackable to registered apprenticeships. They include a partnership with a current apprenticeship program sponsor and provide industry-based training and classroom instruction that is aligned with an existing registered apprenticeship program. Programs such as these provide flexibility

for training at the high school level and allow industry partners more accessibility to high school students who are trying to decide what they will do after graduation. Students often work for these industry partners a few hours a week during the school year and full time during school holidays.

States like Colorado have initiatives targeted at placing more than 20,000 high school students in pre-apprenticeships statewide by 2027. They are creating a process for building a pipeline for talent that goes from the schools directly to the workplace. Their philosophy is “Companies are looking for bright, hard-working, caring people who want to make a difference...Through this initiative, they can grow their own.”

Former U.S. Secretary of Labor Thomas Perez says that “Apprenticeship is the other college – except without the debt... We’ve got work to do. We’ve got to make sure apprenticeship is available to everyone and we’ve got some attitude adjusting to do. There are still folks who think about apprenticeship and they think about it in yesterday’s paradigm. Apprenticeship is remarkable.”

MACNY, with the help of our partners, would like to explore the idea of utilizing pre-apprenticeship in Central New York. We think that it would be valuable to our students, fit the needs of our community, and provide a chance for employers to secure employees for high tech, in-demand, and hard to fill jobs.

Source:

<http://www.denverpost.com/2016/09/15/9-5-million-grants-apprenticeship-program-for-colorado-high-school-students-careerwise/>

HELP WANTED:

Retired toolmaker or machinist to proctor delivery of NOCTI* assessment to high school students in the P-TECH program at Institute of Technology in Syracuse.

Must be familiar with Bridgeport mill & 2 axle manual lathe.

This is a paid, part-time position.

Please contact Joe Vargo at PEB/MACNY at 315-440-1966 or joev@macny.org

*NOCTI is the largest provider of industry-based credentials and partner industry certifications for career and technical education (CTE) programs across the nation.

<http://www.nocti.org/>