

BC3, community colleges key to apprenticeships, U.S. Labor official says

Manufacturers consider partnerships to train workers, fill positions

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Karen Riethmiller, a professor in Butler County Community College’s science, technology, engineering and mathematics division, laughs July 19 while attending the National Institute of Metalworking Skills’ first strategic environmental assessment apprenticeship townhall in West Middlesex, Mercer County. At right is Dean Guido, regional director of the U.S. Department of Labor’s office of apprenticeship.

(West Middlesex, PA) Community colleges can play a critical role in administering registered apprenticeship programs to create a pool of skilled employees, a U.S. Department of Labor regional director told business representatives at a forum to promote training a workforce to fill 350,000 manufacturing jobs nationwide.

“To me, it is a natural for the community college, because historically, the related training has been done at the community college,” Dean Guido, of the Department of Labor’s office of apprenticeship, said at the National Institute of Metalworking Skills’ first strategic environmental assessment apprenticeship townhall Wednesday. “You don’t start off with 500 employees. You start off with one or two employees. ... So using the intermediary makes great sense.”

Greg Chambers agrees.

The director of corporate compliance at Oberg Industries said the Freeport precision manufacturer has experienced a larger return on investment with apprentices trained in part by Butler County Community College compared to new hires trained by other local employers.

Oberg Industries creates components for the aerospace, medical and energy sectors and employs 650 at two of its Butler County locations. Its partnership with BC3 makes Oberg Industries training more cost effective and efficient, Chambers said at the forum hosted by the Greater Oh-Penn Manufacturing Apprenticeship Network.

“Some might say, ‘You have a homogeneity problem’ or ‘You have one-way thinking,’ but when you make sure that one way is the right way, it’s a lot more effective than having everyone rowing out-of-sync,” Chambers said.

Oh-Penn is an association of companies in six eastern Ohio counties and eight Western Pennsylvania counties that in October 2015 received a \$2.9 million U.S. Department of Labor grant to meet manufacturer needs for highly skilled and credentialed employees through customized, registered apprenticeship models such as the one between Oberg Industries and BC3.

BC3 prof “teaching the fundamentals” at crankshaft company

Eduardo Sande is plant manager at Ellwood Crankshaft Group’s plant in Hermitage, Mercer County, which with 187 has the fourth-highest number of manufacturers in Western Pennsylvania, according to the North American Industry Classification System.

Like the work force at Oberg Industries and elsewhere, his employees are also benefiting from the expertise of Karen Riethmiller, a professor in BC3’s science, technology, engineering and mathematics division.

Riethmiller holds a master’s degree in higher education-educational leadership from Geneva College in Beaver Falls, a bachelor’s degree in applied science from Slippery Rock University, and attained three associate degrees from BC3 – in mechanical design, industrial management and architecture – and has been a full-time BC3 instructor since 1995.

She has been summoned to teach courses computer numerical control (CNC) programming, blueprint reading and in industrial math by companies such as GE Transportation in Grove City, Indspec Chemical Corp. in Petrolia and AK Steel Corp. in Butler.

Riethmiller instructs 23 of the 26 credits in the Apprenticeship Technology Workplace Certificate used by Oberg Industries, and this summer began teaching CNC programming to 18 employees of Ellwood Crankshaft Group.

“She is teaching the fundamentals,” said Sande, whose company is seeking manual polishers and skilled CNC machinists who have “good foundations” on CNC controls.

“BC3 is an educator. We’re a manufacturer”

Facing the retirement of 12 percent of its employees at its Freeport and Sarver locations – machinists, grinders and CNC operators – within 15 years, Oberg Industries enlisted BC3 and its Apprenticeship Technology Workplace Certificate last fall.

“You must have the competitive advantage, even in hiring,” Chambers said. “BC3 brings a whole wealth of knowledge, a whole different range of expertise that we must have, such as academic principles, academic methods, changing technology. They are abreast of what is going on in the educational field, different ways to teach, different methods of training and developing people. BC3 is an educator. That is what they do. We’re a manufacturer. So why reinvent the wheel? If you have people who are experts and have expertise in areas, then why should you try to do it yourself instead of just partnering with them and bring them in?”

BC3 is highly flexible in responding to industry needs, Riethmiller said.

“(Chambers) and I got together and we started talking in April 2015 about bringing college credit into Oberg’s apprenticeship program, and we had our first set of students start that September,” Riethmiller said of the CNC Programming Technology Workplace Certificate that was succeeded by the Apprenticeship Technology Workplace Certificate.

Oberg-BC3 relationship “the gold standard,” Philly exec says

The relationship between BC3 and Oberg Industries “is the gold standard,” Raymond Dettmar, the director of training at KVI, a Philadelphia-area machining company, said at the townhall meeting.

“Their system is so well organized,” Montez King, executive director of NIMS, said of Oberg Industries and BC3. “We do consider them the standard when it comes to apprenticeship and involvement and developing their employees.

While Bruce Curry, of Sebring Machine Rolls, Sebring, Ohio, said finding quality, trained workers “is next to impossible,” Oberg Industries’ apprenticeship program with BC3 allows the manufacturer to create its own pipeline, King said.

“They are not just letting the chips fall where they may,” King said of Oberg Industries. “They are taking control of finding new employees and where their employees go within their organization.”

NIMS official: BC3 provides workers with theory, promotes critical thinking skills

Riethmiller instructs courses on blueprint reading, CNC programming and geometric dimensioning and tolerancing at Oberg Industries, one of Butler County’s largest precision manufacturers.

“The company can be very good at teaching on the job, what they do, company-specific,” King said. “But that theory and knowledge that comes with it, the critical thinking, that is where Butler County Community College plays a big role in providing (Oberg Industries’) students with that platform and that framework that they need to make good decisions within the organization.”

Forty-one entities in 2016 received \$90 million in U.S. Department of Labor grants, Guido said.

“This is something that is really new to the Office of Apprenticeship and the Department of Labor, to give out grant money,” he said. “With the funding we are seeing an increase in registered apprenticeships, and that is something that is new and really helps the employer.”

President Donald Trump on June 15 signed an executive order that directs U.S. Secretary of Labor Alexander Acosta to use available funding to promote apprenticeships, focusing in particular on expanding access to and participation in apprenticeships among students at accredited secondary and post-secondary educational institutions, including community colleges.

The executive order also calls for the promotion of pre-apprenticeships.

BC3 offers a Manufacturing Pre-Apprenticeship Certificate that enables students to develop entry-level skills needed to begin a career as a machine operator; or as a machinist, quality control or computer numerical control apprentice; or as an assembler, or in maintenance or in other positions. The noncredit program can lead not only to employment, but can be applied toward BC3's 17-credit Basic Manufacturing Workplace Certificate.

For the first time this fall, the Basic Manufacturing Workplace Certificate will be available online, enabling incumbent workers and job-seekers to gain marketable skills from home and according to their schedules.

Oh-Penn's goal is to have 300 registered apprentices in manufacturing occupations over the five-year period of the \$2.9 million Department of Labor grant, said Eric Karmecy, division chief of the West Central Job Partnership, Sharon.

“Another part of our goal is to get 250 pre-apprentices trained over that same period of time,” he said. “BC3 is working with us and has already sponsored two cohorts of trainees here in Mercer County, in part at BC3 @ LindenPointe.

“The role that BC3 can play is to continue to fine-tune and continue to expand the pre-apprenticeship component, but also potentially serve as a related technical instruction provider for registered apprenticeship programs.”