

Collaborative Approach to Training Creates Strong Skilled Worker Pipeline in Rural Region

In the rural town of Greenfield, Massachusetts, near the Vermont border, many might be surprised to find there is a precision training machine building a robust pipeline of skilled manufacturing workers. The secret is collaboration between local educators, employers, government and partners such as Tooling U-SME, a leader in manufacturing training and development.

As in many areas of the country, to stay competitive and grow as well as to boost the regional economy, the Greenfield manufacturing community needs skilled workers.



Greenfield's Middle Skills Manufacturing Initiative (MSMI) is a collaborative effort by local educators, employers, government and partners.

“With more than 250 manufacturing businesses in Franklin and Hampshire Counties, and with nearly 15 percent expected industry growth in the area by 2020, recruiting and developing qualified employees is a top priority,” said Alyce Stiles, Director of Workforce Development, Greenfield Community College.

To address this need, the Franklin-Hampshire Regional Employment Board in collaboration with Greenfield Community College, Franklin County Technical School and a consortium of area manufacturers created Middle Skills Manufacturing Initiative (MSMI) training for entry-level CNC Operators. The program is targeted to unemployed and under-employed workers in Franklin and Hampshire Counties with funding from a Workforce Competitiveness Trust Fund grant through the Commonwealth of Massachusetts Executive Office of Labor and Workforce Development administered by Commonwealth Corporation.

To develop this new training, Greenfield Community College selected partners that include Tooling U-SME, a division of SME, which delivers versatile, competency-based learning and development solutions to manufacturers and educators across the country.

“The instructional team, consisting of teachers from the vocational school and area employers, provided feedback on the specific Tooling U-SME classes to supplement the hands-on training,” said Stiles. “Once the required courses were completed, students were encouraged to continue to take online classes to build their skills and work with their employers to customize a training program upon hire.”

Subscriptions to the Tooling U-SME courses were funded by the MA Community College and Workforce Development Transformations Agenda (MCCWDTA), which is 100 percent funded through a \$20 million Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant from the U.S. Department of Labor Employment and Training Administration.

Getting Started

Greenfield Community College started with a pilot program in Fall 2013, which quickly received positive feedback. More than 100 people applied for the 15 training slots in that initial program and Tooling U-SME online subscriptions were provided to the twelve “runner-up” applicants to build their skills until the next training.

“This approach successfully allowed students to showcase their motivation, willingness to learn new skills and be on the top of the recruitment list for the next training,” said Stiles. “It’s no surprise that the first students selected, and later hired, were those that completed the most Tooling U-SME classes.”

Since the program began, 89 students have enrolled in Tooling U-SME courses, completing nearly 4,000 classes, and some graduates have already been placed in local manufacturing jobs.

To further help develop skilled workers, Greenfield Community College included Tooling U-SME classes as part of a newly developed Foundational Manufacturing Training and worked with area manufacturers such as VSS, Hillside Plastics, Hassay-Savage and New England Naturals to pilot online classes for their incumbent workers.

The feedback from students, instructors and employers has highlighted the successful use of Tooling U-SME classes to supplement the hands-on training and to allow students 24/7 self-paced resources to customize their skills.

“The courses allow for differentiated learning,” said Stiles. “Some students might respond better to hearing the information vs. reading it and students can just click on the microphone for this feature.”

English as a Second Language (ESL) students also benefitted from using Tooling U-SME classes. “They were be able to look up words, review technical concepts at their own pace, and take notes online to reinforce the topics presented in classes,” said Stiles. “A picture is worth a thousand words to help many students learn.”

The Tooling U-SME program helps instructors hold students accountable as documentation shows mastery of topics, according to Stiles. Additionally instructors have immediate access to how students are progressing by monitoring if students logged in, how much time they spend and which parts of the assignment are easy/challenging for each student. With instant feedback and automated grading and homework assignments, the process saves considerable administrative time for instructors.

“We set the expectation that learning is an evolving and life-long process,” said Stiles.

From Class to Shop Floor

VSS, Inc., a precision machine shop specializing in complex CNC machined components, has been heavily involved in local efforts to build the skilled worker pipeline.

VSS’s President Steve Capshaw, who is part of the consortium that developed the MSMI training, said, “Several years ago, we experienced significant growth but couldn’t find workers – there was no source locally to find the right employees. We were turning away work because we couldn’t hire enough operators. In crisis, we all got together.”

The collaboration by the local schools including Greenfield Community College, Franklin County Technical School, the Franklin-Hampshire Regional Employment Board and government with industry partners helped solve the problem, according to Capshaw, and today, there is a pipeline coming together – with the quantity and quality of operators needed.

That is good news since VSS has seen significant growth, more than doubling in size from 20 employees in 2009 to 55 today.

A year and a half ago, VSS started using Tooling U-SME courses as part of its professional development program for incumbent workers.

“We thought we would just be training for new skill sets but we realized once we got started that employees only knew 60 to 70 percent of what they should have known,” Capshaw said. “Now we use Tooling U-SME courses to develop skills for everyone from entry level to the management team. It has been a tremendous benefit from the start.”

According to Capshaw, benefits include:

- Employees can complete courses on their own time.
- Courses are interactive which engages employees.
- As an administrator, it is easy to track progress and find out who is putting in the work and help identify those who might need extra help.

VSS has already hired three students from the MSMI program who continue their education with VSS’s internal training program supplemented with online courses.

“These students took Tooling U-SME classes so we know what we are getting,” Capshaw said. “There is great uniformity when we talk about what a machine operator should be able to do.” He added that the best employees respond well to the Tooling U-SME platform.

“Those that don’t, aren’t a good fit for our company,” Capshaw said. “Now even for perspective students, we assign ‘seats’ to see how they do. We have seen that some students who weren’t in our original top two or three candidates have shown the strongest work ethic and that is important to see for recruitment.”

For more information about the MSMI program, please contact:

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Local employer VSS has hired students from the MSMI program.