



Skills Gap

3 Key Ways to Ramp Up Learning and Development in Manufacturing

Julie Sullivan | Nov 02, 2017

What You Need to Know:

Manufacturers have come a long way since the somewhat unsafe days of early shop work, but on-the-job apprenticeships have been steadily declining.

The lack of apprenticeships stems from an influx of younger employees, and a fast exodus of older ones—resulting in a loss of proper knowledge transfer. Additionally, budding tech plays a role.

To respond to these concerns, training should be more standardized across manufacturers.

The old model of training (which relied on mostly on-the-job training) needs to be replaced by mainly standardized, in-classroom learning.

New employees also need to take accountability for their career growth.

Looking for ways to address the skills gap in your company? Work on your learning and development program. Here's how.

It's a constant refrain in manufacturing circles, but it's easily recognizable: Who will fill the manufacturing jobs of the future in the U.S.? As a recent webinar on learning and development by Tooling U-SME pointed out, there is a major absence of apprenticeships in this country—and learning and development is key to meeting the demand.

The numbers tell the story: Of the 146 million jobs in the United States, including manufacturing, only about .35 percent were filled by active apprenticeships in 2016, according to *app*. (part of the *USA Today* network). And despite President Donald Trump *touting their importance* at a visit to Pewaukee, Wisconsin, this past June, there's a significant retreat.

"We are now faced with a similar workforce challenge," explains John Hindman, the director of learning and performance improvement at Tooling U-SME. "The 'Silver Tsunami' is upon us, and there's not a skilled pool to replace them."

While lack of a skilled workforce can be attributed to a number of reasons from millennials with low manufacturing awareness to high-tech, intricate machines, that doesn't negate from the need to address the glaring white elephant in the room. As of June 2017, some **419,000 manufacturing jobs**

remained unfulfilled, per the U.S. Labor Department's statistics. There is no access to the talented, competitive workforce that manufacturers require.

One major answer, according to Hindman? More robust, standardized training:

"Lack of a skilled workforce will impact a manufacturer's ability to remain competitive in their market. They'll be burdened by turnover and inconsistent time to worker competency. It's time to standardize internal training programs."

Drawing from the recent MSC and Tooling U-SME Learning and Development Webinar, we outline some of the key reasons why that skill discrepancy exists—and what manufacturers and managers can do to bridge it.

1. Making Millennials a Priority

Whereas a century ago kids would be trotted off to factories to earn a living, today young adults have more choices when it comes to career paths. And overwhelmingly, they're not choosing manufacturing.

"Education systems are often not responsive to employers' needs," says Katherine McClelland, director of education and workforce initiatives at *The Manufacturing Institute*. "Manufacturers struggle with outdated perceptions of manufacturing careers, and we've been in a culture where we are promoting four-year college degrees as the only option for a successful career despite overwhelming opportunities in manufacturing."

As Hindman reports in the webinar, millennials account for 92 million U.S. residents (the biggest generational group in history). Baby boomers, on the other hand, make up 77 million.

"Millennials now make up half of the workforce," Hindman stresses. "They decide whether they are going to stay with a company on Day 1."

And Hindman says making a connection with millennials from the first moment of interaction is absolutely crucial in retaining them—and avoiding a significant bulk of costly turnover expenses.

"Lack of a skilled workforce will impact a manufacturer's ability to remain competitive in their market. They'll be burdened by turnover and inconsistent time to worker competency. It's time to standardize internal training programs."

John Hindman

Director of Learning and Performance Improvement, Tooling U-SME

2. Standardize Training and Development Opportunities

During apprenticeships in the early days of manufacturing, the passage of information was hands-on and thorough—but it was also customized to the job and shop floor. The key to ensuring those 419,000 open jobs are filled by skilled, competitive workers will be a thorough onboarding process, Hindman emphasizes.

As the learning and development webinar outlined, there are eight specific aspects associated with high-impact learning in organizations:

- High Performance Onboarding
- Job-Based Competencies Based on Standard Work

- Career Pathways and Self-Development Plans
- Flexible Workforce
- Strong Engaged Learning Culture
- Strategic Partnerships
- Community Focus
- Measuring Learning & Development Impact on Business

In other words, onboarding and training should be a cumulative effort by the manufacturer and the individual to be successful. "There needs to be a system in place to manage the learning and development aspects of job training," explains Hindman.

Achieving a harmonious balance, according to Hindman, will require shops to modernize the traditional learning model when it comes to training new employees.

"The old model is 70/20/10," he explains. "Ten percent of standardized training takes place in the classroom, while 20 percent is focused on mentoring and coaching. Seventy percent of learning is achieved through actual experience."

Conversely, the new model suggests an inverted 80/10/10 program, where 80 percent of learning is formalized in the classroom.

"Based on importance of qualification program, Tooling U-SME suggests a flip model that provides standardization for a greater percentage of associates to be dedicated to formalized learning and practices," says Hindman. "The vast majority of work can be formalized, and desired work performance is met and validated. It reduces time to be competent on job."

3. Emphasize the Role of Individual Responsibility

Alternatively, Hindman and Tooling U-SME also stress the importance of individual-lead growth, which includes having an eagerness to learn, finding a mentor, seeking new job opportunities, joining communities of like-minded professionals and staying up to date on the latest tooling techniques. Above all else, however, self-learning is key.

"Online portals allow you to learn and communicate with other professionals," says Hindman. "There's truly nothing that can't be researched and learned online."

The good news is that younger generations are used to using technology to self-learn, to find relevant information and absorb new material. Stephen Meyer, president and CEO of the Rapid Learning Institute writes in the *article* "Study: How Millennials Learn Best":

"Millennial learners are accustomed to seamlessly integrating technology into their learning experiences. According to one of the studies reviewed by the Mayo Clinic researchers, 80 percent of millennial learners use online resources as their primary source of educational information."

In that respect, *Tooling U-SME* offers a host of virtual and in-person training programs that both managers and employees can tap into to advance the learning and development process. The service identifies skill gaps, matching those needs with interactive courses led by instructors or the individual. Connect to an in-depth *white paper* on Apprenticeships that helps document a proven workforce development strategy.

What is your shop doing to help better train and retain new employees? Let us know in the comment section below.