

# MISSION CRITICAL: WORKFORCE 2021

A skills gap crisis is looming for  
the manufacturing industry.  
Is your company ready?



## IS YOUR COMPANY READY?

We hear it all the time: we can't \_\_\_\_\_.

Fill in the blank:

- Take on more customers
- Find enough skilled workers
- Provide on-time delivery of the quality products customers expect
- Add *your* daily challenge

What we also see is an execution gap.

According to our five-year Mission Critical: Workforce 2021 report, only a very small number of world-class organizations are prepared for the extreme talent gap predicted by the year 2021.

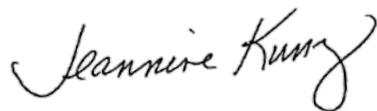
Some of these companies started planning years ago to address the coming labor shortage. Others were forced to take reactionary steps when faced with a shrinking employee pool. Regardless, they started formal training programs, introduced apprenticeships, built relationships with educators and more.

And guess what? They are seeing positive results already. We heard some of their inspiring success stories at our 2016 tuXperience event this past spring.

At Tooling U-SME, we are concerned that more manufacturers aren't taking action since this has a big impact on the long-term health and competitiveness of the industry as a whole. There is a false sense of security among many manufacturers who are not recognizing these future challenges or investing in the development of their workforce today.

We hope this report propels companies to take steps to ensure the health of their businesses—and the manufacturing industry—into the next decade.

To assess your ability to meet existing and growing workforce challenges, we invite you to take the Workforce 2021 Assessment at: [toolingu.com/shortage](http://toolingu.com/shortage).

A handwritten signature in black ink that reads "Jeannine Kunz".

**Jeannine Kunz**

Vice President  
Tooling U-SME

# THE TIME IS NOW

In 2011, as part of its Mission Critical: Workforce 2021 initiative, Tooling U-SME sounded the alarm that the future success of manufacturing is at risk by the end of the decade if industry does not address the growing skills gap.

To assess and gauge a company's performance related to this challenge, Tooling U-SME introduced a one-of-a-kind "Workforce 2021 Assessment" tool.

Now halfway to the year 2021, we've taken a look at progress, based on five years of insights from the Workforce 2021 Assessment, and the results are not encouraging. Responses show there has been little advancement.

While it's not too late, companies must take action now to ensure a healthier next decade.

## **Mission Critical: Workforce 2021 highlights:**

- ◆ Key findings from responses to the survey from manufacturers of all sizes
- ◆ Insights on business pains, such as hiring needs, training resources, mentoring and talent development
- ◆ Best practices to immediately start ensuring your workforce is ready for the next decade



# THE DISCONNECT

“ We can buy the equipment, but we don't have people to run it. ”

“ We lost our best customer because we couldn't produce enough of the parts they needed. ”

“ We turn down business because we don't have enough production workers to grow. ”

Comments like these are all too common in the industry. At the same time, we have been saturated by messages about the expanding skills gap.

Yet, there is little progress toward changing a dangerous fate for manufacturers. What's the disconnect? Why is there so little action, especially when we know a well-trained workforce is a competitive advantage for companies, driving innovation, customer satisfaction, quality, productivity and growth?

Take this study by Bersin & Associates, entitled **“High-Impact Learning Culture: The 40 Best Practices for Creating an Empowered Enterprise.”**<sup>1</sup> It shows high-impact learning organizations (HILOs) that have a strong learning foundation in place tend to significantly outperform their peers in several areas:

32%

more likely to be first to market

26%

greater ability to deliver quality products

37%

greater employee productivity

58%

more likely to have skills to meet future demand

34%

better response to customer needs

17%

more likely to be market-share leaders

While companies that have heeded the call to action are likely enjoying some of these benefits, others are losing out.

<sup>1</sup> “High-Impact Learning Culture: The 40 Best Practices for Creating an Empowered Enterprise,” Bersin & Associates, June 10, 2010.

# GROWING SKILLS GAP

Perhaps the consistent drumbeat of warnings about the skills gap has dulled concern by busy manufacturers focused on daily challenges. Yet, from production errors to downtime, common business pains typically tie directly back to identifying, recruiting and training a strong workforce.

To reiterate the enormity of the challenge, over the next decade, nearly 3.5 million manufacturing jobs will likely need to be filled. The skills gap is expected to result in 2 million of those jobs remaining unfilled.<sup>2</sup>

This is due to retirements and economic expansion, as well as changing technology, reshoring and the fact that fewer students are pursuing Science, Technology, Engineering and Math (STEM) careers.

This shortage is not quickly remedied — it takes an average of 70 days to recruit skilled production workers.<sup>3</sup>

**Tooling U-SME's Workforce 2021 Assessment shows that three issues related to the skills gap need to be immediately addressed:**

- 1. Incoming employees — finding them**
- 2. Incoming employees — training them**
- 3. Incumbent workers — upgrading their skills to keep up with changing technology**



<sup>2</sup> The Skills Gap in US Manufacturing: 2015 and Beyond, Deloitte and The Manufacturing Institute, 2015.

<sup>3</sup> Ibid.

# GAMBLER OR VISIONARY?

Companies responding to Tooling U-SME's Workforce 2021 Assessment fall into **FIVE CATEGORIES:**



## **GAMBLER**

You are risking the future success of your company. Get started today addressing these critical workplace issues before it is too late.



## **PROCRASTINATOR**

You are falling behind, but it's not too late. Tap into the industry resources available and start implementing these ideas immediately.



## **STRATEGIST**

You are moving in the right direction by starting to think strategically about the nearing challenges facing your company. Now is the time to start putting specific steps in place to address them.



## **ROLE MODEL**

You are on the right track and ahead of your peers. Continue putting successful programs in place to solve the skilled labor gap and encourage others to address these issues.



## **VISIONARY**

Congratulations! You are 2021-ready. Share your knowledge and approach with other companies to inspire them to lead this industry and our country to success in the next decade.

When Tooling U-SME introduced the assessment, the majority of respondents fell into the Gambler and Procrastinator categories. Unfortunately, five years later, that has not dramatically changed.

# WORKFORCE 2021 ASSESSMENT INSIGHTS

## TIME TO FOCUS ON THE FUTURE

To address current and pending human capital needs, more companies must move into action mode to reach Role Model and Visionary status. As the following findings from Tooling U-SME's Workforce 2021 Assessment show, there is plenty of room for improvement.

**Nearly 9 out of 10 respondents (88%)** said their company is having problems finding skilled workers in manufacturing.

**Yet less than half (42%)** say their company has identified the skills that will be needed to manufacture in the future.



**1 in 2 (49%)** say their company has not begun assessing their manufacturing employees' current skills against skills they will require in the future.



**1 out of 20 (5%)** acknowledge conducting a complete assessment of all staff.



**3 out of 4 (76%)** say the training their company provides its manufacturing employees is not adequate to meet the needs of the organization going forward.

# ASSESSMENT INSIGHTS

## TALENT DEVELOPMENT STRATEGY IN HIGH DEMAND

Tooling U-SME's Workforce 2021 Assessment findings show manufacturers need to take immediate steps to train and develop their people before it's too late.

**Less than one-third (29%)** of respondents would characterize their company's talent development strategy as good/excellent.



Fewer than **1 in 20 (4%)** say their company does an **excellent job** of consistently delivering the right training and development programs throughout the organization.



**1 in 3 (33%)** say their job-related training options are **minimal**.



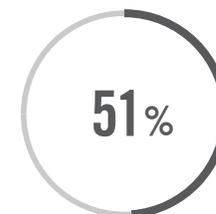
**2 out of 5 (39%)** say their company has **no community involvement** (internships, co-op, etc.) to help develop the proper skills of their incoming workforce.



Nearly **9 out of 10 (88%)** say their company is **below average** when it comes to offering outside resources to upgrade the skill sets of employees.



More than **1 in 2 companies (56%)** don't budget for employee development.



**1 in 2 (51%)** say their company **supports nontraditional learning and development solutions** (online training, etc.) as part of their employee development.

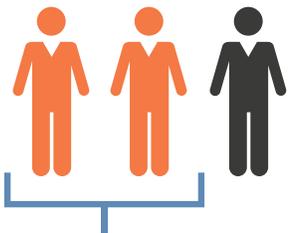


## REDUCE TURNOVER

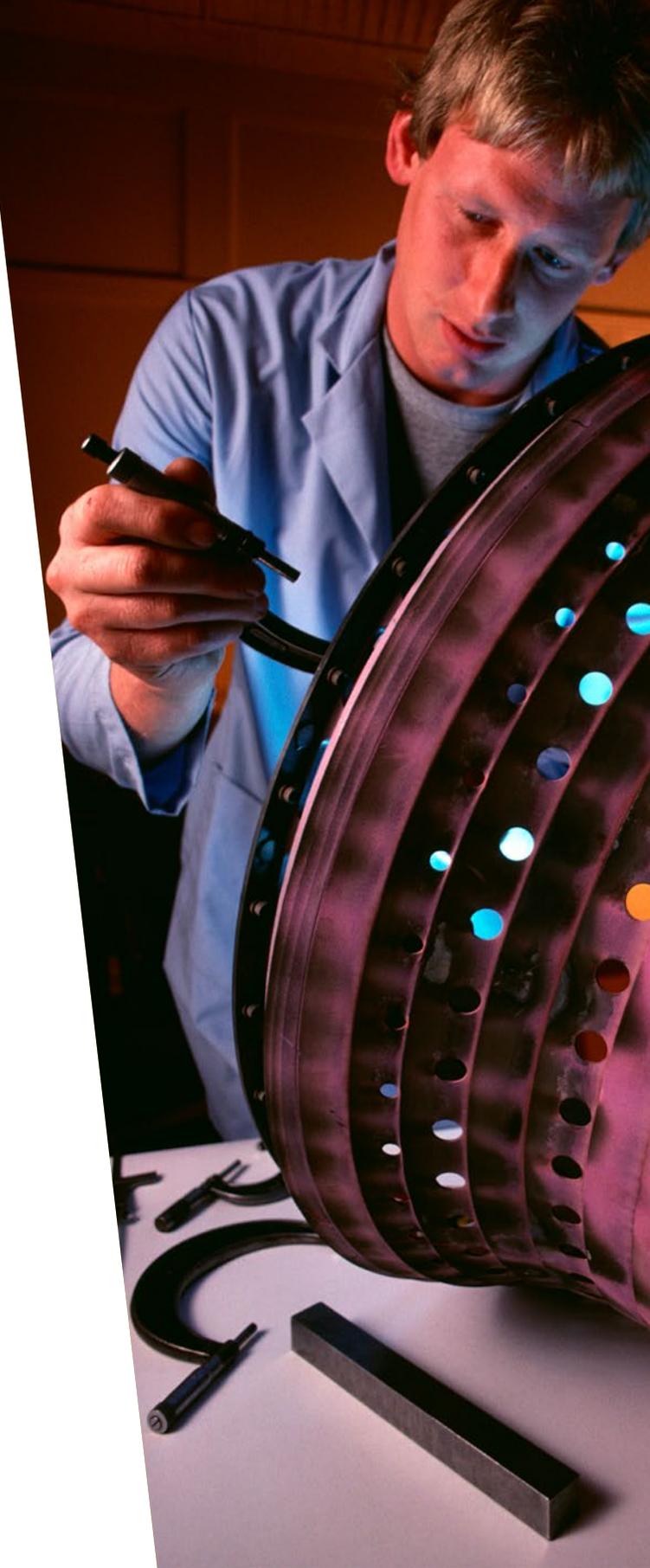
The future of manufacturing is at risk without an improvement in retention strategies.



14% of respondents say they will lose **a full quarter (25%)** or more of their workforce to retirements in the next five years.



Nearly **2 out of 3 (65%)** say their company is ineffective at keeping the people/employees who demonstrate higher knowledge and skills.



## SIX STEPS FOR GETTING STARTED TODAY

It's not too late to move ahead with a workforce development plan. Here's how:

1

Build a business case for learning with senior management. Involve the right stakeholders in discussions and tie learning to performance so you can measure the results later. It is important to set expectations, get buy in and gather support for the program early on.

2

Define and update your job roles with the required knowledge, skills and abilities needed to build strong performance on the job. This competency-based learning approach will lead to the positive return on investment (ROI) your stakeholders expect.

3

Build career progressive models, showing growth from entry level to more senior levels. This modeling effort will improve employee engagement and retention, and allow the alignment of skills to pay.

4

Benchmark incumbent employee competencies through knowledge and skills-based assessments to determine gaps in performance and build a training strategy to address them.

5

Design a custom competency-based training curriculum using blended learning that consists of online and on-the-job training as well as other performance support.

6

Ensure performance standards are measurable and trackable. These standards will validate your ROI business case.

## ASSESSMENT INSIGHTS

### CREATE A STRUCTURED PROGRAM

**An overwhelming 74%** agree that training needs in the organization impact a wide range of levels throughout the company (engineering, production, sales, operations, office support, etc.).

**So where's the commitment to training?**

75%



**3 out of 4 (75%)** say their company doesn't offer a structured training program on manufacturing skills.

45%



**Less than half (45%)** say their company has personnel designated to manage training and employee development.

### Competitive Advantage

While the majority of manufacturers have a long way to go to address the skills gap, there are some that are well ahead of the curve. That means your competitors are enjoying the benefits of their investment in human capital while your company loses ground. Learn workforce development best practices from your peers. Listen to success stories shared at Tooling U-SME's 2016 industry event called tuXperience: [toolingu.com/x](http://toolingu.com/x)

## TAKE THE WORKFORCE 2021 ASSESSMENT

Concerned about your company's preparedness? Take the Workforce 2021 Assessment and you'll discover where you fit on the spectrum, from **Gambler to Visionary**.



By answering a brief series of questions about your company's knowledge retention, readiness of future skill requirements and the status of employee development programs, you will be able to assess your ability to meet the workforce challenges that are quickly approaching.

Take the updated Workforce 2021 Assessment by visiting: [toolingu.com/shortage](https://toolingu.com/shortage)

For more workforce development ideas, find case studies at: [toolingu.com/resources/testimonials](https://toolingu.com/resources/testimonials)

## SIX TRAITS OF GOLD-STANDARD TRAINING PROGRAMS

1

**Sustainable.** Putting the right pieces in place now through a formal training program will help you develop and grow your employees — and your company — well into the future.

2

**Scalable.** No matter the size of your existing organization, it is important to set the groundwork for a program that grows with you, based on best practices. You don't want to have to recreate the wheel two years from now.

3

**Cross Trainable.** Cross-training employees for a variety of jobs through a blended learning program enhances productivity and efficiency and helps ensure a seamless workplace.

4

**Customizable.** People learn differently. That's why the best programs include a variety of learning methods from online to hands on. By evaluating each employee, you can create customized programs based on existing knowledge and skills. Training just to the areas of need saves time and money.

5

**Consistent.** Consistent training and development across the organization is one way to maintain the standards of quality that your customers require. Your people impact productivity and output. Measured, repeated output, based on competency models, is the way to long-term success.

6

**Flexible.** Routine downtime during the day can provide just the opportunity you need to focus on employee development. Employees can work to meet their compulsory training goals during these "downtimes." Online training, which addresses a variety of learning styles through multimedia offerings and is available 24/7, ensures this is always an option.

# IS YOUR WORKFORCE READY?

The future success of manufacturing is at risk by the end of the decade if industry does not address the growing skills gap.

A five-year study conducted by Tooling U-SME, with findings outlined in this Mission Critical: Workforce 2021 report, shows manufacturers have made little progress to solve workplace development challenges.

Based on these findings, there is no doubt that many companies are unprepared to address the pressing issues

around the talent gap. Taking basic steps now can help companies avoid the catastrophe associated with not having the right — or enough — skilled workers to meet customer demands.

To ensure the health of the manufacturing industry and to enhance economic prosperity, the time to act is now.

## Contact

For more information on the Mission Critical: Workforce 2021 report or how to start implementing a workforce development program, please call Tooling U-SME at 866.706.8665 or email [info@toolingu.com](mailto:info@toolingu.com).

## About Tooling U-SME

Tooling U-SME delivers versatile, competency-based learning and development solutions to the manufacturing community, working with more than half of all Fortune 500® manufacturing companies, as well as 600 educational institutions across the country. Tooling U-SME partners with customers to build high performers who help their companies drive quality, profitability, productivity, innovation and employee satisfaction. Working directly with hundreds of high schools, community colleges and universities, Tooling U-SME is able to help prepare the next-generation workforce by providing industry-driven curriculum. A division of SME, a nonprofit that connects all those who are passionate about making things that improve our world, Tooling U-SME can be found at [toolingu.com](http://toolingu.com) or on Facebook ([facebook.com/toolingu](https://facebook.com/toolingu)) and Twitter ([twitter.com/toolingu](https://twitter.com/toolingu)).

