OVERCOMING THE MANUFACTURING SKILLS GAP

A GUIDE FOR BUILDING A WORKFORCE-READY TALENT PIPELINE IN YOUR COMMUNITY

Developed by the NAM Task Force on Competitiveness & the Workforce / Summer 2014
INTRODUCTION

Manufacturers have made big bets on the rebirth of U.S. manufacturing. But rebuilding and retooling factories can seem easy compared to rebuilding workforce capabilities lost when workers retire or if outsourcing has been the norm. If you are experiencing a manufacturing skills gap in your pool of potential mid-skilled and entry-level workers, you are not alone. The challenge is one all manufacturers share and has become a central policy issue of the National Association of Manufacturers (NAM).

Solving the manufacturing skills gap has become a central issue at the local, state and national level—spurring countless programs and collaborations. You may even be involved with some of these efforts. Thanks to these well-intentioned initiatives, it’s becoming clearer to the industry what works—and what doesn’t.

The most successful initiatives are led by manufacturers aligned to speak with one voice about the workforce they need to sustain and grow their operations.

These manufacturing alliances collaboratively assess common skill deficits, create a plan for their region and take ownership to drive government and educational institutions to commit resources to make it happen. Natural competition is set aside in favor of addressing this shared, urgent need. As a unified group, they help focus disparate efforts and move the community from discussions to solutions. If your business is located near such an established group, you would be well-advised to join it and become active.

If not, the NAM Task Force on Competitiveness & the Workforce has issued this guide, and associated toolkit, to help you create your own manufacturing alliance. These materials provide specific steps and best practices for establishing a manufacturers’ led workforce development program to create and sustain a local talent pipeline.

As you consider your involvement, it’s important to recognize that there is no quick fix to this issue. “Solving” the manufacturing skills gap cannot be handed off to government or educational institutions. Neither can you launch a solution and put it on automatic pilot. Creating a sustainable manufacturing workforce development program requires systemic change and ongoing commitment from the manufacturing community to ensure the industry’s needs are met. You will need to devote time, effort and resources, but the payoffs to your company and the local economy can be tremendous.

GOALS

- Organize manufacturers to speak with one voice regarding the workforce needed to sustain and grow manufacturing
- Engage and align key stakeholders—community leaders, education institutions, local/state officials—to take action and build momentum
- Together, build a system that delivers a sustainable pipeline of strong, mid-skilled manufacturing talent

Where Skill Building Is Working:

The Arizona Manufacturing Partnership (AMP)  

Michigan Advanced Technician Training (MAT²®) Program  
[http://www.mitalent.org/mat2/](http://www.mitalent.org/mat2/)
GETTING STARTED

1. ASSESS AND CONNECT

Audit before you act. Before you align with other manufacturers, you’ll need to understand your own company’s skills gap as well as short- and long-term hiring needs. Inventory available skill-building and training resources and evaluate relationships to determine strengths and weaknesses in your talent pipeline.

Some elements of this effort can be resource-intensive. You will need more than one person to develop and implement a successful plan. Assemble a working group to take on this project. Handpick “doers” who can lead the effort and carry out the required tasks as well as team members who can champion the effort and support the doers with time and resources. The members of the working group will act as representatives of your company and will play an integral role in the creation, promotion and sustainability of the manufacturing alliance.

DETERMINE YOUR ORGANIZATION’S HIRING NEEDS

1. Quantify the number of skilled workers you need now and in the future, factoring in upcoming retirements.
2. Specify degrees, certifications, credentials and standards needed to succeed in your company or industry.
3. Tally annual worker recruitment objectives by job type.

ASSESS AVAILABLE TRAINING PROGRAMS AND DETERMINE NEEDS FOR OTHER OPTIONS

1. Inventory existing programs and initiatives within your business and community designed to deliver skilled workers.
2. Connect with stakeholders outside the company who may be working on this issue to gather information and build relationships.
3. Look elsewhere in your state and in others to gather ideas for solutions to your area’s needs.

The industry-driven Michigan Advanced Technician Training (MAT2®) Program provides eligible students with a three-year, employer tuition-paid training program; on-the-job training with pay; an associate’s degree in a high-tech, in-demand field; and a guaranteed job upon successful completion of the program.

In June 2014, a group of manufacturers in Louisville, Kentucky, published “A Blueprint for Bridging the Industrial Skills Gap: Urgent Call to Action from Greater Louisville Manufacturers.” The group is using the blueprint to increase awareness, engagement and support in the community.
2. ALIGN/COLLABORATE WITH OTHER MANUFACTURERS

Manufacturers carry significant clout in their communities. By joining forces and speaking with one voice, you can improve or refocus suboptimal programs and accelerate change. Together, you can advocate to state and local governments for support to create a systemic solution that delivers long-term results.

To create a local manufacturing alliance, the first step is to convene interested manufacturers to discuss common needs and determine ways you can advance workforce development together. If you are a small manufacturer, consider asking a large manufacturer, the state manufacturers’ association or the area chamber of commerce to be the host. If appropriate, involve state and local government officials, who may have helpful information.

IDENTIFY SOLUTIONS TO BRIDGE THE MANUFACTURING SKILLS GAP

1. Determine common needs and goals. To be successful, an alliance of manufacturers must agree on the competencies, skills and work habits needed in their workforces.

2. Gain consensus on how to meet common needs. The solution may be an industry-defined curriculum or certification program taught by a local educational institution, a new training program, an addition to an existing program or some new mix of current resources. It’s also important to determine how the group will promote manufacturing as a desired career track in your community.

3. Prepare a Call to Action. This document becomes the roadmap your group will follow and sets the agenda—in black and white—for a community-wide response.

4. Regroup with the non-manufacturer stakeholders you contacted previously to clarify your expectations and the role you would like each to play.
3. ENGAGE EDUCATIONAL INSTITUTIONS, OTHER TRAINING PROVIDERS

Once your manufacturing alliance has defined a solution that would serve identified, common needs, you need to evaluate and engage area training providers. If the alliance has doubts about an institution’s ability to meet its needs, demand reforms or keep looking. Competition for a partnership will generate better outcomes.

FIND THE RIGHT TRAINING PROVIDER

1. Review the programs currently offered by area schools (secondary and post-secondary) and training organizations.

2. As appropriate, request proposals from institutions and training providers to report how they would deliver the needs you’ve identified in your Call to Action.

3. Establish criteria and a process for the manufacturing alliance to review submitted proposals and make a final selection.

RECRUIT CANDIDATES

1. Create criteria and a plan to recruit the first class of students for your new training approach.

2. Determine where recruitment efforts will be focused. Based on each manufacturing alliance member’s needs, this could include current employees and/or new candidates (e.g., secondary school grads, veterans’ groups and individuals with relevant certifications).

4. CREATE A SYSTEM TO BUILD AND SUSTAIN A TALENT PIPELINE

The education/training solution your alliance develops will help satisfy near-term hiring and skill-building objectives. For your long-term needs and growth, you will also need to focus on creating a system that builds interest in manufacturing careers and helps develop future employees.

ENGAGE WITH SECONDARY SCHOOLS

1. Review the information you gathered in step three regarding programs in area schools dedicated to building manufacturing skills. Determine the efforts you can build upon and where you can help develop new approaches.

2. Meet with school district administrators to present your Call to Action and discuss ideas for collaboration. This can include realigning (or creating) a curriculum, supporting schools with equipment, personnel and/or financial donations, establishing internships and more. Start with high school programs, with an eye to extending to middle school as appropriate.

3. Establish regular dialogue regarding manufacturers' hiring needs, including skills needed and desired industry certifications, such as the NAM-endorsed Manufacturing Skills Standards Council (MSSC), Certified Production Technician (CPT) and American Welding Society (AWS) Certified Welder Certifications.

The Facts: Public Perception of Manufacturing

- Ninety percent of Americans rate manufacturing as “important” or “very important” for America’s economic prosperity and standard of living.
- Manufacturing ranks fifth for Americans when choosing to begin their careers behind industries like technology, energy and health care.
- Only 35 percent of Americans say they would encourage their children to pursue careers in manufacturing, despite the advanced skills and above-average pay that are characteristic of work in today’s manufacturing sector.

Source: The Manufacturing Institute

PROMOTE MANUFACTURING AS A CAREER

Many people have an inaccurate, outdated image of manufacturing as offering low-paying, low-skilled jobs in facilities that are dark, dirty and dangerous. Manufacturers must lead the way in countering this misperception and building interest in manufacturing as a career path with well-paying, skilled jobs with upward mobility.

1. Engage local, state and national partners to access materials and drive a promotional, awareness campaign for use in area schools and for the public-at-large.

2. As the voice of manufacturing in your community, establish an outreach plan to reach key audiences with your message (e.g., students, their parents and guidance counselors).

3. Work with area secondary schools to establish awards and scholarships.

CONCLUSION

Any one of the steps outlined in this toolkit will likely improve the quality of the available workforce. But when manufacturers follow all the steps to unite, take control of the conversation and define their collective needs, meaningful and sustainable change will happen.

By helping manufacturers in your area speak with a clear, cohesive voice, you can help fuel that change and grow your business.