DEVELOPING SKILLED WORKERS

A Toolkit for Communities on Using the Skills Certification System
HOW DOES A COMMUNITY USE SKILLS CERTIFICATION TO SUPPORT ITS MANUFACTURING WORKFORCE?

Putting in place the Skills Certification System at the community level is a multi-step process. It typically involves a variety of different partners, such as economic and workforce partners, manufacturing/trade associations, educators, and community organizations. As community leaders you will play an important role in coordinating this effort among various groups.

The four major steps below provide a guide or map to successful implementation. It is based on almost a decade of on-the-ground experience of The Manufacturing Institute working with community partners across the country. Click to learn more about the major steps that lead to success.

**Lessons Learned**
- Every state and every community is at a different level of readiness for implementation.
- You already have many of the pieces in place!
- The steps to implementation are not necessarily linear, but some do build off others.
- Other communities have many tools to share, so there is no need to worry about starting from scratch.

You can participate in a national Community of Learners Network to learn about how others have achieved results.

### Planning and Research
1. Identify State/Regional Economic Demands and LMI
2. Launch Planning/Create an Asset Map

### Design and Development
1. Engage Industry Leaders/Build Demand
2. Recruit Community Support/Develop Program Model
3. Align and Map Programs to Certification Requirements
4. Build Systems to Support Your Model
5. Design Career Pathways and Articulation Agreements
6. Incorporate Real-World Learning Experiences
7. Drive a Policy Agenda
8. Sustain the Certification System/ROI

Click on each step below to take a self-assessment of your community’s progress to date and access resources that will help you fill gaps.
This phase of work is focused on collecting relevant data and information on which to build your plan. Much, if not all, of the data and information likely already exists. It is a matter of locating them and pulling the pieces together. Your state employment and/or economic development agency can often be very helpful in providing labor market information, but make sure you do a reality check with employers to validate the findings, particularly around high-demand occupations and projected job openings.

Conducting your own survey on employer skills needs can provide critical supplemental information.

As you read through the list below, click on each activity to assess whether you, or a community partner, have already taken and completed each critical step. In areas where you have gaps or may need to do additional work, click on the linked resources and tools for help.

### Planning and Research

#### 1. Identify State/Regional Economic Demands and LMI

Collected relevant data about your state/region’s advanced manufacturing base, including # of firms, size of firms, and distribution of firms across sectors?

Considered the data available across the full range of advanced manufacturing (including traditional industries such as primary metals, chemicals, food processing, and many more), as well as areas that are often classified as high technology (such as semi-conductors and medical devices)?

Determine if the economic development priorities of the state/region as they relate to advanced manufacturing?

Analyzed the data to identify potential high-growth industries and high-demand occupations?

Conducted a skills survey or held focus groups to verify and/or supplement needed data?

Identified which high-demand occupations will support which high-growth industries? (Often high-demand occupations will support numerous projected high-growth industries.)

Identified the career pathways/programs of study that support those high-demand occupations?

#### 2. Launch Planning/Create an Asset Map

Identified manufacturing-related programs of study at the high-school, community college, and four-year levels?

Identified existing career pathways that incorporate a seamless transition for students across organizations?

Catalogued various regional and state initiatives that support manufacturing talent development?

Determined the various advanced manufacturing organizations and associations that function in the area, and their leaders?

Explored the various career awareness and student recruitment activities?

Researched government programs and/or external funding opportunities?

Considered STEM-related initiatives?
This step addresses the overall design or approach. Which employer champions in the community will step up to lead the charge? What is most important to the employer community—a longer-term strategy targeted at preparing high school graduate to enter the workforce? a shorter-term approach focused on filling skills gaps? upskilling incumbent worker?—or all three?

Based on those priorities, where should effort be focused? Who needs to be recruited? What roles can various community partners play? Who will wake up every day making sure things get done (a true "process owner") and holds all partners accountable? These are all critical aspects of the design and development phase.

**Design and Development Need Assistance?**

### 3. Engage Industry Leaders/Build Demand

**Developing Skilled Workers - Employer NAC Employer Engagement Manual**

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<thead>
<tr>
<th>Design and Development</th>
<th>Need Assistance?</th>
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<tbody>
<tr>
<td><strong>3. Engage Industry Leaders/Build Demand</strong></td>
<td>Have you:</td>
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<td><strong>Check if complete</strong></td>
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<td>Convened industry leaders to confirm data findings and discuss potential responses?</td>
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<td>Identified manufacturing champions in your state/region?</td>
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<td>Provided an orientation session to key advanced manufacturers in your state/region regarding industry certifications?</td>
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<td>Developed the business case for how certifications can deliver positive return on investment and impact the bottom line?</td>
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<td>Developed/adapted marketing tools that stress the benefits of industry certification?</td>
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<td>Identified and/or developed a set of industry leaders who have, or are willing to adopted industry certifications in the workplace and can advocate for their value?</td>
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### 4: Recruit Community Support; Develop Program Model.

**Have you:**

- Reached out to community stakeholders to share results of employer requirements?
- Provided an in-depth orientation to community stakeholders regarding industry certifications so you can start to gain their buy-in?
- Determined your focus of effort: high-school, community college, apprenticeship, incumbent workers— or a combination of several levels?
- Determined which programs of study at which levels to target for initial certification efforts based on labor market demand? For example, welding or machining technology.
- Considered funding implications and sources of revenue?
- Developed a timeline for action?
- Identified a process owner/leader who owns responsibility for managing the effort?
- Identified strategies for on-going engagement of key stakeholders?
- Determined roles and responsibilities of key stakeholders, so everyone has a stake in the game?
Much of the work in this component will fall to the education partners, but employers and other community partners play a critical role as well. In a demand-driven system, the needs of the employer customer drive the activity of the providers. They identify skill needs and certification requirements, advise on how to design curriculum to meet those needs, and provide real-world learning experiences like internships to students to connect learning and work.

Community partners help with outreach and referral, providing needed support services, and job retention strategies. Community marketing efforts that connect skills certification to an economic agenda have proven particularly effective.

### Design and Development

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<tr>
<td>5. Align and Map Programs to Certification Requirements</td>
<td>Alamo College: Aligning &amp; Mapping Education Perspective Webinar Right Skills Now Curriculum</td>
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<tr>
<td>8. Incorporate Real-World Learning Experiences</td>
<td>Work-Based Learning Model Apprenticeship in Metalworking</td>
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#### 5: Align and Map Programs to Certification Requirements.

Have the targeted education providers in your region:

- Check if complete
- Check if in-progress or a “gap”

- Analyzed the curriculum in targeted programs of study against the requirements of industry certifications?
- Identified the critical applied math, science, and technology skills imbedded in certification requirements?
- Done a crosswalk between certification requirements and current curriculum to identify gaps?
- Developed new instructional modules to fill identified gaps?
- Adjusted the sequence of curriculum, if required?
- Determined when various certification exams should be given, which is not always at the end of the course?
- Put a mechanism in place to help faculty assess their current knowledge and skills relative to the certification requirements?
- Determined which faculty has which industry certifications?
- Arranged for faculty to participate in training provided by certification sponsors, if needed?
- Required faculty to earn the required certification(s) for the program areas they teach?
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- Required faculty to earn the required certification(s) for the program areas they teach?
Many communities launch skills certification initiatives with grant funding. One of the critical lessons learned is that planning for sustainability of effort must begin day one. Often that involves developing a local or state policy agenda that targets funding in support of industry certification. Another critical aspect is establishing return on value/return on investment, for all partners involved. Who pays and who benefits are critical questions that must be considered.

### Policy and Sustainability

**9. Drive a Policy Agenda**

| Need Assistance? | Advanced Manufacturing Model in Indiana Work Readiness Standard and Benchmark The Career and Professional Education Act Excel in Career Technical Education |

Identified policy barriers at the local/regional and state levels that are impeding progress?

Developed a policy agenda for driving needed policy interventions?

Explored best practice innovations from other communities and states?

Leveraged local successes to promote regional and statewide change?

### Policy and Sustainability/ROI

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**8. Incorporate Real-World Learning Experiences**

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Included a range of career development activities that expose students to real-world learning experiences, including job shadowing, internships, and co-ops?

Developed a menu of activities to employers with varying commitment levels so they can choose how to engage?

Developed a number of employers interested in supporting student learning activities in the workplace?

Communicated with employers about the menu of options and gotten commitments?

Explored best practices in work-based learning, including apprenticeship models?

Developed institutional policies for prior learning assessment?

**7. Design Career Pathways and Articulation Agreements. Have you:**

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Established partnerships with area high schools/technical schools that offer programs in the targeted occupational areas?

Established partnerships with area community colleges that offer programs in the targeted occupational areas?

Established partnerships with area four-year colleges that offer programs in the targeted occupational areas?

Determined the number of credits that will transfer forward to allow for “stackable credentials”?

Developed a mechanism for converting non-credit to credit?

Developed a mechanism for awarding credit for industry-certifications earned?

Negotiated articulation agreements among various educational partners to ensure seamless transition for students across program levels?

Developed a visual to represent the career pathway flow for students?
DEVELOPING SKILLED WORKERS

A Toolkit for Communities to Recruit and Train a Quality Workforce with the Skills Certification System

Produced with support from the ACT Foundation.

This toolkit is a working document and will be updated periodically.
To suggest changes or updates, please email AJ Jorgenson at ajjorgenson@nam.org.