# NATIONAL SURVEY ON THE VALUE OF A CREDENTIALED WORKFORCE

### Final Report

November, 2013

This survey was conducted by The Manufacturing Institute, in partnership with MAGNET, the Manufacturing Advocacy and Growth Network.







# **PURPOSE**

Access to a skilled workforce is a significant and growing challenge for manufacturers. Numerous reports identify the importance of a highly skilled workforce and the increasing number of unfilled positions due to skill gaps. Companies need to do more to cultivate the next generation of skilled manufacturing workers and must work with schools, governments and nonprofits to recruit and train individuals with the knowledge and skills needed to meet the demand. (BCG Perspectives, Aug. 2013) This challenge has implications on local economic growth where the manufacturing sector is a significant part of the economy, and on our national economy, which relies heavily on manufacturing for economic growth and national security.

Certifications have been identified as effective tools in addressing this challenge. They benefit job seekers (increased job advancement), manufacturers (reduced recruiting costs, enhanced employee retention, improved company performance), and community colleges (documented learning outcomes). Despite these

benefits, it appears that use is not as common as it could be. Despite these benefits and the availability of relevant certifications, there remains significant opportunity to increase their use and document the value to all stakeholders.

The Manufacturing Institute, in partnership with MAGNET, conducted a survey to assess the percieved value and the use of industry-endorsed certifications in the advanced manufacturing workplace. The goal was to gain an improved understanding of the use of industry certifications by manufacturers to validate the qualifications of both new hires and incumbent workers seeking advancement opportunities. The focus was on entry and middle-skill jobs that typically require at least a high-school diploma but less than a four-year degree.

The feedback from the survey was used to inform the identification of strategies that if executed, would be likely to increase the use of certifications, document their value, and help to address some of the national workforce challenges in the manufacturing sector

# **APPROACH**

The survey was conducted in August, 2013. This online survey was distributed through employer networks and organizations connected with the Manufacturing Institute, MAGNET or Manufacturing Extension Partnership (MEP) centers in the Midwest region. Manufacturers received a request to participate through their contact in the network or organization.

Questions were intended to get feedback on the following:

- Types of certifications used
- · Degree to which they are used

- Perceived value
- Quantified value
- Partners

Sixty three individuals responded to the survey, 46 completed the survey and 32, representing ten states, chose to identify themselves and offer to participate in a follow up conversation.

Follow-on interviews were requested with fifteen companies to gather additional information and insights into certification use and practices.

# **KEY FINDINGS**

## Familiarity/awareness among employers is adequate

The majority of employers indicated using at least one of the NAM Endorsed Manufacturing Skills Certifications. The most commonly used was Occupational Safety and Health Administration (OSHA) and the least was the National Career Readiness Certificate (NCRC). The "other" category included references to apprenticeship programs, pathways, college certificate programs, chemical, fluid power, IT and electrician certifications.

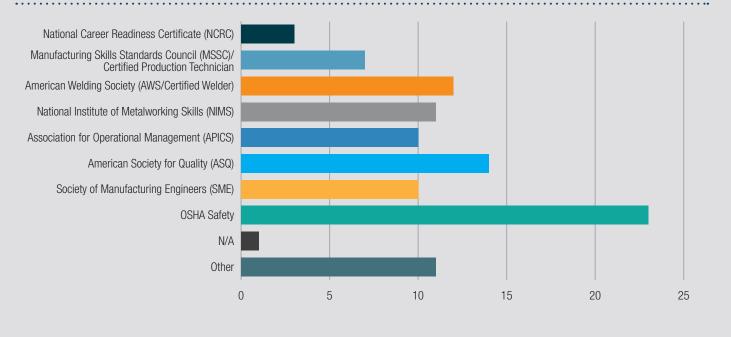
These responses suggest that although employers may be familiar with the certifications more work is needed to expand the use to achieve significant impact.

#### Reasons for use are varied

When provided with three options for using certifications and asked to check all that apply the most common selection was professional development of staff followed by screening and selection for new hires and evaluation of incumbent workers for promotion/advancement.

In the interviews, some employers indicated that they would prefer to hire individuals with certifications but they cannot find them. One mentioned that including certifications within the HR practice came about as a result of an individual supervisor being familiar with the relationship of the certification to the positions and requesting HR to include it and also make available to incumbent workers. Some indicated that accessing certified candidates was offered as part of a pilot project that they were able to take advantage of and thus learn about the certifications. Once familiar with the value and the relationship to needed skills, most employers were interested in getting certified candidates.

#### Number of Companies that Use Selected Certifications



#### Perceived value is there

When asked if certifications make a difference in validating the knowledge and skills of the workforce over 90% responded positively. There is recognition of the potential value of the use of certifications and how they affect employee performance and company outcomes.

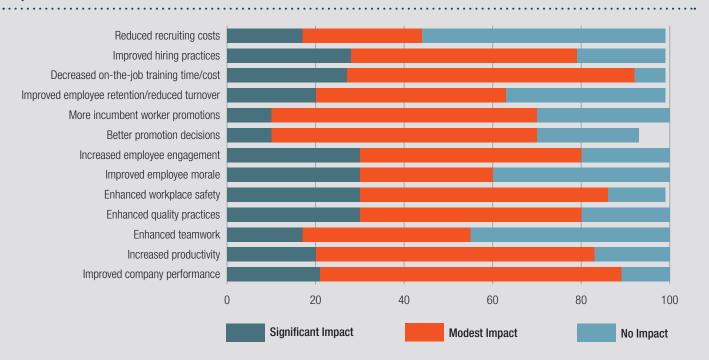
The following chart summarizes employers' assessment of the impact of certifications on specific metrics.

The chart suggests that the value can be measured using a number of metrics. Over 90% of the employers noted either "Modest Impact" or "Significant Impact" on at least two of the criteria and most indicated modest or significant in over half of the criteria. The certifications are perceived as making a difference on metrics critical to manufacturing operations.

Reduced Recruiting Costs was the largest "No Impact" factor. Companies typically still have to advertise or recruit in some way to create a pool of candidates from which to choose employees. The certifications will not impact that cost unless a targeted training program is available with certified completers available for employment.

Employers have a sense that certifications could make a difference but they may be unclear as to how to measure it. Employers with a large workforce have the resources to commit to developing and measuring metrics that can quantify the value. Smaller employers report not only a lack of resources but also fewer opportunities to measure impact due to a smaller workforce and less turnover.

#### Impact of Certifications on Selected Measures



#### **Barriers to using exist**

Despite adequate awareness of certifications demonstrated in this survey, it is well known that the use of certification programs could be more common. Responses in this survey are suggestive of some of the opportunities to improve the usage rates of certifications. Respondents were asked:

"If you currently do not use industry certifications as part of your talent/professional development practice, why not?" The most common responses were

- "Not clear on the value to my hiring and promotion practices"
- "Don't know about industry certifications"
- "No one applies with any certificate"

These responses indicate three significant opportunities to increase certification use:

- Expanded awareness of the programs
- Increased availability of relevant information that will move manufacturers to action
- Improvements in the ability of certification programs to validate their value to manufacturers

A similar conclusion was noted in a 2011 report on skills certifications, "A significant barrier to implementing a credentialing system may be the lack of sufficient information for manufacturers to assess the system's value and the implications of integrating credentialing standards into HR policies and operations." (University of Phoenix & Manufacturing Institute, pg.7)

#### **Partner engagement is important**

Employers currently partner with educational institutions to hire certified graduates or to provide training for incumbent workers resulting in an industry certification. The most common partner is a community college (81%) followed by High school/Tech Center (59%) and University (37%).

Most of the employers provide tuition assistance to hourly employees and the majority of the hourly employees use this benefit. Employees wishing to increase their skills and knowledge by taking classes have the opportunity to do so usually through one of the partner institutions. Employers encourage and often expect individuals to continue their education through the tuition assistance program. Some have arrangements with the colleges to move employees along a pathway that includes certifications and credit leading to a degree.

Manufacturer-led organizations and economic development groups can play a leadership role in facilitating partner engagement. They are able to increase awareness and provide information to their members that is relevant and meaningful and connect with academic partners to develop and implement strategies to address their workforce challenges.

# RECOMMENDATIONS

#### Leverage intermediaries in bridging the gap between education, industry, and job seekers

Widespread use of certifications may be inhibited due to the cyclical process that has developed. Students are not seeking certifications because manufacturers are not demanding them. Educational institutions are not supporting the development of certification programs because students (their customers) are not asking for them. Manufacturers are not getting candidates with certifications, and so they are not seeing the value. Despite common interests between students/professionals, educational institutions, and manufacturers, these stakeholders are unable to coordinate/align their activities to break this cycle and initiate a sustainable system for development and use of certification programs.

Intermediaries like MAGNET and other Manufacturing Extension Partnership (MEP) affiliates can play an important role in breaking this cycle. Intermediaries are in a strong position to understand, represent, and communicate the interests of all three constituents. Intermediaries can support the aggregation of data/perspective/needs from many small and medium sized manufacturers and present it to the educational institution. Intermediaries can also work with the educational institutions to develop relevant and sustainable certification programs, and to market the programs both to manufacturers and to students. These activities would bridge the gap between students.

## **Develop ROI models and case studies** that demonstrate quantifiable value

In making decisions about implementing new practices, manufacturers are more likely to adopt new practices when they see that quantifiable value is demonstrated in a setting that is relevant to their situation. Developing models and best practices for measuring the value of certifiactions is a critical step. These models would include the cost (cash

outlay + labor hours) to evaluate, implement, execute, and measure the value of certifications, and the bottom line cost savings or productivity improvements that result. The model would be applicable to different certifications, and adaptable to address the unique costs and benefits of different certification programs. The Institute could sponsor the development of case studies and/or experiments with certification programs that, to the extent possible, result in quantifiable benefits.

## Leverage case studies in executing localized marketing campaigns nationally

The message about certifications needs to be sent through a variety of methods to touch the relevant stakeholders. Employers have to know about the certifications and be able to clearly articulate the value. Educators also need to be more familiar with the certifications and must initiate the discussion to identify those most relevant to the company and those that they have the capacity to deliver. Programs and courses with employer-requested embedded certifications will be more attractive to job seekers and those seeking career advancement.

### Execute a similar survey with educational institutions

The purpose of this survey was to gain the perspective of industry. A corresponding survey should be executed that would gain the perspective of educational institutions to understand what type of data they would need to see in order make the investments necessary to create a sustainable certification program that benefits, them, their students, and their local economy.

#### References

Sirkin, Harold, Zinser, Michael, Rose, Justin, "The U.S. Skills Gap", BCG Perspectives, August 28, 2013 University of Phoenix and Manufacturing Institute, "Manufacturing Skills Certification: Employer Perspectives", 2011.







