



National Student  
Clearinghouse®

## Industry Credentials

Pilot Program Studies Matching Up Industry Credential Attainment, Enrollment and Degree Data to Identify New Learner Pathways



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Identifying quality industry credentials provides valuable information on alternative education and career pathways.

In this white paper, learn how the National Student Clearinghouse is shining a light on a segment of workforce education and learning that has previously not been well understood by adding industry credential information to the Clearinghouse's data.

The Clearinghouse is continually working to provide better data that empowers education and workforce organizations to make good decisions. Our goal is to show the most holistic view of how learning is happening across the country and to represent this evolution accurately for the education and workforce communities.

As part of that effort, the Clearinghouse recently shared an overview of one of its current initiatives: the Industry Certification Education and Performance Data System. This pilot project is the result of more than four years of effort.

To make it a reality, the Clearinghouse received generous support from the Lumina Foundation, and is working in partnership with the U.S. Census Bureau, the National Association of Manufacturers (NAM)/Manufacturing Institute (MI) and their national manufacturing organization partners. The pilot program's goal is to study how industry credential attainment could be matched with, and incorporated into, the enrollment and degree information that the Clearinghouse collects.

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The Clearinghouse collects enrollment and degree information from more than 3,600 colleges and universities nationwide, covering 99 percent of the students enrolled in postsecondary education. However, the Clearinghouse's data is focused on enrollment for credit leading to a postsecondary degree, like an associate, bachelor's, or master's degree.

By contrast, industry credentials are often earned in a noncredit, continuing education format. Thus, there is a significant gap in tracking the outcomes of people who gain industry credentials outside of the for-credit postsecondary system.

This pilot program focused on the manufacturing industry as NAM has been the leader in promoting the use of certifications to help close the talent supply gap. Here is what the industry certification education and performance data system pilot program has done so far:

- Partnered with NAM to pilot this initiative with their members including, the American Welding Society, the National Institute of Metalworking Skills, and the Manufacturing Skills Standards Council to define a standard by which the Clearinghouse could incorporate data related to manufacturing industry certifications.
- Talked with colleges and universities, secondary institutions, and state education organizations to discover what they wanted to know about industry credential attainment.
- Added student-level credential attainment data fields to [StudentTracker for Colleges and Universities Premium](#) service. This data will be added to other Clearinghouse services like [StudentTracker for High Schools](#) and the [Postsecondary Data Partnership](#) in the future.

The pilot program's first year focused on establishing and refining the industry credential intake process. During the second year, the Clearinghouse focused on providing reports back to the manufacturing organizations, tying industry credentials to the Clearinghouse's education and degree information.

Preliminary results have offered an opportunity for empirical research into the effectiveness of obtaining certain types of certifications within manufacturing. Through this workforce pilot, the Clearinghouse is helping to close the skills gap by bringing the workforce community and the education community closer together.

## Dig into Industry Credential Education and Performance Data System's Preliminary Results

The Industry Certification Education and Performance Data System initiative studies how industry credential attainment could be matched with, and incorporated into the enrollment and degree information that the Clearinghouse collects and then matches against Census Bureau data to produce preliminary aggregate labor market outcomes.

The data shows that most of the people who earn a manufacturing credential from the National Institute for Metalworking Skills (NIMS) or the Manufacturing Skill Standards Council (MSSC) are earning those credentials in the noncredit environment, rather than in high school or on the manufacturing floor.

The goal of the National Association of Manufacturers and Manufacturing Institute is "to try to bring some order to what is traditionally a pretty chaotic market," said **Gardner Carrick, vice president for strategic initiatives, NAM/MI.**

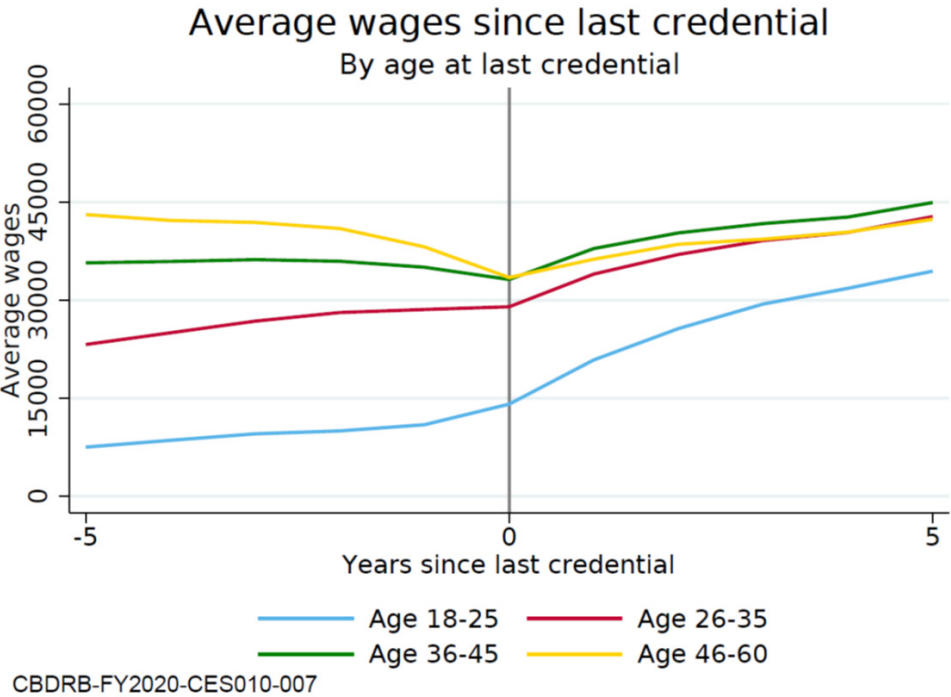
The manufacturing associations sought to determine several things about individuals who earned high quality manufacturing industry credentials, as defined by the industry itself:

- Were they more likely to work in manufacturing?
- What were their wages?
- How did they intersect with the education system?

In short, the industry wanted to know, “If I hire this person, is he or she really going to be a better employee than someone without a credential? We were frankly unable to answer any of that,” Carrick said.

Using the preliminary data, the Clearinghouse and its partners were able to gain visibility into employment and earnings outcomes based on when an individual earned the credential. The data showed an immediate increase in wages and the year over year increase in wages after the attainment of the last credential. When the data was broken down by age, it revealed additional points of interest:

- People age 18-25 see an immediate upward wage trajectory for the five years after receiving their credential.
- Between age 26 and 45, wages are stagnant before earning a credential, then rise steadily for the five years after earning the credential.
- Finally, people older than 45 who are earning a manufacturing credential are able to replace wages that they lost before they attained that credential.



DISCLAIMER: Any opinions and conclusions expressed herein are those of the authors and do not reflect the views of the U.S. Census Bureau.

The Census Bureau's Disclosure Review Board has approved all statistics and estimates presented today for public release under approval numbers CBDRB\_FY2020-CES010-007 and CBDRB-FY2020-CES010-012.

“Wage replacement for older workers is one of the trickiest public policy conundrums that we face,” Carrick said. “So, the ability to demonstrate that individuals at this age who were able to earn an industry certification immediately began to arrest that decline in wages and ultimately at five years out get back to the same wage level” is key.

## Industry Credential Attainment and Effect on Wages and Earning Potential

It is difficult to quantify the impact of any learner’s industry credential attainment on labor market outcomes.

As the variety of industry credentials being offered has exploded, the need for information about what constitutes a quality credential grows across the education and workforce ecosystem. The pandemic accelerated this need as education and workforce stakeholders desire ways to get people back to work and to know if industry credentials provide a quicker pathway to livable wages.

The Industry Certification Education and Performance Data System pilot, initially focused on the manufacturing industry, is the result of more than four years of effort. The overarching goal is to show how learning is happening across the country and to represent it accurately for both education and workforce communities.

In 2018, the Clearinghouse and NAM/MI began partnering with the U.S. Census Bureau to discover aggregate labor market outcomes using industry credential and postsecondary outcomes data. First, the Clearinghouse collected industry credential attainment information from manufacturing industry certifying bodies. Next, it matched that student-level information with the Clearinghouse’s existing enrollment and degree attainment information. Finally, the Clearinghouse provided directory information, within the Family Educational Rights and Privacy Act (FERPA) guidelines, for enrollment and degree attainment to the Census Bureau, along with the industry credential attainment information.

Nevertheless, the file the Clearinghouse sent to the Census Bureau during the pilot program included approximately 119,000 unique learners who earned approximately 302,000 credentials, primarily in the manufacturing industry. Using the credential information, the Census Bureau was able to produce aggregate wage outcomes for credential programs. This is a key part of the process of connecting the dots between industry credential attainment and its long-term effect on wages and earning potential.

Looking ahead, the Clearinghouse plans to expand the pilot to more industries, and integrate this kind of longitudinal information into [StudentTracker](#) and the [Postsecondary Data Partnership](#) services to help industry, learners, and education institutions.



## What's Next for the Industry Certification Education and Performance Data System Initiative?

The Industry Certification Education and Performance Data System initiative has already yielded fascinating insights for the manufacturing industry.

Here is a preview of what's next for the program moving forward:

- The Clearinghouse will analyze the geographical impacts of wages – how do wage levels correspond to geographical location?
- The initiative will examine the types and sizes of employers for this population that are included in the data, in order to understand what types of employers are hiring entry-level manufacturing workers.
- The program will focus on assessing retention in the industry over time. Are workers staying in the manufacturing industry after earning credentials? What does the path forward look like?
- Most importantly, the Clearinghouse aims to expand the work into other industries. This requires getting additional credentialing bodies on board to partner with the Clearinghouse and the Census Bureau.
- The Clearinghouse is continuing this pilot research with the Census Bureau throughout 2021.

Currently, the Clearinghouse is looking to pique interest among credentialing bodies in other industries by sharing some of the outcomes data the project is generating.

“We’ve partnered with [Workcred](#) as a part of their voluntary data sharing network that includes numerous credentialing bodies to drive interest in this initiative,” said **Vanessa Brown, the Clearinghouse’s deputy chief data officer**. “That network has been meeting since February 2020 with the goal to help credentialing bodies understand the value of data linking as it relates to understanding the value of their credentialing programs in the labor market. Those meetings are allowing us to leverage some of the information that we have already seen out of the census to get other groups interested in joining us in this journey. It’s really starting to drive interest.”

The new work reality that COVID-19 has created has increased the Clearinghouse’s commitment to helping all learners – across both education and workforce communities – gain skills and credentials to enable them to find good jobs. Defining the various educational pathways remains an ongoing challenge that the project is working on. Overall, the data is having an enormous positive impact on the landscape of industry credentials.

“The wave [of industry credentials] is now enormous and continuing to push in all directions on policy makers, on the education system, and ultimately on the labor market. We are looking to this type of information to determine how do we, as a national association for this industry, try to define what an industry-recognized certification is,” said **Gardner Carrick, vice president for strategic initiatives at NAM/MI**. “Having data to back up these decisions is extremely helpful as we’re moving forward in trying to bring some clarity, and to bring some certainty.”

Further, the data is helping the U.S. Census Bureau understand a growing segment of the workforce.

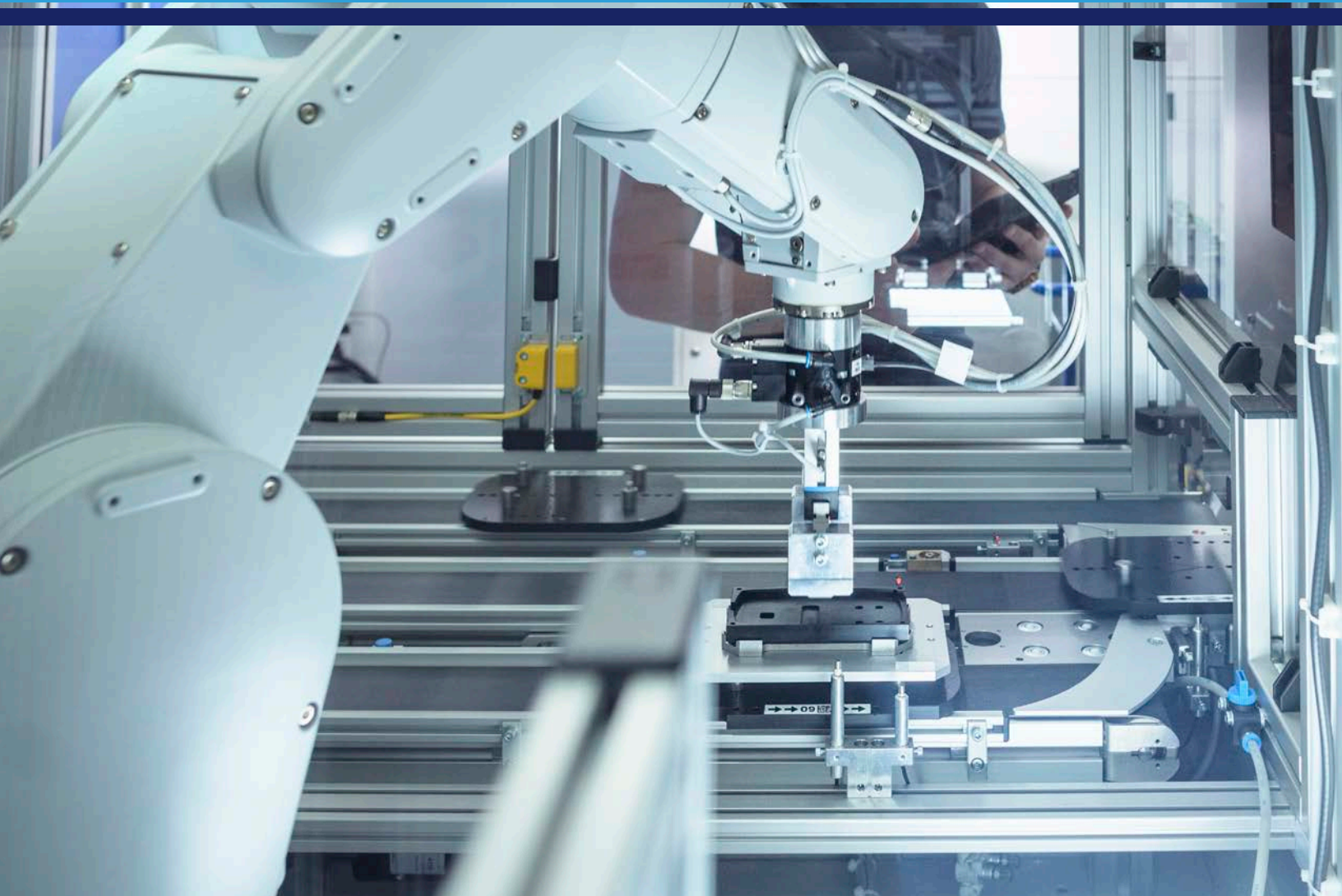
“This is a chance for us to truly understand an important part of the economy that is growing and to understand not just a point in time, but trajectories over time,” said **Nikolas Pharris-Ciurej, a statistician with the Census Bureau**.

To learn more, email the Industry Credentials team at [industrycredentials@studentclearinghouse.org](mailto:industrycredentials@studentclearinghouse.org)!





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