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IDENTIFYING HIGH QUALITY INDUSTRY CERTIFICATIONS

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The unprecedented fallout from the coronavirus pandemic calls for swift and serious action to help people quickly develop skills to adapt to harsh economic realities. High quality and efficient pathways to employment and further education have long been a high priority. Now they take on even greater urgency. Among these pathways, industry certifications offer great potential. To uncover that potential, we must ask: What is

a high quality industry certification? As states seek to promote high quality industry certifications, some employers require certifications in their hiring processes, and educational institutions consider embedding certifications in their programs, this brief provides an overarching definition of high quality, a summary of recent research on certifications, and an overview of efforts to promote this goal.

Based on industry or occupational standards, industry certifications are awarded by industry or professional groups, are usually time-limited and renewable, and are intended to demonstrate skills that can provide a direct and efficient pathway to a career.¹ Industry certifications are high quality when they are well designed, reflect actual competencies, and let employers and educational institutions know the holder has a particular, valued set of skills that are rewarded with employment, earnings, and educational credit.² When low quality, industry certifications do not signify what they are intended to and can lead to disappointment and waste for individuals, employers, educators, and policymakers alike. By some estimates, there are as many as 5,000 industry certifications in the credential marketplace in the United States.³ But not all are high quality. Given the numbers, it is essential for stakeholders to be able to identify which industry certifications are high quality and which are not.



WHAT IS A HIGH QUALITY INDUSTRY CERTIFICATION?

Recent efforts to define high quality industry certifications for states point to essential criteria including demonstrated labor market demand, as well as positive employment and earnings outcomes.⁴ They also point to the importance of continued education via stackability. These criteria are important for on-the-ground efforts to develop state level policy for the support of industry certifications. In addition to these criteria, a broad conceptual framework for quality can inform efforts to understand quality across four elements:⁵



At the foundational level, a high quality industry certification must be a well-designed credential that represents relevant competencies, with appropriate assessment processes, stackability and portability, transparency, accessibility, and affordability.



Those who attain the certification must possess and be able to demonstrate the competencies that the certification intends to mark.



The certification must have currency in the market, which can be gained through various processes including transparency initiatives, general awareness, endorsements and validations, regulations, hiring policies and practices, and/or procedures that can be used to translate the credential into academic credit.



A well-designed credential that leads to the desired competencies and is successfully translated into the market would yield outcomes of value for individuals, employers, and society, including a range of educational, employment, and social outcomes.

While these elements are challenging to measure because of limited data, they form a guide for identifying high quality industry certifications. As data on industry certifications are developed and become available, this framework and these criteria offer approaches to understand and measure quality.



WHAT DO WE KNOW ABOUT THE QUALITY OF INDUSTRY CERTIFICATIONS?

While national data on industry certifications and their quality traditionally have not been collected, recent research is shedding light on this question. The National Center on Education Statistics' Adult Training and Education Survey, a nationally representative survey of work-related credentials among adults, shows that 6 percent of adults hold an industry certification.⁶ These credential holders tend to cluster within certain occupations including finance; science, engineering, and architecture; computer science; health care; and installation and repair. Some of these

occupations can be entered with a certification alone, such as IT helpdesk with the CompTIA A-plus certification. Others require work experience, specified courses, and/or a degree along with a certification, such as medical assisting where the Certified Medical Assistant certification requires completion of an accredited program.

The self-reported utility of a certification for individuals offers an indication of quality. Among holders of industry certifications, the majority reported the certification was somewhat or very useful to their employment in terms of getting a job (86 percent), keeping a job (81 percent), staying marketable for employers or clients (90 percent), and improving work skills (86 percent).⁷

Analyses of online job postings provide an indication of how employers use industry certifications in hiring, helping to further discern their quality. Analyses by Burning Glass identify which industry certifications are most likely to be included on job postings.⁸ Their analysis of 16 million job postings in the calendar year 2015 indicates that employers value a certain set of certifications. Just 50 certifications comprise two-thirds of the certifications mentioned in job postings across a range of occupations. Those most mentioned include: certified public accountant (CPA), project management professional (PMP), certified information systems security professional (CISSP), Cisco certified network associate (CCNA), and automotive service excellence (ASE). Some certifications help open doors for workers to enter careers, such as ASE for auto repair and CCNA for computer networking. Others help workers advance in their careers by marking specific skills, such as PMP for project management and CISSP for cybersecurity, and act complementarily with degrees. The Burning Glass analyses show employers who mention certifications also offer higher salaries to workers, indicating that workers gain an economic reward by attaining certain industry certifications.



WHAT DO WE KNOW ABOUT THE QUALITY OF INDUSTRY CERTIFICATIONS?

National data show that industry certifications are associated with higher employment and earnings. For individuals without a bachelor's degree, those who held a certification are more likely to be employed than those with no non-degree credential (82 percent versus 68 percent).^{9,10} Further, certifications are associated with higher earnings. Men without bachelor's degrees who hold a certification are more likely to earn more than \$50,000 per year than those without a non-degree credential (47 percent versus 17 percent); the same pattern holds for women (18 percent versus 6 percent).¹¹

This recent research provides an indication that some industry certifications have labor market value. It also raises the question of where and when they have value. There is much that is not known. The data indicate that many industry certifications are not recognized by employers or used in hiring.¹² These national studies build on prior research in sub-fields, showing mixed results about industry certifications.¹³ The dynamics within sub-fields of industry certifications are important to understand in order to identify high quality industry certifications. Ongoing research will help to further this understanding. The Corporation for a Skilled Workforce, in partnership with WorkCred and the George Washington Institute of Public Policy, is currently examining industry certifications across four fields of study: healthcare, manufacturing, information technology, and cybersecurity.¹⁴ Additionally, important efforts are under way to better track industry certifications and their outcomes, such as the Industry Credentials Project and the Certification Data Exchange Project, which are bringing together data from industry certification groups and wage data.¹⁵ Initial findings from the Industry Credentials Project using Census data and National Student Clearinghouse data linked with data on certifications endorsed by the National Association of Manufacturers show earnings increases for certification holders, particularly those who are younger and do not have a bachelor's degree.¹⁶ A current effort by WorkCred that seeks to identify certification data to link to National Student Clearinghouse data to help generate more insights on outcomes.

In addition to labor market value, industry certifications can have value in educational institutions. There is some evidence that colleges are embedding industry certifications in their degree programs.¹⁷ Some colleges use industry certifications as part of their recognition of non-institutional learning processes, awarding credit for the learning acquired through these programs. Additionally, third-party organizations like the American Council of Education also make recommendations about the value of industry certifications in terms of academic credits. These reviews are accepted by many institutions of higher education.



WHAT STATE EFFORTS CAN ENSURE THAT INDUSTRY CERTIFICATIONS ARE HIGH QUALITY?

Recognizing the growing importance of high quality industry certifications, state-focused efforts offer practical guidance. To provide an actionable way for states to identify quality credentials using existing data and systems, the National Skills Coalition (NSC) offers a specific definition to measure quality among non-degree credentials.¹⁸ Developed in consultation with 12 states, this definition specifies the credential must be designed to be associated with substantial job opportunities and must demonstrate that its holders have mastered competencies. It also must satisfy the outcome that credential holders have positive employment and earnings outcomes. An important but optional feature is that it leads to further educational pathways.

To create a robust ongoing quality assurance system, the Education Strategy Group's (ESG) toolkit for states and communities provides detailed steps for implementing processes to promote high quality non-degree credentials like industry certifications.¹⁹ These steps include: identify high-value credentials or those associated with in-demand, high-skill, and high-wage occupations that are used in hiring; validate the preliminary list of priority credentials through employer surveys and focus groups; incentivize attainment of priority credentials through funding and communication; and report on the attainment of priority credentials by integrating data collection and accountability systems.

At the same time, national efforts can help advance the work of states. The Credential Registry is working to build a national open-linked data system with information on all credentials, including industry certifications, that could help identify those that are quality from those that are not.²⁰ Quality assurance standards by national accreditation organizations, such as the ANSI National Accreditation Board (ANAB) and the National Commission for Certifying Agencies (NCCA), can provide a basis for states and other entities to use when ensuring quality.²¹ These standards seek to ensure that industry certification bodies follow quality procedures in how they operate and issue certifications.



WHAT STATE EFFORTS CAN ENSURE THAT INDUSTRY CERTIFICATIONS ARE HIGH QUALITY?

Given the large numbers of industry certifications, states are advised to implement definitions and processes as developed by NSC and ESG. These definitions and processes can help identify and promote investments in industry certifications that are high quality; these may be concentrated in certain occupations and may differ across states and regions. Employers are also advised to consider what certifications they consider to be quality and to specify those in their hiring process, in their job descriptions. And, educational institutions are advised to consider these definitions of quality and to work with certification organizations to embed quality certifications into their programs where this is feasible.

Ongoing research and data development will continue to improve what is known about the quality of industry certifications. At the same time, states, industry certification organizations, and educational institutions should move forward using well-informed approaches that build a strong infrastructure to identify and promote high quality industry certifications. The health of the economy and the future of workers depend on this infrastructure.

¹Prebil, M., & McCarthy, M. (2018). *Building better degrees using industry certifications: Lessons from the field*. Washington DC: New America.

²Van Noy, M., McKay, H., & Michael, S. (2019). *Non-Degree credential quality: a conceptual framework to guide measurement*. Piscataway, NJ: Education and Employment Research Center, Rutgers University.

³Prebil & McCarthy, 2018.

⁴Duke-Benfield, A., Wilson, B., Kaleba, K., & Levantoff, J. (2019). *Expanding opportunities: Defining quality non-degree credentials for states*. Washington, DC: National Skills Coalition; Education Strategy Group (2019). *Building credential currency: Resources to drive attainment across K-12, higher education and workforce development*. Washington, DC: Author.; Van Noy, McKay, & Michael, 2019; National Governors Association and WorkCred (2020). *Understanding Quality: The Role of State in Supporting Quality Non-Degree Credentials*, Washington DC: authors.

⁵Van Noy, McKay, & Michael, 2019.

⁶Cronen, S., McQuiggan, M., & Isenberg, E. (2018). *Adult training and education: Results from the National Household Education Surveys Program of 2016*. Washington DC: US Department of Education, National Center for Education Statistics.

⁷Cronen, S., McQuiggan, M., & Isenberg, E. 2018

⁸Markow, W., Restuccia, D., & Taska, B. (2017). *The narrow ladder: The value of industry certifications in the job market*. Boston, MA: Burning Glass.

⁹Tesfai, L, Dancy, K., & McCarthy, M. (2018). *Paying more and getting less: How nondegree credentials reflect labor market inequality between men and women*. Washington DC: New America.



¹⁰Employment rates are also higher for those with other types of non-degree credentials—82 percent for those with a license and 70 percent for those with a certificate.

¹¹Earnings are also more likely to be more than \$50,000 for those with other types of non-degree credentials—of men, 40 percent with a license and 31 percent with a certificate; of women, 17 percent with a license and 10 percent with a certificate.

¹²Markow, Restuccia, & Taska, 2017.

¹³e.g. Russ-Eft, D., Dickison, P., & Levine, R. (2008). "Certification and career success." Paper presented at the Academy of Human Resource Development International Research Conference in the Americas, Panama City, FL, Feb 20-24, 2008; Bartlett, K. (2004). *Signaling power of occupational certification in the automobile service and information technology industries*. St. Paul, MN: National Research Center for Career and Technical Education, University of Minnesota.

¹⁴George Washington Institute of Public Policy. (2020). *CSW launches national certification study*. Washington, DC: Author. Retrieved from <https://gwipp.gwu.edu/csw-launches-national-certification-study>

¹⁵Association for Career and Technical Education. (2017). *Certification Data Exchange Project, Connecting industry-recognized certification data to education and workforce outcomes*. Alexandria, VA: Author.

¹⁶Carrick, G. & Brown, V. (2020). *Industry Certification and Education Performance Data System – Preliminary Project Results [PowerPoint slides]*, Washington DC: National Student Clearinghouse.

¹⁷Prebil & McCarthy, 2018.

¹⁸Duke-Benfield, Wilson, Kaleba, & Levantoff, 2019.

¹⁹Education Strategy Group, 2019.

²⁰Credential Engine. (2020). *Credential registry overview*. Washington, DC: Author. Retrieved from: <https://credentialengine.org/about/credential-registry-overview/>

²¹ANSI National Credentialing Board (2020), ANAB Credentialing Accreditation Programs, <https://www.ansi.org/accreditation/credentialing/Default>; Institute for Credentialing Excellence (2020), NCCA Accreditation, <https://www.credentialingexcellence.org/ncca>.

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