The Complex World of Certifications

A Presentation to the Non-degree Credentials Research Network

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THE GEORGE WASHINGTON UNIVERSITY

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Agenda

- Introductions and overview
- Defining certifications
- Presentation of findings
 - Certifications as tools for economic mobility
 - Recertification: a distinguishing feature of certifications
 - Accreditation standards: the primary source of quality assurance for certifications
- Policy and operational recommendations
- Need for further research
- Questions and discussion

Overview of the Project

- Provide a picture of the dimensions, patterns, and trends among certifications and how they currently or could interrelate with other types of credentials.
- Research conducted from 2019-2021 on 16 certifications that spanned cybersecurity, healthcare, information technology, and manufacturing, and resulted in <u>five reports</u> <u>and separate overviews for each certification</u>.
- Help policymakers, practitioners, employers, and funders better understand the potential of certifications to support economic mobility.

Definition of a Certification

Certifications are attestations of their holders' ability to perform a set of competencies relevant to an industry and/or occupation. They are awarded and tracked by certification body issuers—typically nonprofit organizations, professional associations, industry or trade organizations, or businesses.

High quality certifications are:

- **Based on third-party assessment.** This oral, written, or performancebased assessment is based on a set of validated competency standards (minimum performance expectations) set through a defensible, industryor profession-wide job analysis process which is reviewed/revised regularly.
- **Time limited and renewable.** Requiring recertification to retain the credential ensures the holder's knowledge and skills are current and reflect changing needs within an industry and occupational area.
- **Revocable.** Similar to an occupational license, some certifications can be revoked for a violation of a code of ethics (if applicable) or proven incompetence after due process.

Certifications Studied In-Depth

For each of the 16 certifications included, the project team reviewed the certification bodies' websites and interviewed certification staff:

- American Academy of Healthcare Providers in
 the Addictive Disorders Certified Addiction
 Specialist
- American Healthcare Information Management Association Registered Health Information Technician
- American Nursing Credentialing Center Psychiatric-Mental Health Nursing – Board Certified
- American Registry for Diagnostic Medical Sonography Registered Diagnostic Medical Sonographer
- American Society for Clinical Pathology Board of Certification Medical Laboratory Technician
- Association for Supply Chain Management Certified Supply Chain Professional
- Behavior Analyst Certification Board Certified Assistant Behavior Analyst

- Board for Global EHS Credentialing Certified Industrial Hygienist
- CertNexus Certified Ethical Emerging Technologist
- CompTIA A+ Core Series
- EC-Council Certified Ethical Hacker
- (ISC)² Certified Information Systems Security Professional
- Manufacturing Skills Standards Council Certified Production Technician 4.0
- Microsoft Certified Azure Fundamentals
- Project Management Institute Certified Associate in Project Management
- Smart Automation Certification Alliance Certified Industry 4.0 Associate – Basic Operations

Certifications as Tools for Promoting Economic Mobility

Certifications' utility as tools for promoting economic mobility depends on:

- the starting points of the pathways as determined by the level and scope of the competencies assessed by certifications and any educational and work experience prerequisites that may exist;
- how certifications are being integrated with educational programs of study;
- the ways certifications are connected to each other and other credentials;
- the number of steps in a pathway and the distance between steps in terms of knowledge, skills, educational attainment, and work experience required to move from one step to another;
- the navigational and other supports provided to certification seekers by certification bodies; and
- pathway exit points to the labor market

Recommendations

- Improve data collection
- Transform and better align workforce and education credentialing systems

Source: Certifications as Tools for Promoting Economic Mobility

Accreditation Standards: The Primary Source of Quality Assurance for Certifications

Certification bodies look to accreditation standards as the framework for development and maintenance of a quality credential.

Quality assurance processes addressed these characteristics:

- Ensuring a governance structure that minimizes the potential for conflicts of interest
- Developing and managing the assessment to support reliability, validity, and security
- Assuring certified persons have proven skills

Recommendations

- Make outcomes data publicly available
- Develop and adopt a certification quality assurance process which combines process- and outcome-based approaches
- More transparency on the personnel certification development process

Recertification: A Distinguishing Feature of Certifications

Key characteristics of recertification programs:

- Certifications can be lost if not renewed
- Recertification is intended to ensure continuing competence, though certification bodies often lack evidence that recertification has the intended effect
- Most recertification is achieved through the attainment of continuing education units, but innovative practices exist

Recommendations

- While some certification bodies offer "free" opportunities to gain credits towards recertification, some options involve significant financial costs. Certification bodies could do more to ensure that less advantaged individuals can access high-quality recertification activities
- Certification bodies should track who recertifies and whether the loss of certifications tends to disproportionately affect individuals of particular demographic backgrounds

Source: Recertification: A Distinguishing Feature of Certifications

Policy and Operational Recommendations

- Collect better data; consider a reporting framework for certification bodies.
- Bring certification bodies into the policymaking process; establishing an interagency working group to review the role and potential of certifications in the ecosystem.
- Format and store data in ways (e.g., comparable across certification bodies and jurisdictions, interoperable with other kinds of data sets) that facilitate their use.
- Certification bodies should improve their internal processes and practices around transparency, recertification, and equity.
- Governments and employers should encourage wider reliance on certifications in hiring and efforts to make recertification more accessible.
- Education and workforce systems should engage more deeply with certifications by looking beyond foundational certifications to more specialty certifications.
- Governments and foundations should fund additional research on certifications to shed light on key dimensions of certification production and consumption and so that initiatives to improve their performance and utilization are as evidence-based as possible.

Source: Certifications: The Ideal, Reality, and Potential

Need Research on Individual Effects of Certification

- Whether and how those who obtain them benefit broken down by occupation, stage of career, gender, race, education (subbaccalaureate or not), and by the nature of the benefit – earning and employment gains, promotions, ability to switch careers, professional respect.
- The extent to which career pathways in the world of certifications are truly stackable, either towards more advanced certifications or academic degrees, and how often that pathway is traveled.

Need Research on the Broader Certification Marketplace

Broader Marketplace:

- The extent, nature, and reasons for the proliferation of certifications.
- The conditions under which certification bodies arise, prosper, and decline and the implications for the production of certifications, especially those that are high quality and facilitate upward mobility.

Employers:

- Employer attitudes towards and utilization of certifications and the implication for increasing the diversity of their workforces.
- The payoffs realized by employers who use certifications to recruit, hire, upskill, and promote workers, and how these vary by industry, size of firm, and business model.

Series of Publications

Published December 2020

Understanding Certifications

Coming in mid-March . . .

- Certifications as Tools for Promoting Economic Mobility
- Accreditation Standards: The Primary Source of Quality Assurance for Certifications
- *Recertification: A Distinguishing Feature of Certifications*
- Certifications: The Ideal, Reality, and Potential

Project site: <u>https://www.workcred.org/Our-Work/Certifications-as-a-Vehicle-for-Increasing-Labor-</u> <u>Market-Mobility.aspx</u>

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Selection Criteria and Methodology

- Selection criteria for the certifications studied included:
 - a mix of more established certifications as well as certifications that have been developed recently to address emerging skills and occupations;
 - representation of certifications with a range of educational and experience prerequisites—from entry-level to post-baccalaureate specialization with particular attention to certifications that provide accessibility to workers without a prior college degree;
 - a mix of accredited and non-accredited certification bodies and certifications;
 - an opportunity to study the relationship between industry certifications and academic credentials; and
 - an opportunity to map career pathways.
- Each interview was conducted using a standard interview protocol and the questions were grouped around the following topics:
 - purpose and scope;
 - assessments and recertification;
 - accreditation and quality assurance;
 - data;
 - employer engagement;
 - candidate outreach; and
 - relationships with educational institutions.