# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BACKGROUND</strong></td>
<td>1</td>
</tr>
<tr>
<td>About the Brief</td>
<td>1</td>
</tr>
<tr>
<td>About the Project</td>
<td>1</td>
</tr>
<tr>
<td>About Workcred</td>
<td>2</td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>MYTH #1: CERTIFICATIONS CAN BE EARNED QUICKLY</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>MYTH #2: THERE ARE NO STANDARDS FOR CERTIFICATIONS</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>MYTH #3: CERTIFICATION ASSESSMENTS ARE BASED ON LEARNING OUTCOMES AND DEVELOPED BY EDUCATORS</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MYTH #4: CERTIFICATIONS DO NOT SUPPORT LIFELONG LEARNING</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>MYTH #5: CERTIFICATIONS CANNOT BE REVOKED</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>CONCLUSION</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

©2022 Workcred, Inc. All Rights Reserved
BACKGROUND

ABOUT THE BRIEF

This issue brief was developed by Workcred as part of its “Demonstrate Value Through Linking Data” project. One of the goals of the project was to address the continued confusion about the purpose and characteristics of certificates and certifications as well as provide an overview of organizations that convene credentialing bodies.

The following three issue briefs were developed:

» Certification Myths Debunked addresses five common myths about certifications.

» The Role of Certificates in Signifying Knowledge and Skills Attainment brings clarity to the different types of certificates with a particular emphasis on the role of assessment-based certificates and certificates of achievement.

» A Primer on Associations for Credentialing Professionals provides an overview of four organizations that bring together credentialing bodies that issue certifications and certificates outside of higher education institutions.

ABOUT THE PROJECT

From 2020-2022, Workcred brought together a network of certification bodies to explore the potential for data-linking efforts to improve understanding of the value of certifications, the aggregate labor market outcomes of certifications, and insights into successful career pathways into the workforce. The network is working with the National Student Clearinghouse to match data from certification bodies, educational attainment and enrollment data from universities, and aggregate wage data from the U.S. Census Bureau.

Despite their prevalence in the workforce, there is no complete, centralized source of data on the outcomes or impact of certifications. While there have been isolated efforts to collect this data by states, as well as self-reported data from certification bodies, outcomes data are fragmented and incomplete. By linking different data sets, the information can be used by individuals, employers, and policymakers can make more informed choices about the return on investment of certifications.
Funding for this project was provided by Lumina Foundation. The views expressed herein are those of the authors and do not necessarily represent those of Lumina Foundation, its officers, or employees.

ABOUT WORKCRED

Formed in 2014, Workcred is an affiliate of the American National Standards Institute (ANSI). Its mission is to strengthen workforce quality by improving the credentialing system, ensuring its ongoing relevance, and preparing employers, workers, educators, and governments to use it effectively. Workcred’s vision is a labor market that relies on the relevance, quality, and value of workforce credentials for opportunities, growth, and development.
This issue brief will address five common myths about certifications. Certifications are one of the most frequently misunderstood credentials. Certifications – a form of non-degree credential – are attestations of their holders’ ability to perform a set of skills relevant to a professional setting, and are awarded and tracked by various nonprofit organizations, professional associations, industry or trade organizations, and businesses. High quality certifications are based on a third-party assessment and are time-limited, renewable, and revocable.¹

A contributing factor to this confusion is that the terms certificate and certification are often used interchangeably. While this may seem like semantics, these two credentials have different meanings and significantly different outcomes. One key difference is that certificates are awarded after the completion of a learning experience from education or training courses and programs. A certification, on the other hand, is a third-party assessment of competence that is separate from education and training (See Figure 1: How are Certifications Different From Assessment-Based Certificates and Certificates of Achievement?).

## Figure 1: How Are Certifications Different from Assessment-Based Certificates and Certificates of Achievement?

<table>
<thead>
<tr>
<th>ASSESSMENT-BASED CERTIFICATE OR CERTIFICATE OF ACHIEVEMENT</th>
<th>CERTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awarded by</strong> Community colleges, universities, businesses, labor unions, for-profit training providers, government agencies, and professional and trade associations</td>
<td>Nonprofit organizations, professional associations, industry or trade organizations, and businesses</td>
</tr>
<tr>
<td><strong>Awarded for</strong> Passing an exam or a series of summative assessments either throughout or at the end of an education or training program</td>
<td>Passing a third-party assessment based on a set of competency standards (minimum performance expectations) set through a defensible, industry- or profession-wide job analysis process which is reviewed and revised regularly</td>
</tr>
<tr>
<td><strong>Indicates</strong> A person has achieved the learning outcomes in an education or training program</td>
<td>A person can perform a set of skills relevant to a professional setting</td>
</tr>
<tr>
<td><strong>Assessment created by</strong> Education and training providers who may have a test and measurement background; if it is a criterion based assessment with a determined pass-fail point, it will be developed by a test and measurement expert</td>
<td>Psychometricians, who are test and measurement experts, with input from subject matter experts</td>
</tr>
<tr>
<td><strong>Assessment type</strong> An educational assessment designed to specifically measure learning outcomes, which may be a criterion-based exam or detailed rubrics if it is a performance-based assessment</td>
<td>An oral, written, or practical standardized assessment that is fair, valid, and reliable and based on a set of validated competency standards</td>
</tr>
<tr>
<td><strong>Time to complete</strong> Variable</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Period of validity</strong> Issued for life or for a specific period of time, which will be listed on the issued certificate</td>
<td>Time-limited</td>
</tr>
<tr>
<td><strong>Renewal requirements</strong> No renewal requirement</td>
<td>Recertification is required to maintain the certification</td>
</tr>
<tr>
<td><strong>Revocation process</strong> Cannot be revoked, only invalidated</td>
<td>Can be revoked for incompetence, unethical behavior, or failure to meet recertification requirement</td>
</tr>
</tbody>
</table>
National Commission for Certifying Agencies Standards for the Accreditation of Certification Programs 
Accreditation Board for Specialty Nursing Certification (ABNSNC) Standards |
MYTH #1

CERTIFICATIONS CAN BE EARNED QUICKLY

Some certifications can be earned quickly, but not all. Certifications focus on different levels and combinations of knowledge, skills, and abilities from foundational to specialized skills. As a result, certifications are available for entry-level, mid-level, and specialized occupations. To gain the skills and competencies needed for a mid-level or professional certification may take years of experience, training, and/or education. Therefore, even though certifications are frequently referred to as short-term credentials, that is not always an accurate depiction.

The differences in skill levels can be seen in the prerequisites that are required for an individual to qualify to take a certification exam (i.e., assessment). Common types of prerequisites include education, experience, other certifications, or a combination of the three. These prerequisites are meant to ensure that someone who takes a certification exam has obtained the necessary skills and knowledge needed to pass the exam.

Some certifications, though, do not have any postsecondary education or experience prerequisites. For example, the National Commission for the Certification of Crane Operators (NCCCO) offers a mobile crane operator certification. There are no specific education or experience requirements to qualify to take the exam. However, there are other eligibility requirements to earn the certification, which include that candidates are at least 18 years of age; follow the substance abuse policy and code of ethics; and pass the certification exams, which consists of core and specialty written exams and a practical exam.2

In the information technology (IT) industry, many certifications do not have education requirements, but may recommend work experience. The rationale for including work experience is that the candidate will have a better chance of successfully passing the certification exam. For example, CompTIA A+ is a vendor neutral certification that focuses

on foundational IT skills across a variety of devices and operating systems. Although A+ is considered an entry-level certification, CompTIA highly recommends 9-12 months of experience before sitting for the exam.³

Other certifications have different levels of education prerequisites (see Figure 2). The Pharmacy Technician Certification Board (PTCB) Certified Pharmacy Technician (CPhT) certification requires the completion of a PTCB-recognized education/training program or equivalent work experience to take the certification exam.⁴ The Certified Financial Planner Board of Standards, Inc. (CFP Board) CERTIFIED FINANCIAL PLANNER™ certification requires candidates to have earned a bachelor’s degree.⁵ And, some certifications require graduate degrees, such as the HR Certification Institute (HRCI) Senior Professional in Human Resources® and the American Nurses Credentialing Center (ANCC) Family Nurse Practitioner-Board Certified (FNP-BC) certification.⁶

Many certifications have multiple pathways for candidates to meet the prerequisite requirements. For example, there are four eligibility routes someone could take to qualify for the American Society for Clinical Pathology (ASCP) Board of Certification Medical Laboratory Technician (MLT) certification exam. Each route has a different combination of eligibility requirements, including an associate’s degree or 60 hours of academic credit with six semester hours in chemistry and six semester hours in biology, and one of the following: successful completion of National Accreditation Agency for Clinical Laboratory Sciences (NAACLS) or Accrediting Bureau of Health Information Schools (ABHES) accredited MLT program, a valid Clinical Lab Assistant (CLA) certification,⁷ successful completion of a 50 week U.S. military medical laboratory training course, or three years of full time clinical experience

³ CompTIA, “CompTIA A+ exam Codes 220-1001 & 220-1002 (Core Series),” accessed March 13, 2022: https://www.comptia.org/certifications/a


⁷ Effective January 1, 2023, the MLT eligibility route allowing for a valid Clinical Lab Assistant (CLA) certification will be discontinued. The last certification examination under this route will be administered December 30, 2022, with a deadline date of September 30, 2022, for receipt of all application materials.
in blood banking, chemistry, hematology, microbiology, immunology, and urinalysis/body fluids within the last six years.\(^8\) By offering different eligibility pathways, ASCP recognizes that the skills and competencies can be learned through different experiences.

---

**FIGURE 2: VARYING EDUCATION PREREQUISITES FOR CERTIFICATIONS\(^9\)**

<table>
<thead>
<tr>
<th>NO FORMAL EDUCATION REQUIREMENT</th>
<th>NCCCO Mobile Crane Operator Certification</th>
<th>CompTIA A+ Certification</th>
<th>Microsoft Certified: Azure Developer Associate</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAINING PROGRAM</td>
<td>National Association of Elevator Contractors Certified Elevator Technician (CET)</td>
<td>North American Board of Certified Energy Practitioners Photovoltaic Installation Professional(^9) (PVIP)</td>
<td>International Board of Heart Rhythm Examiners Certified Cardiac Device Specialist, Allied Professional (CCDS)</td>
</tr>
<tr>
<td>BACHELOR’S DEGREE</td>
<td>Association for Supply Chain Management Certified Supply Chain Professional (CSCP)</td>
<td>CFP Board CERTIFIED FINANCIAL PLANNER(^{TM})</td>
<td>Board of Certified Safety Professionals Certified Safety Professional(^9) (CSP(^9))</td>
</tr>
<tr>
<td>GRADUATE DEGREE</td>
<td>HRCI Senior Professional in Human Resources (SPHR(^8))</td>
<td>ANCC Family Nurse Practitioner-Board Certified Certification (FNP-BC)</td>
<td>Behavior Analyst Certification Board (BACB) Board Certified Behavior Analyst(^9) (BCBA(^9))</td>
</tr>
</tbody>
</table>

---


9. Some of these certifications also have experience requirements. In addition, certification bodies may provide multiple combinations of experience and educational attainment requirements to be eligible to take the certification exam.
MYTH #2

THERE ARE NO STANDARDS FOR CERTIFICATIONS

As it relates to personnel certification bodies, a standard is a document that sets guidelines for the operation of the certification body, including the development, governance, and implementation of certifications.\(^{10}\) Simply stated, a standard is an agreed-upon way of doing something. Once the need for a standard is identified, a standard developing organization brings together people representing interested industry, consumers, academia, government, and non-profit organizations to develop voluntary consensus on the standard.

Once a standard sets the needed requirements, there is a process of conformity assessment to help ensure that the requirements are being met, called accreditation. The two main organizations that accredit certification bodies in the United States are the ANSI National Accreditation Board (ANAB) and the National Commission for Certifying Agencies (NCCA), though each uses a different voluntary standard. NCCA uses the 2021 *Standards for the Accreditation of Certification Programs*.\(^{11}\) ANAB uses ANSI/ISO/IEC: 17024:2012, *Conformity assessment – General requirements for bodies operating certification of persons*, which is a national and international standard that sets the bar for quality certification programs.\(^{12}\) One of the distinguishing features of the ANSI/ISO/IEC 17024 standard is that the certification body must have a continuous, quality improvement process to ensure that certification bodies achieve the requirements of the standard. There is also specialty accreditation for nursing certifications through the Accreditation Board for Specialty Nursing Certification (ABSNC) Standards.\(^{13}\)

---


12 For more information about the ANSI/ISO/IEC 17024 standard requirements, see [https://www.iso.org/standard/52993.html](https://www.iso.org/standard/52993.html).

13 For more information about the Accreditation Board for Specialty certification, see [https://absnc.org](https://absnc.org).
Standards have a specific role in the development and administration of a personnel certification and provide assurances to individuals and employers that individuals who earn the accredited certification meet the validated competencies of a job or occupation that are being assessed. Employers benefit from standards by knowing that individuals who hold the certification have the needed knowledge, skills, and abilities. In addition, accreditation ensures that a certification body follows consistent practices in areas such as development of the certification scheme, management and governance of the certification body, and administration of the certification assessment. The standards and accreditation processes provide confidence that the certification exam is reliable and valid, and, therefore, an accurate representation that an individual has met a minimum level of competence that reflects current practice.

14 For more information about how certifications are supported by standards, see Workcred’s video series, https://workcred.org/Publications-and-Events/Standardization-and-Workforce-Credentials.aspx
MYTH #3

CERTIFICATION ASSESSMENTS ARE BASED ON LEARNING OUTCOMES AND DEVELOPED BY EDUCATORS

Assessment exams associated with certifications, assessment-based certificates, and certificates of achievement measure different things. When an individual takes an assessment as part of an education or training experience, the assessment is measuring learning outcomes for the course or the academic program. Learning outcomes are statements that describe the knowledge and skills an individual will gain upon completion of a course, training program, or academic program. Typically, learning outcomes are listed on a course syllabus and developed by the course or program instructor.

Certification assessments, on the other hand, are not tied to a specific course, degree, or training program. Instead, certification assessments measure whether an individual has achieved a level of competence related to a specific job role or occupation. Written, oral, and performance-based assessments can be used to measure competence. Regardless of the format, the development of the assessment associated with certifications differs from the assessment process used for education and training programs.

As outlined in Figure 3, the basis for developing a certification assessment is through the use of a job task analysis, which determines the knowledge, skills, and abilities for a job role or occupation. The tasks may be identified through surveys, interviews, and/or focus groups with subject-matter experts (SMEs). Each task is then evaluated for its frequency and importance in performing the role or occupation. The tasks are validated with SMEs to ensure that the tasks being assessed accurately represent the skills, knowledge, and abilities that are currently used by professionals in the industry.
Step 1: Job Task Analysis
Identifies the specific competencies needed by an individual to perform a certain job or set of tasks relevant to an occupation.

Step 2: Subject Matter Expert Involvement
Provide first-hand, industry-specific, contextualized knowledge of the competencies needed to effectively perform in a role.

Step 3: Test Blueprint Creation
Provide a plan for what the exam will measure.

Step 4: Item Development
The process of writing, reviewing, and editing exam questions.

Step 5: Test Design
The type of assessment developed should be appropriate to the competencies being assessed.

Step 6: Setting Cut Score
The process of determining the amount of correct answers needed to pass an assessment.

Step 7: Administration of Exam Processes
A certification body must be diligent in maintaining the security of the assessment, as well as exam administration.

Figure 3 was recreated with permission from Professional Testing, Inc.
The information gleaned from the job task analysis is then used to create a test or exam blueprint, which informs the development of the assessment. Exam blueprints may include the purpose of the exam, the intended audience, the domain knowledge being assessed, the distribution of questions across each domain of knowledge, and the type of assessment that will be used.\textsuperscript{15} In addition to guiding the development of an assessment, exam blueprints may be used by faculty and training instructors to align their curriculum with the certification exam. This is a way to ensure that the curriculum is up-to-date with current practice and their students will learn skills and knowledge that will be assessed on the certification exam.\textsuperscript{16}

Although a faculty member or training instructor develops an exam associated with an academic or training program (i.e., for a certificate), certification exams are developed by experts in assessment and measurement called psychometricians.\textsuperscript{17} Certification bodies use psychometricians to develop fair and valid assessments. Since certifications are high-stake assessments that measure the competence of an individual, it is critical that the assessment accurately measures the skills and knowledge associated with competence, especially against potential legal challenges.

Psychometricians perform a variety of tasks associated with the certification exam development and implementation processes, such as developing the assessment, conducting passing score studies, writing assessment questions, developing multiple forms of the assessment, conducting validity studies, and managing the job task analysis.\textsuperscript{18} Since the tasks performed by psychometricians are so varied, it is common for certification bodies to work with multiple psychometricians, each who have their own area of expertise.


\textsuperscript{17} Psychometricians are experts in assessment and measurement who typically hold a graduate degree in fields such as education measurement and research, psychology, psychometrics, or statistics.

Recertification, or renewal, is a distinguishing characteristic that is found in certifications and not in certificates or degrees. Because of the recertification component, certifications are a type of credential that supports lifelong learning. Certification holders continue to learn new skills and/or participate in professional development activities, which supports individuals in gaining knowledge and growing professionally throughout the life of their career. Recertification also serves as a signal to employers that an employee or potential employee has up-to-date competencies. The process to recertify varies by certification and may involve taking an assessment, completing continuing education opportunities, conducting academic research, or submitting a portfolio of professional accomplishments.

Typically, certification bodies require certification holders to recertify every three to five years, though it can be less or more often depending on the industry. By meeting recertification requirements, certification holders can demonstrate that their knowledge and competencies are up-to-date with the needs of industry. This is especially important in fields such as healthcare or financial services where it is important to protect the public from harm or bad actors.

Some industries such as IT and cybersecurity often have shorter timeframes between recertification cycles due to the rapidly changing skills and needs in their fields. For instance, Microsoft role-based and specialty certifications such as Power BI Data Analyst Associate or Azure Virtual Desktop Specialty must be renewed annually; otherwise, they expire. These certifications can be renewed by taking a free, online assessment within six months of the certification expiration date. Certification holders can prepare for the recertification assessment, which covers only technology updates and promotes continuous learning and

skill updates, by taking learning modules on Microsoft Learn.\textsuperscript{20} By contrast, the recertification process for the Project Management Institute (PMI) Project Management Professional (PMP\textsuperscript{®}) requires 60 professional development units in two areas—education and giving back to the profession—every three years.\textsuperscript{21} Since occupations differ in how rapidly skills can change, each certification body determines the appropriate recertification time cycle and requirements.


MYTH #5
CERTIFICATIONS CANNOT BE REVOKED

Another unique characteristic of certifications is that they can be revoked. Reasons for a certification revocation include failing to meet the recertification requirements, violating a code of ethics, or for instances of professional misconduct. In fact, a certification holder who chooses not to complete the recertification requirements in the appropriate timeframe is no longer able to claim that they hold the certification.

Many certifications have a code of ethics or a code of professional conduct by which certification holders must abide. Certifications that are accredited must have clear policies and procedures that outline the process to revoke a certification, as well as the process for an individual to appeal the decision to revoke their certification. Many certification bodies make information about revocations and appeals processes available on their website or as part of the candidate handbook.

If a certification holder is found to have violated the code of ethics, there is a notification process and an additional process to determine the applicable sanctions. Sanctions can vary depending on the severity of the violation and may range from having a certification revoked, barring the individual from taking other certifications offered by the certification body, or a suspension of the certification. Usually, individuals have a set period of time, such as 30 days, to file a request to appeal the revocation of the certification.

REASONS A CERTIFICATION CAN BE REVOKED

- Failing to meet recertification requirements
- Violating a code of ethics
- Instances of professional misconduct
CONCLUSION

Certifications are just one of a variety of credentials that people can obtain. To help individuals, employers, and other credential consumers make informed decisions, they need to distinguish assessment-based certificates or certificates of achievement from certifications. Consumers of credentials should also be familiar with the prerequisites required to earn a credential; who develops the assessment and whether it assesses learning outcomes or competencies; whether the credential is guided by national or international standards; how the credential can support lifelong learning; and whether it can be revoked.

The more information about a certification someone has, the better positioned they are to determine if it is the appropriate credential to help them meet their goals. With an increasing focus on skills and skills-based hiring, employers can compare the competencies assessed in the certification exam with the competencies they require for jobs. This allows employers to better identify qualified candidates who meet the skill needs of the jobs. And, if certification holders can more effectively articulate how their skills match job requirements, they will better position themselves for career opportunities and advancement.