The NOCA Guide to Understanding Credentialing Concepts

Primary Author
Cynthia C. Durley, M.Ed., MBA
NOCA Board of Directors

President
William Kersten
Senior Vice President, Operations, National Institute for Automotive Service Excellence

President-Elect
Cynthia Durley, M.Ed., MBA
Executive Director, Dental Assisting National Board

Immediate-Past President
Susan Eubanks, NCC, NCSC, LPC
Associate Executive Director, National Board for Certified Counselors

Secretary/Treasurer
Francine Butler, Ph.D., CAE
Executive Director, Biofeedback Certification Institute of America

NCCA Chair
Lawrence J. Fabrey, Ph.D.
Vice President, Measurement Research, Applied Measurement Professionals, Inc.

Sustaining Member
Richard Goldberg, Esq.
Principal, Richard Goldberg & Associates

Elected Board Members
Melissa Murer Corrigan, RPh
Executive Director, Pharmacy Technician Certification Board

Christopher Damon, J.D.
Executive Director, American Medical Technologists

Carol Hartigan, RN, MA
Certification Director, American Association of Critical Care Nurses Certification Corporation

NCCA Commissioners

Chair
Lawrence J. Fabrey, Ph.D.
Vice President, Measurement Research, Applied Measurement Professionals, Inc.

Co-Chair
Christine Reidy
Executive Director, Commission on Dietetic Registration of the American Dietetic Association

NOCA Board Appointee
Carolyn Lewis, Ph.D., RN, CNAA
Principal, The PRINE, LLC

NCCA Appointees
Reed A. Castle, Ph.D.
Director of Research and Development, Schroeder Measurement Technologies, Inc.

Janice Scheuneman, Ph.D.
President, Quality Assessment Services

Elected Commissioners

Lynn Anderson
Executive Director, Joint Commission on Allied Health Personnel in Ophthalmology

Denise Fandel, MS, ATC
Executive Director, Board of Certification, Inc.

Cynthia Miller Murphy, RN, MSN, CAE
Executive Director, Oncology Nursing Certification Corporation

Jan Towers, Ph.D., NP-C, CRNP
Director, American Academy of Nurse Practitioners Certification Program

Public Member
Rebecca LeBuhn
Chair, Board of Directors, Citizen Advocacy Center
The NOCA Guide to Understanding Credentialing Concepts

EXECUTIVE SUMMARY

Nearly every profession uses credentialing to establish criteria for fairness, quality, competence, and/or safety for professional services, products, or educational endeavors. In some cases, professions voluntarily develop quality standards of practice; a profession may also be regulated by the State or Federal government. Despite the widespread use of professional designations, credentialing terms are often misused and general concepts often misunderstood. The National Organization for Competency Assurance (NOCA), the national membership association for professional certification organizations, developed The NOCA Guide to Understanding Credentialing Concepts to assist its stakeholders, including legislators, educators, employers, credentialing agencies, professionals and the public, in understanding and correctly using credentialing terms and concepts.

This paper addresses the following:
- Purposes served by credentialing
- Definitions and descriptions of credentialing terms
- Processes used in conducting or choosing a psychometrically sound and legally defensible credentialing examination program
- Differences between didactic (end-of-course) examinations and professional credentialing examinations

General NOCA Information (www.noca.org)

Established in 1977, NOCA serves as a clearinghouse for information on the latest trends and issues of concern to practitioners and organizations focused on certification, licensure, and human resources development. NOCA’s accrediting body, the National Commission for Certifying Agencies (NCCA), is the international leader in setting quality standards for credentialing organizations and grants accreditation to those organizations that meet these Standards.

NOCA’s mission is to promote excellence in competency assessment for practitioners in all occupations and professions by:
- Providing expertise and guidance
- Developing and implementing standards for accreditation of certification programs through NCCA (NOCA’s accrediting body)
- Providing educational and networking resources
- Serving as an advocate on certification issues

NOCA’s vision is to:
- Establish NOCA as the authority in certification and NCCA as the authority in accreditation of certification programs.
- Educate the general consumer so they understand the value of voluntary certification and recognize the NCCA seal as representative of quality certification programs.
- Enhance quality member benefits and resources so all certification organizations will join NOCA and aspire to NCCA accreditation of their certification programs.
- Lead the global transformation to excellence in competency assessment.
WHAT PURPOSE DOES CREDENTIALING SERVE?

Credentialing programs serve many purposes including, but not limited to:

- Protecting the public
- Establishing standards for professional knowledge, skills, and practice
- Assuring consumers that professionals have met standards of practice
- Meeting the requirements of governmental regulators
- Helping members of an association or organization work with governmental agencies to regulate the profession
- Developing a customized credential to meet unique needs in the marketplace, because: such a credential does not currently exist; a credential exists, but the organization wishes to differentiate itself from its competition; or because new technologies or procedures have developed into a new scope of practice or body of knowledge
- Meeting the needs of employers, practitioners, and the public to identify individuals with certain knowledge and skills
- Furthering a company’s overall business goals – that is, to ensure that consumers have access to skilled professionals knowledgeable about the company’s products and services
- Advancing the profession
- Reflecting an individual’s attainment of knowledge of a specifically defined course of study or of technical skills recognized by a manufacturer or service provider
- Providing the individual certificant with a sense of pride and professional accomplishment
- Demonstrating an individual's commitment to a profession (and to life-long learning, if the credential is a professional certification, requiring recertification by continuing education, examination, self-assessment, etc.)
DEFINITIONS AND DESCRIPTIONS OF TYPES OF CREDENTIALS

Credit for the sources of these definitions is shared among the resources listed in the bibliography.

**Credentialing** is the umbrella term that includes the concepts of accreditation, licensure, registration, and professional certification.

**Credentialing** can establish criteria for fairness, quality, competence, and/or safety for professional services provided by authorized individuals, for products, or for educational endeavors. Credentialing is the process by which an entity, authorized and qualified to do so, grants formal recognition to, or records the recognition status of individuals, organizations, institutions, programs, processes, services or products that meet predetermined and standardized criteria.

The **credentialing process** is essentially a method for maintaining *quality* standards of knowledge and performance, and in some cases, for stimulating *continued self-improvement*. Credentialing confers occupational *identity*.

**Accreditation** is the voluntary process by which a nongovernmental agency grants a time-limited recognition to an institution, organization, business, or other entity after verifying that it has met predetermined and standardized criteria.

**Professional certification** is the voluntary process by which a non-governmental entity grants a time-limited recognition and use of a credential to an individual after verifying that he or she has met predetermined and standardized criteria. It is the vehicle that a profession or occupation uses to differentiate among its members, using standards, sometimes developed through a consensus-driven process, based on existing legal and psychometric requirements. The holder of a professional certification is called a *certificant*.

**Licensure** is the mandatory process by which a governmental agency grants time-limited permission to an individual to engage in a given occupation after verifying that he/she has met predetermined and standardized criteria, and offers title protection for those who meet the criteria.

**Registration** has at least three meanings: one is the governmental process by which a governmental agency grants a time-limited status on a registry, determined by specified knowledge-based requirements (e.g., experience, education, examinations), thereby authorizing those individual’s to practice, similar to licensure. Its purpose is to maintain a continuous record of past and current occupational status of that individual, and to provide title protection.

A second meaning of **registration** is simply a listing of practitioners maintained by a governmental entity, without educational, experiential, or competency-based requirements; for example, maintaining a list of practitioners on a state ‘registry.’

A third use of the term **registration** is a professional designation defined by a governmental entity in professional regulations or rules. However, the governmental regulatory body does not itself maintain a listing or registry of those who purport to meet registration requirements. Verification and authentication of such individuals are left to the employer of the individual claiming to be registered.

Therefore, when conducted according to legally defensible and psychometrically sound methods and standards, credentialing, in the form of accreditation, licensure, the first form of registration, or a professional certification, assures that a highly qualified, objective, recognized third party (the credentialing body) has examined this person, program, product or service and found it to meet defined, published, psychometrically sound, and legally defensible standards.
While the following may be considered by some to be types of credentialing processes, these certificate programs are not held to the objective standards required of the other types of credentialing programs.

**A certificate program** is a training program on a topic for which participants receive a certificate after attendance and/or completion of the coursework. Some programs also require successful demonstration of attainment of the course objectives. One who completes a professional certificate program is known as a **certificate holder**. A credential is usually NOT granted at the completion of a certificate program.

There are three types of certificate programs: **knowledge-based certificate, curriculum-based certificate,** and **certificate of attendance or participation**.

**A knowledge-based certificate** recognizes a relatively narrow scope of specialized knowledge used in performing duties or tasks required by a certain profession or occupation. This certificate is issued after the individual passes an assessment instrument.

**A curriculum-based certificate** is issued after an individual completes a course or series of courses and passes an assessment instrument. The content of the assessment is limited to the course content and therefore may not be completely representative of professional practice (and therefore it is not as defensible to use this or the knowledge-based type of certificate for regulatory purposes as compared to a professional certification).

**A certificate of attendance or participation** is issued after an individual attends or participates in a particular meeting or course. Usually, there is no knowledge assessed prior to issuing this type of certificate. A certificate of attendance or participation is **not a credential**, because the recipients are not required to demonstrate competence according to professional or trade standards.

(These aforementioned certificate programs should not be confused with high level, post-master’s degree programs offered within some nursing specialties.)

---

**PROCESSES USED IN CONDUCTING OR CHOOSING A PSYCHOMETRICALLY SOUND, LEGALLY DEFENSIBLE CREDENTIALING PROGRAM**

While professional regulation may occur on the Federal level, it is most often conducted by State professional regulatory boards whose mission it is to protect the public by ensuring that professionals meet Federal or State-specific credentialing requirements such as completing specific educational and/or experiential requirements and passing an examination to demonstrate competence to practice the profession. Only those who meet the regulatory requirements and remain in compliance with the State professional practice act may legally practice the profession.

Some professional regulatory boards use national examinations prepared specifically for regulatory purposes. Others recognize examinations prepared by voluntary credentialing programs. In this case, the regulatory body must ensure that all required or recognized credentialing programs and their examinations are developed and conducted according to legally defensible and generally accepted psychometric principles and standards. These standards include the following:


Engaging the services of a **psychometrician** is necessary to interpret and implement these standards as part of a psychometrically sound and legally defensible credentialing program.

According to Larry Early in *Starting a Certification Program, 2nd Edition*, **psychometrics** is the science and technology of mental measurement, including psychology, behavioral science, education, statistics, and information technology.

A professional **psychometrician** is needed to:

- Design and analyze results of a job analysis or role delineation to define knowledge and/or skill associated with performance domains and tasks associated with the identified profession.

- Establish examination specifications based on a job analysis or role delineation.

- Select appropriate examination item format to meet measurement goals.

- Facilitate examination development based on examination specifications and item writing principles.

- Facilitate passing standard ('cut score') studies, such that the cut score is consistent with the purpose of the credential and the established standard of competence for the profession.

- Advise on examination administration policies and procedures that are appropriate, standardized, and secure.

- Analyze examination results using appropriate statistical methods.

- Establish scoring and reporting procedures, and ensure the security and confidentiality of such scores and reports.

- Ensure that the reported scores are sufficiently reliable for the intended purpose(s) of the examination.

- Ensure that different forms of an examination assess equivalent content and that candidates are not disadvantaged for taking a form of an examination that varies in difficulty from another form.

- Conduct ongoing research in the areas of reliability and validity.
### DIFFERENCES BETWEEN END OF COURSE TESTS AND PROFESSIONAL CREDENTIALING EXAMINATIONS

According to the Education Policy and Leadership Center, high stakes testing is the use of test scores to make decisions that have important consequences for individuals, such as tests some states require before individuals can graduate from high school; college and graduate school admissions tests; and credentialing (licensure, registration and certification) examinations.

Therefore, any examinations used to meet state licensure or registration requirements are considered “high stakes” because passing such examinations allows individuals to perform professional duties as proscribed by State or Federal regulatory bodies. End-of-course examinations should not be allowed to substitute for professional credentialing examinations in these high stakes testing situations, because these examinations are not designed for, and are therefore not valid for, these purposes. Educational courses and examinations offered as part of a course or degree program are not designed to stand alone; few if any such tests are developed and scored according to psychometrically sound principles and standards, and therefore, are not likely to be legally defensible in making employment and promotion decisions.

Unfortunately, sometimes confusion exists regarding the concepts of end-of-course (didactic) examinations or educational knowledge-based certificate programs as compared to professional certification or other professional credentialing examinations. In addition to the differentiating characteristics described earlier in this paper, there are five major criteria that distinguish a professional credentialing (certification, licensure or registration) examination from an end-of-course examination:

1. A professional role delineation or job analysis is conducted and periodically validated.
2. A demonstration of how the examination is linked to a defined body of knowledge, based on the professional role delineation or job analysis, is provided.
3. A demonstration of reliability and validity of the examination, based on psychometrically accepted statistical methods, is provided.
4. A minimum passing score is developed using psychometrically accepted statistical methods.

A demonstration that alternate forms of the examination are parallel in construction and content coverage, and equated for difficulty using psychometrically sound techniques, is provided.

In addition, when a professional credentialing examination is part of a professional certification, credential maintenance or recertification is (or should be) required. The credential maintenance process or recertification requirements involve the enhancement and/or the evaluation of continued competence, with an emphasis on lifelong professional learning and development.

A knowledge-based or curriculum-based certificate program, on the other hand, often has a short ‘shelf life.’ To earn the certificate, individuals are exposed to and learn information and/or skills, and then take a test of some type. A professional disadvantage to a certificate program is that the knowledge gleaned to earn the certificate may be too generic to be useful in one’s career, or may be too narrow in its focus, or may quickly become outdated. These types of certificate programs may become insufficient in and of themselves for demonstrating continuing competence, or for moving people forward in their careers. In addition, certificates obtained at the conclusion of such courses may not be developed and are not bound by generally accepted psychometric principles, as noted above.

While curriculum-based end-of-course examinations are usually based on curriculum guidelines and learning objectives, valid, accredited professional credentialing examinations, including licensure,
registration, and certification examinations should be based on a **professional role delineation or job analysis**. According to the National Commission for Certifying Agencies’ *Standards for the Accreditation of Certification Programs*, a **job analysis** or **role delineation** study is defined as:

> Any of several methods used singly or in combination to identify the performance domains and associated tasks, knowledge, and/or skills relating to the purpose of the credential and providing the basis for validation.

A **role** is likewise defined as:

> A more specific or narrower set of knowledge and skills than may be encompassed by the term ‘profession’ or ‘occupation,’ and may also be the focus of certification for a particular product or service.

The results of the job analysis or role delineation are used to develop the blueprint or outline for the credentialing examination.

The reason that credentialing examinations are based on a job analysis and the application of knowledge in the work setting and not based solely or primarily on theoretical knowledge is grounded in concepts surrounding the legal defensibility of these examinations to regulate entry into a profession or promotion within a profession. A legally defensible credentialing examination tests the application of knowledge required to perform a specific task, not necessarily the underlying theory that serves as the foundation for this application of knowledge. This does not mean that the theory is not important, just that it is not often tested. There have been legal cases that have set precedent to support this decision to test the application of knowledge rather than theory. Individuals have argued that if they can perform the task, they should be able to become employed, whether or not they have the theoretical foundation.

Certainly one can argue that the theoretical foundation helps a professional or other certificant to understand the duties performed on the job. While this may very well be true, a credentialing examination cannot discriminate against those who do not know the theory, as long as the examination candidates can demonstrate that they have the knowledge required to perform the tasks reflected in the job analysis or role delineation.

Therefore, in summary, if state or federal regulatory bodies allow end-of-course examinations to substitute for professional credentialing examinations, they may be vulnerable to legal challenges. Questions of particular importance in the determination of whether or not a high stakes examination may be successfully defended against a legal challenge include but are not limited to these:

- How was it objectively determined that the examination measures content representative of the profession or the duties to be allowed to be performed by the professional?
- How was the passing point determined so that candidates are not penalized for taking a more difficult form of the examination?
- How can one determine if various forms of the examination are equivalent or equated in both content coverage and difficulty?
CONCLUSION

Organizations sponsoring professional credentialing programs and State and Federal regulatory bodies share a common mission: Public protection. Optimally, if a professional regulatory body recognizes or requires examinations developed and administered by an independent credentialing organization, the organization’s professional certification programs would be accredited by the National Commission for Certifying Agencies (NCCA), the accrediting body of the National Organization for Competency Assurance (NOCA). All professional certification programs accredited by NCCA have demonstrated that they meet generally accepted psychometric principles and standards, leading to legal defensibility and public protection.

Please note that whether or not an educational institution sponsoring a course with an end-of-course examination is accredited is immaterial in this discussion, because accreditation of an educational institution does not address whether or not its end-of-course examinations are developed based on generally accepted psychometric standards, and are therefore valid for use as ‘high stakes’ examinations. In addition, accreditation of an educational institution does not, in and of itself, assess whether or not the four standards mentioned previously in this paper as crucial to the development of psychometrically sound and legally defensible examination programs have been applied to the development of end-of-course examinations.

There is a nationwide trend whereby state regulatory agencies are getting out of the testing business, and instead recognizing professional certifications as meeting state regulatory requirements. Public protection is the core business and primary responsibility of both State and Federal regulatory agencies. As such, the examinations required of professionals regulated by these agencies must be legally defensible and meet generally accepted psychometric standards. The reader should note, however, that there are few if any legal restrictions governing certification bodies. Virtually any organization can claim to be one.

Therefore, when choosing or recommending a professional credentialing program, stakeholders should investigate key components, and determine whether or not the credentialing program is accredited, and if so, by which accrediting body. If the credentialing program is accredited by NCCA, this means that the credentialing organization has independently demonstrated that the examinations within its NCCA-accredited certification programs are developed, administered, scored and reported according to generally accepted psychometric standards and its governance and administration also meet NCCA Standards. Insisting on NCCA accreditation of a certification program is a safeguard for regulatory bodies looking to use professional certification programs or examinations when implementing professional regulatory requirements.

For more information about NOCA membership and NCCA accreditation, and the topics discussed in this paper, contact:

NOCA
2025 M Street, N.W., Suite 800
Washington, DC 20036
Phone 202.367.1165
Fax 202.367.2165
Email info@noca.org
www.noca.org
BIBLIOGRAPHY


