



THE **PRAXIS**<sup>™</sup>  
S E R I E S

*Teacher  
Quality  
Series*  
2004

# Validity for Licensing Tests

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A Brief Orientation

*Listening.  
Learning.  
Leading.*

## Introduction

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The purpose of this document is to provide an overview of validity for licensure tests, with specific reference to The Praxis Series: Professional Assessments for Beginning Teachers®. This overview provides a brief orientation to validity and is not an exhaustive, technical treatment of validity or issues pertaining to the process of validation.

## Licensure: A Form of Occupational Credentialing

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According to the most recent edition of the *Standards for Educational and Psychological Testing* (American Educational Research Association [AERA] 1999)<sup>1</sup>, tests used for credentialing purposes (licensure and certification) focus on a candidate's current skill, knowledge, or competency in a particular domain. The process of licensure serves as a gateway into a profession, as a license is typically a prerequisite for entry into an occupation.

“Licensure requirements are imposed by state and local governments to ensure that those licensed possess knowledge and skills in sufficient degree to perform important occupational activities safely and effectively ... Tests used in credentialing are intended to provide the public ... with a dependable mechanism for identifying practitioners who have met particular standards. The standards are strict, but not so stringent as to restrain unduly the right of qualified individuals to offer their services to the public. Credentialing also serves to protect the profession by excluding persons who are deemed to be not qualified to do the work of the occupation (AERA, 1999, p. 156).

## ETS Educator Licensure Assessments

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The Praxis Series consists of an extensive array of content-specific tests, pedagogical tests and basic skills tests that are used by states and other credentialing agencies to inform decisions regarding teacher licensure. Colleges and universities also use the basic skills tests to inform decisions regarding entrance into teacher preparation programs. The Praxis Series includes specific categories of tests that correspond to different milestones in the career of a professional educator.

**Basic Skills: Praxis I™ Pre-Professional Skills Tests** measure basic academic skills in reading, writing, and mathematics. These exams are designed for use as a precursor to entry into a traditional teacher preparation academic program and for state licensure.

**Content-specific tests: Praxis II™** subject tests measure knowledge of core subject areas such as English, mathematics and biology. These are designed to be taken by prospective teachers who are ready to apply for a state license.

**Pedagogy tests: Praxis II** assessments also include both content-specific pedagogy tests and tests of pedagogical knowledge germane to four grade levels: Early Childhood, K-6, 5-9, and 7-12. These tests are designed to be taken by prospective teachers who are ready to apply for a state license.

**Classroom Performance Assessments: Praxis III™** is an assessment that combines classroom observation with pre- and post-observation interviews to measure a teacher's in-class practice in each of four areas:

- Organizing Content Knowledge for Student Learning
- Creating a Environment for Student Learning
- Teaching for Student Learning
- Teacher Professionalism.

Praxis III is designed to be administered during the first year of teaching, as part of the teacher licensure process.

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<sup>1</sup>American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education (1999). *Standards for Educational and Psychological Testing*. Washington, DC: American Educational Research Association.

## Assessments for Other Educators

ETS also offers a series of competency assessments for other education personnel:

- **The School Leaders Licensure Assessment** and the **School Superintendent Assessment** are used by many states to license principals, superintendents and other school leaders. These assessments are administered through contracted services with the Council of Chief State School Officers.
- The **ParaPro Assessment** was developed in response to requirements for instructional paraprofessionals that were outlined in the federal No Child Left Behind legislation. This assessment is not a licensure test; however, it does measure knowledge and skills in reading, mathematics, and writing, as well as the ability to apply those skills and knowledge to assist in classroom instruction.

## Validity

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According to the most recent edition of the *Standards for Educational and Psychological Testing* (American Educational Research Association [AERA] 1999), validity refers to the accumulation of evidence (logical and empirical) that supports the intended use and interpretation of test scores. Establishing validity involves collecting evidence that justifies the decisions made and actions taken on the basis of test scores. Validity evidence is needed to support each purpose for which test scores are to be used — what may be sufficient validity evidence for one test score use may not be sufficient for another.

“Validation of credentialing tests depends mainly on content-related evidence, often in the form of judgments that the test adequately represents the content domain of the occupation or specialty being considered. Such evidence may be supplemented with other forms of evidence external to the test. Criterion-related evidence is of limited applicability in licensure settings because criterion measures are generally not available for those who are not granted a license.” (AERA, 1999, p 157).

“The content domain to be covered by a credentialing test should be defined clearly, and it should be justified in terms of the importance of the content for credential-worthy performance in an occupation or profession ... Some form of job or practice analysis provides the primary basis for defining the content domain ... [T]he emphasis for licensure is limited appropriately to the knowledge and skills necessary for effective practice.” (AERA, 1999, p 161).

## The Process of Accumulating Validity Evidence for the PRAXIS Series

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The validation process used to justify the interpretation of Praxis scores is consistent with the technical guidelines presented in the *Standards for Educational and Psychological Testing* (AERA, 1999). Central to the process is the connection or alignment between the content of the test and the knowledge and/or skills judged important for entry-level practice. This is accomplished through multiple means, beginning with a systematic analysis of job requirements (knowledge and/or skill levels). This analysis involves gaining the input of representative samples of educators and reviewing national disciplinary standards. Test development committees of educators are then convened, who work with ETS subject experts to conduct reviews for test content appropriateness and fairness. The process culminates with passing score or standard setting studies by each state or licensing agency, during which the job-relatedness of the test content for that state’s entry-level teachers is evaluated. These sources of validity evidence are described in more detail below.

## Job Analysis

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A domain of job-related knowledge and/or skills is defined through reviews of education literature and disciplinary standards, and is then modified and refined by one or more committees of educators, which typically include practicing teachers in the content domain and faculty who prepare teachers. Committee members are selected for their subject expertise, as well as their representativeness and diversity (e.g., racial, ethnic, regional, gender). A large-scale survey of educators is also conducted to collect independent judgments of the job-relatedness (or occupational importance) of the defined content domain.

## Test Development Committees

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Additional committees of educators (practicing teachers and faculty who prepare teachers) are convened, and work with ETS subject experts, using the results of the job analysis to create test specifications. Test specifications define the content areas to be measured by the test. They are sometimes referred to as the “blueprint” of the test, as they describe and define the content architecture of the test. The process of deriving test specifications from the job analysis creates the connection between the test content and the job-related knowledge and/or skills being measured.

## Item Writing and Reviewing

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Test development committees, working with ETS subject experts, write, review, and revise test items to align with the defined specifications — once again, reinforcing the job-relatedness of the test content. Committee members are trained by ETS experts in how to write content-appropriate and fair items as part of an overall quality control process. The process continues with reviews of critical items by ETS experts to confirm linkages to test specifications, appropriate perceived difficulty levels, and compliance with the ETS Fairness Guidelines<sup>2</sup>.

## Test Reviews

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In addition to the test development activities through which validity evidence is accumulated, each state or licensing agency interested in adopting one or more Praxis tests is strongly encouraged to conduct a test review. The purpose of a test review is for representatives of the state or licensing agency to examine the content covered by a test and to determine if it satisfactorily represents content believed to be important in satisfying that state or licensing agency’s professional educator credentialing requirements. Tests with content that is judged to be important are then scheduled for a standard setting study (see below). Test reviews may be conducted with one or more committees of practicing teachers, college faculty who prepare teachers, and other stakeholders. Committee members provide input in determining the importance of the test content for use in professional educator licensing decisions in that state. In this regard, test reviews attest to the state-specific validity of the test content.

## Standard Setting Studies

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After a state or licensing agency has approved the test for use in the state, a standard setting study is scheduled. A primary objective of the study is to recommend to the state agency a minimum test score that a prospective educator needs to earn in order to be considered qualified to enter the teaching profession in that state. This passing score recommendation is based on the judgments of a state-selected committee of educators (practicing teachers and college faculty who prepare teachers), following technically sound, well established, and widely accepted standard setting procedures (e.g., Angoff Method for multiple-choice items, Benchmark Method for constructed-response items). As part of the standard setting study, the committee members are asked to judge the importance of the test content for entry-level teachers in that state. These judgments are used to provide documented support for the state-specific validity of the test content. Based on the results of the Standard Setting Study, as well as on other relevant information, each state licensing agency determines its own threshold of the minimum teaching knowledge and subject knowledge required of entry-level teachers in that state. Each test used in licensing also must meet or exceed a state-determined or agency-determined validity threshold in order for test scores to be used to inform teacher licensure decisions in that state or agency.

In some cases, Praxis I Pre-Professional Skills Tests (Reading, Writing and Mathematics) are used as a precursor to entry into a traditional teacher preparation program. The tests are typically taken in the sophomore year of undergraduate study. It’s important to note that when Praxis I tests are used by states for teacher licensure purposes, the standard setting activities focus on the state’s licensure requirements. However, when the tests are used for entrance into a teacher preparation program, the standard setting activities focus on the institution’s requirements for its teacher preparation program.

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<sup>2</sup>ETS *Standards for Quality and Fairness*. (2003). Princeton, NJ: Educational Testing Service.

## For Further Information

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This overview is intended to help users of educator licensure testing programs understand validity in licensure testing as it pertains to The Praxis Series. For questions concerning The Praxis Series or any of the topics addressed in this overview, please contact ETS at **[teachandlearn@ets.org](mailto:teachandlearn@ets.org)**.

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