



Teaching
and Learning Division

Understanding Teacher Assessment

Setting Passing Scores: The Need for Justifiable Procedures

 *Educational
Testing Service*

The Praxis Series

The Praxis Series™ and related assessments are designed to be used principally in connection with other criteria by state authorities for the purpose of licensing professional school personnel and by educational institutions for assessing the readiness of applicants seeking entry into a major field program, such as teacher education, at the end of their sophomore year. The Praxis Series consists of three major components used to help states license teachers:

Praxis I: Academic Skills Assessments are academic skills tests which include separate measures of basic proficiency in reading, writing, and mathematics.

Praxis II: Subject Assessments measure knowledge of specific academic subjects or fields that prospective teachers acquire in their academic preparation. Praxis II also includes the three Principles of Learning and Teaching tests (grades K-6, grades 5-9, and grades 7-12). These tests are designed to assess a preservice, beginning, or provisional teacher's knowledge of a variety of job-related criteria.

Praxis III: Classroom Performance Assessments combine in-class observation of teaching performance with written documentation and interviews — these performance assessments contribute to state licensing decisions (i.e., beginning, provisional, in-service, recertification).

“Related assessments” include, but are not limited to, tests customized for particular states or agencies and the School Leaders Licensure Assessment, which is based on standards developed by the Interstate School Leaders Licensure Consortium (ISLLC).



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Setting Passing Scores: The Need for Justifiable Procedures

Assessing and licensing tomorrow's teachers¹ is a challenging endeavor. The Division of Teaching and Learning at Educational Testing Service is committed to supporting learning and advancing good teaching by providing the educational community with the highest quality assessments — testing tools that enable licensing agencies to make informed decisions.

Required passing scores are perhaps the most prominent focal point in any assessment and licensing process: the passing standard determines access to the profession for both individuals and groups. It is imperative that passing scores be set by following a rigorous process that reflects the good-faith judgment of qualified professionals.

While ETS develops and delivers a range of assessments that are required for teacher licensure, ETS does not set — and cannot set — the passing scores for those assessments. This is the delegated responsibility of the legally authorized licensing agencies. It is the purpose of this pamphlet to explain why states or institutions need to use a rigorous process for setting passing scores on The Praxis Series and related assessments.²

The Complex Nature of Passing Score Decisions

Choosing a passing score on a licensing test is a policy decision, and the decision-making process that is used must bear the scrutiny of various stakeholders (educators, legislators, school board members, etc.). The complex factors that shape passing score decisions can be grouped into two broad categories: (1) the judgments of qualified experts regarding the level of knowledge and skills important for beginning teachers to demonstrate and (2) the informed projections about the makeup of the resulting teaching force if a particular passing score is established.

¹ For ease of reading, the term “teacher” refers to all school professional personnel for whom assessments with passing scores are used for licensing purposes.

² This pamphlet does not explain specific methods for informing the setting of passing scores. For descriptions of common methods of setting passing scores, see Livingston, S.A., & Zieky, M.J., (1982). *Passing Scores*. Princeton, NJ, Educational Testing Service. For descriptions of methods used in connection with constructed-response tests used in the Praxis program, see: Faggen, J. (1994, November) *Setting Standards for Constructed-Response Tests; An Overview*. Research memorandum RM-94-19, Princeton, NJ, Educational Testing Service.

The first set of factors consists of the pooled judgments of qualified experts as to what level of knowledge or skill should be required for beginning teachers in a specific subject area and/or grade level. This information is provided by a passing score study (also known as a *standard-setting study*). The second set of factors consists of the predictable consequences of choosing a particular passing score. These consequences include such factors as the number of new teachers who will be available to fill openings in each subject and/or grade level, given a particular passing score; and the racial and ethnic composition of the group of new teachers who would pass the assessment, given a particular passing score.

There is no “magic formula” for resolving the conflict that occurs when these two types of information imply different choices regarding a passing score; and, likewise, there is no one, true, unassailable passing score that perfectly selected, perfectly trained people using the perfect method will find. The passing score is, rather, constructed by the people involved in the passing score-setting process and is a reflection of their combined judgments and values.

As long as different people hold different values and make judgments that reflect those values, passing scores are likely to remain controversial. Because people hold different values, a passing score that may be viewed by some as low, may be seen by others as unfairly high, a barrier to aspiring teachers, and possibly related to adverse impact on racial and ethnic minorities. Since the passing score itself is difficult to defend in a vacuum, the *process* leading to the passing score must be as defensible as possible.

The sections that follow briefly discuss the standard-setting process: 1) selecting tests for teacher licensure, 2) planning, 3) the passing score study, 4) setting the passing score, and 5) evaluating the effects of using the passing score.

1. Selecting Tests for Teacher Licensure

Qualified experts must make important choices regarding what needs to be tested and what tests to use. There are a number of variables any state agency authorized to select a teacher licensure test series should consider. First, given the importance of legal defensibility in any licensure testing arena, decision makers should consider the validity of the development process:

- were teachers involved in the actual development of the test?
- were the tests reviewed by a variety of experts?

- are the tests, once developed, reviewed and refreshed on a regular basis?

Second, state decision makers should carefully consider the processes that the test developers routinely use to analyze candidate performances at each administration, or on each test question:

- does the entity that develops, administers, and scores the test maintain a rigorous statistical review process?
- what happens when a question is found to be flawed?
- what happens when candidates complain about test questions or conditions?

Finally, decision makers should consider what provisions have been made for helping candidates learn what the assessment is like:

- are candidates informed about the kinds of questions that appear on the test?
- are candidates provided with opportunities to analyze and understand test content?

By selecting appropriate and proven assessments such as those in The Praxis Series, licensing agencies are able to establish a strong first step in a justifiable standard-setting process.

2. Planning

The planning phase of a passing score study is crucial if the resulting passing score is to be acceptable and defensible. It is necessary to have a justifiable and well-documented rationale for each of the decisions made in the planning stage of the process used to set passing scores. The following questions (*and responses*) suggest the scope of the issues that must be dealt with during the planning stage:

- What person or agency is legally responsible for setting the operational passing score? *The state department of education? The state standards board? Another agency?*
- What information should that person or agency consider in setting the passing score? *How many teachers in each field are needed in the state? How would each prospective passing score affect these needs? How would each prospective passing score affect the diversity of the teaching force?*
- Who will serve as judges? *Expert teachers and higher education practitioners who prepare prospective teachers.*

- How many judges are needed? *In our experience, in order to ensure a diverse and inclusive representation, each panel of judges should include at least 12 members.*
- What kind of training should the judges receive? *At a minimum, judges need to understand the test specifications, the fit between the specifications and the test questions, and the significance of the decision they are making.*

3. The Passing Score Study

Each authorized licensing agency using a Praxis Series or related assessment with a passing score must conduct a passing-score study (a standard-setting study). Whenever feasible, it is prudent to use a method of implementing a passing-score study methodology that has been discussed in the professional literature. The agency may choose to use ETS's services to conduct the study; may choose to conduct its own study; or may use the services of another organization. Regardless of the method used or who conducts the study, the study and its outcomes must be documented.

One of the most challenging aspects of the standard-setting process is the selection of excellent practitioners to make up the panels. Our standard-setting services include the *definition* of the necessary qualifications for panelists and the *identification* of candidates who have these qualifications. While the licensing agency ultimately selects the panelists who will conduct the study, ETS's past experience in this area (for instance, gathering pools of expert teachers for the National Board certification effort) can productively enhance the process of defining, identifying, and selecting qualified panelists.

It is important that panelists are qualified to make the judgments that they will be asked to make, and will be deemed acceptable to the constituencies that have a stake in the outcome of the passing score study. It is important to provide adequate training to the panelists and to ensure that they understand their responsibilities. It is essential to document the qualifications of the panelists and the steps that were taken to train them.

All procedures for setting passing scores require the application of expert judgment. For example, some types of passing score studies require panelists to estimate, for each item on the test, the percentage of minimally competent entry-level candidates who would know the

answer to that question. Other types of studies require panelists to examine candidate responses to test items and to determine which responses are indicative of minimal competence.

4. Setting the Passing Score

Once the data have been collected from the panelists, decision makers will set the operational passing score. Important collateral information such as test score distributions, supply and demand surveys, measurement error, cost-benefit analyses, and diversity in the teaching force should be considered by the decision makers. Decision makers should also consider the relative harm caused by the possibility of passing an unqualified candidate and the possibility of failing a qualified candidate.

5. Evaluating the Effects of Applying the Passing Score

Because no test is perfect, and because no process of setting passing scores is perfect, it is important to evaluate the effects of applying the passing score. Licensing agencies should conduct structured, periodic reviews to assure that those meeting the passing score demonstrate acceptable levels of knowledge, skill, and ability.

Our Commitment to the Educational Community

A commitment to quality, equity, access, and fairness informs all of the products and services provided by ETS. We have provided this information to help answer questions regarding the setting of passing scores and to help assure that justifiable and well documented processes are in place. The processes used and the documentation gathered will figure strongly in any defense of the passing scores that may be required. Most of all, these efforts will help ensure the identification of qualified teachers, now and in the future.

For further information

If you have any questions about The Praxis Series and related assessments, or if you are interested in more detail about any of the topics presented here, please write to:

Research and Analysis Group, 15D
The Praxis Series
Teaching and Learning Division
Educational Testing Service, Princeton, NJ 08541

*ETS's Teaching
and Learning Division is
committed to supporting learning
and advancing good teaching through
a coherent approach to the licensing,
advance certification, and professional
development of teachers
and school leaders.*

