

## The Role of Instructional Materials in Providing Evidence of Opportunity to Learn<sup>1</sup>

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Recent federal legislation requires states to develop academic content standards in reading, mathematics and science and to administer assessments to measure the progress of students in attaining those standards.<sup>2</sup> School reform efforts underway in many states have already produced such standards and accountability tests. Students who are unable to pass a state graduation test may be awarded a certificate of completion rather than a high school diploma. Schools that are unable to improve performance by a threshold amount may be targeted for intervention while those that make appropriate assessment gains may receive monetary rewards. These new state standards and accountability tests reflect higher expectations and higher stakes for both students and teachers.

When mandated statewide tests are used to make high-stakes decisions about individuals and/or schools, demanding requirements for fairness imposed by professional testing standards and legal

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<sup>1</sup> This paper has been adapted from the following sources: Phillips, S.E. *GI Forum v. Texas Education Agency: Psychometric Evidence*, 13(4) *Applied Measurement in Education* 343 (2000); Phillips, S.E. *Legal Implications of High-Stakes Assessment: What States Should Know*, North Central Regional Education Laboratory, Oak Brook, IL (1993); and other writings by the author on assessment law.

<sup>2</sup> No Child Left Behind Act, 20 U.S.C. § 200 (2002).

cases must be satisfied. As a result, such uses of statewide tests have increased the vulnerability of states and districts to legal challenges from those who believe they have been treated unfairly. One important aspect of fairness in high-stakes testing is affording all students the ***opportunity to learn*** the tested content.

For high-stakes, statewide tests to be legally and psychometrically defensible, there must be sufficient evidence of appropriate instructional materials to demonstrate adequate opportunity to learn. Providing textbooks and supplementary instructional materials that reflect the state's academic standards are essential elements in the construction of a convincing argument that students have had an adequate opportunity to learn the content tested and that teachers have had the resources necessary to teach that content.

If the only textbooks available are outdated, or if state standards have changed but new instructional materials that reflect those changes are not available, or if there are not enough textbooks available in the classroom for each student to take one home to complete homework assignments, opportunity to learn evidence will be weak. Meager opportunity to learn evidence that is not consistent

with psychometric and legal requirements weakens testing programs and increases the likelihood of a successful legal challenge.

### **Defining of Opportunity to Learn**

Opportunity to learn means that students must be taught the skills tested on a graduation, promotion or accountability test. There are two types of opportunity to learn evidence: (1) curricular validity – the match between tested content drawn from state academic standards and classroom curricular materials such as textbooks; and (2) instructional validity – the match between tested content drawn from state academic standards and what is actually taught in classrooms. Curricular validity evidence and instructional validity evidence are not interchangeable. For example, if a teacher’s classroom instruction differs from state academic standards or adopted textbooks linked to those standards, a test that has curricular validity might not have instructional validity.

It is important to evaluate curricular validity evidence along with instructional validity evidence because many teachers rely heavily on the material contained in adopted textbooks and supporting instructional materials when determining content coverage in their classrooms. If districts’ textbooks and supporting instructional

materials are not closely aligned with state academic content standards, students will not receive adequate instruction on the knowledge and skills specified in state academic content standards and tested by accountability assessments *unless* teachers develop their own curriculum and instructional materials. Few teachers have the time and resources to do so. Thus, evidence of both curricular and instructional validity is necessary to document that students have had an adequate opportunity to learn the tested content.

In practice, evidence of opportunity to learn is often gathered by examining the official district curricular materials used in instruction and by surveying teachers to determine whether they are teaching the tested content. Such opportunity to learn evidence should clearly demonstrate congruence between state academic content standards, instructional resources, and instructional practice. The following sections describe guidelines from professional testing standards and precedents from legal cases that have established the opportunity to learn requirement.

### **Professional Testing Standards**

Tests must be valid for their intended purpose. Opportunity to learn (curricular and instructional validity) is one of several types of

validity evidence that must be collected and documented for high-stakes achievement tests. A consensus view of measurement experts on opportunity to learn and other psychometric properties necessary for defensible high-stakes test uses is expressed in the Standards for Educational and Psychological Testing (*Test Standards*).<sup>3</sup> The *Test Standards* were developed by three professional organizations concerned with testing: the American Psychological Association (APA), the American Educational Research Association (AERA), and the National Council on Measurement in Education (NCME).

The opportunity to learn requirement is specified by Standard 13.5 of the *Test Standards*. Standard 13.5 states:

**When test results substantially contribute to making decisions about student promotion or graduation, there should be evidence that the test adequately covers only the specific or generalized content and skills that students have had an opportunity to learn.**

*Comment:* Students, parents, and educational staff should be informed of the domains on which the students will be tested, the nature of the item types, and the standards for mastery. Reasonable efforts should be made to document the provision of instruction on tested content and skills, even though it may not be possible or

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<sup>3</sup> AERA, APA, NCME. *Standards for Educational and Psychological Testing*. Washington, DC: American Educational Research Association (1999).

feasible to determine the specific content of instruction for every student (p. 146).

Introductory material in Chapter 7 of the *Test Standards* elaborates on the relationship between opportunity to learn and test fairness in educational achievement testing. It states:

In many contexts, achievement tests are intended to assess what a test taker knows or can do as a result of formal instruction. When some test takers have not had the opportunity to learn the subject matter covered by the test content, they are likely to get low scores. The test score may accurately reflect what the test taker knows and can do, but low scores may have resulted in part from not having had the opportunity to learn the material tested as well as from having had the opportunity and having failed to learn. When test takers have not had the opportunity to learn the material tested, the policy of using their test scores as a basis for withholding a high school diploma, for example, is viewed as unfair (p. 76).

Most courts hearing assessment law cases have recognized the applicability of the *Test Standards* and have given significant weight to the testimony of psychometric expert witnesses regarding appropriate implementation of the guidance contained in those professional standards.

### **Legal Cases**

In the late 1970s, the *Debra P.* case, in which minority students challenged the fairness of a recently adopted graduation test requirement, established adequate notice and opportunity to learn as

prerequisite conditions for a legally defensible high school graduation test. Notice means that students must be given adequate advance warning of the testing requirement.

In the *Debra P.* case, the court held that the appropriate standard for opportunity to learn was that “the [tested] skills be included in the official curriculum and that the majority of the teachers recognize them as being something they should teach.”<sup>4</sup> The *Debra P.* court also found that (a) it was not constitutionally unfair that some students had mediocre teachers and (b) proving instructional validity for each individual student was an impossible burden.

The legal requirement for demonstrating opportunity to learn for a graduation test derives from the fundamental fairness aspect of the substantive due process clause contained in the fourteenth amendment to the U.S. Constitution. Under the Supreme Court’s rationality standard for judging fundamental fairness, state action must serve a legitimate government interest and must use means that are not arbitrary or capricious. Although the *Debra P.* court recognized a legitimate government interest in ensuring a minimal level of competence for all students receiving diplomas, it also held

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<sup>4</sup> *Debra P. v. Turlington*, 564 F.Supp. 177, 186 (M.D. Fla. 1983).

that fundamental fairness requires that the state demonstrate opportunity to learn for all tests used to further that interest. States typically delegate a portion of that responsibility to local school districts.

In the recent *GI Forum* case, in which the court upheld the graduation test requirement in Texas, the plaintiffs argued that to establish adequate opportunity to learn, Texas should have collected exactly the same data as Florida presented to the court in the *Debra P.* case, which included formal surveys of districts' curricular materials, teachers, and students. Defendants responded that Texas had implemented an equivalent opportunity to learn procedure as allowed by the *Test Standards*. For the graduation test, opportunity to learn was established through the state-mandated curriculum, surveys of teachers and curricular materials for the prior graduation test based on the same curriculum, and adequacy of preparation reviews of items by Texas educator committees and separate bias review panels. Furthermore, district surveys had been conducted for the prior graduation test based on the same mandated state curriculum.

The testimony by named minority plaintiffs in the case was also cited. Most had received average or below-average grades in academic subjects, had failed one or more academic courses, were interested in nonacademic pursuits, and chose not to participate in remediation options offered by their schools. They also acknowledged that they had sat next to majority and minority students in their classes who had passed the graduation test. Some had made up incomplete course work or completed remediation and passed the test after their scheduled graduation. Those who had not said they were too busy with work or family obligations. When asked under oath if they felt the graduation test was fair, several said “Yes.”<sup>5</sup> Defendants questioned how opportunity to learn could have been adequate for some minority students but not for others in the same classes and schools.

Defendants asserted that collectively, the following provided sufficient evidence of opportunity to learn for the graduation test:

- Well-publicized, state-mandated, graduation test objectives that all schools were required to teach.
- Wide dissemination to students, parents, and educators.

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<sup>5</sup> Personal recollection of trial testimony of named plaintiffs, confirmed by Defendants’ attorneys.

- Positive adequacy of preparation reviews by educator committees and bias review panels asked to respond “yes or no” to the following question for each test item: “Would you expect students in your class to have received sufficient instruction by the time of the test administration to enable them to answer this item correctly?”
- Textbooks that linked instructional content to specific objectives in the state curriculum.
- Mandated remediation.
- Distribution of study guides.
- Availability of released tests.
- Teacher survey data from the preceding graduation test based on the same state-mandated curriculum.

Despite this evidence presented by the state, the plaintiffs in the *GI Forum* case also offered the results of a “Testing and Teaching survey” designed “to obtain the opinions of a representative sample of [Texas secondary teachers] about the relationships between mandated testing and teaching and the effects of mandated testing.”<sup>6</sup>

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<sup>6</sup> Haney, W.M., *Supplementary Report on Texas Assessment of Academic Skills Exit Test (TAAS-X)*, July 30, 1999.

The survey results presented by the plaintiffs were based on a 15% response rate from 1,000 Texas secondary teachers randomly sampled from a sample of 4,000 such teachers obtained by randomly sampling from a list compiled by a market data firm in Connecticut. The survey questions asked respondents about mandated testing in general. In addition to responses demonstrating a perceived ineffectiveness of mandated testing, the plaintiffs also presented the court with examples of specific negative comments made by individual teachers selected from a compilation of positive and negative comments from survey respondents. No data on follow-up of nonrespondents' opinions were reported.

In response to the survey data presented by the plaintiffs, the defendants cited a research methods text consistent with prevailing professional views that stated:

As a result of low returns in mail questionnaires, valid generalizations cannot be made. . . . If they are used, every effort should be made to obtain returns of at least 80 to 90 percent or more, and lacking such returns, to learn something of the characteristics of the nonrespondents.<sup>7</sup>

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<sup>7</sup> Kerlinger, F.N., *Foundations of Behavioral Research*, 2<sup>nd</sup> ed., Holt, 1973, p. 414.

Defendants argued that the survey data were non-representative and irrelevant to the specific issue of opportunity to learn for the Texas graduation test.

With respect to the issue of opportunity to learn for the Texas graduation test, the *G/ Forum* court held:

[A]ll students in Texas have had a reasonable opportunity to learn the subject matters covered by the exam. The State's efforts at remediation and the fact that students are given eight opportunities to pass the [graduation test] before leaving school support this conclusion.

. . .

The Court has determined that the use and implementation of the [graduation test] does identify educational inequalities and attempts to address them. While lack of effort and creativity at the local level sometimes frustrate those attempts, local policy is not an issue before the Court. The results of the [graduation test] are used, in many cases quite effectively, to motivate not only students but schools and teachers to raise and meet educational standards.<sup>8</sup>

## **Conclusion**

Taken together, the *Test Standards* and prior graduation test cases indicate that information on instructional materials, also referred to as curricular validity, is an important piece of evidence for establishing adequate opportunity to learn. To provide convincing evidence of curricular validity, districts and schools should carefully evaluate their instructional materials for scope, sequence and content that is consistent with state

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<sup>8</sup> *GI Forum et al. v. TEA et al.*, 87 F.Supp. 667, 696 (W.D. Tex. 2000), citations omitted.

academic content standards and accountability tests. Districts and schools should also ensure that sufficient instructional materials are available for all students at the beginning of each new school year.