

Supporting Inclusive Assessment: A Publisher's Perspective

By
Michael H. Kean, Ph.D.
Vice President, Public and Governmental Affairs
CTB/McGraw-Hill
Monterey, California

The 1999 NATD Symposium:
Issues and Trends in Inclusive Assessment Practices

April 20, 1999
Montréal, Canada

I. Introduction

Documenting the achievements and educational progress of all students is a critical aspect of an appropriate education experience and is required by law for students with disabilities. Since the passage of federal and state legislation in the 1970's, students with disabilities have been guaranteed access to a "free, appropriate, public education." Therefore, when tests and assessments are used as indicators of students' progress in a school curriculum or on state academic standards, or to make decisions about their future educational services, all students are expected to participate.

The genesis of the current education reform movement is considered by some to be in the 1983 report, *A Nation at Risk*, but the major emphasis upon "world class standards" and "break-the-mold assessments" arguably began some years later with the Charlottesville Education Summit of 1989. Since that time, 47 states have begun adopting standards and developing and implementing statewide assessment programs. Because such programs typically emphasize the testing of all students, the inclusion of special populations has become a topic of progressively greater national, state, and local concern.

Commercial test publishers work closely with virtually every state in the development of their assessment programs, and provide tests and scoring services to most local districts as well. Publishers subscribe to the principles of test use set forth in the *Standards for Educational and Psychological Testing* and *The Code of Fair Testing Practice*. They also adhere to, and in many instances take the lead in emphasizing, Federal and State regulations governing the use of tests.

This presentation will focus upon three areas of particular importance to publishers in the provision of an inclusive assessment environment:

1. The inclusion of special populations in norming tests
2. The inclusion of special populations in actual testing situations
3. Reporting test results to reflect the inclusion of special populations

The presentation should also be viewed in light of a number of important limitations:

1. The focus will be primarily upon students with disabilities; the presentation will not address testing problems that may arise from an

incomplete knowledge of English, although the issues discussed may also be relevant to students with limited English proficiency.

2. These comments represent the views of only one publisher—CTB/McGraw-Hill. Though the positions, policies, and procedures articulated may be similar to those of other publishers, no attempt has been made to represent the test publishing industry or other individual companies.
3. New tests are continuously being developed, and new technologies are being used in their creation.
4. As of the drafting of this presentation, the IDEA regulations have still not been finalized.

II. The Challenge

In recent years, much attention has been focused on the inclusion of students with disabilities in school testing programs.

Many laws support this effort—for example, Section 504 of the Rehabilitation Act of 1973, which states that students cannot be discriminated against because of their disability; the Americans with Disabilities Act of 1990, which requires that institutions provide access to individuals with disabilities; the Individuals with Disabilities Education Act (IDEA) as amended in 1997 and in particular Section 612 (a) 17, which requires all states to include students with disabilities in their assessment systems. In addition, two congressional initiatives, the *Improving America's Schools Act*, and the *Goals 2000: Educate America Act*, encourage educators to include in all education programs widespread participation of students with disabilities.

Many students with disabilities need testing accommodations to provide a valid measure of their knowledge and skills. Such accommodations offset possible distortions in test scores without invalidating or changing what the test measures. Decisions about testing accommodations for students must be made on a case-by-case basis by an Individualized Education Program (IEP) team. Those decisions must be documented.

Despite requirements to the contrary, many states are still not reporting the educational progress of disabled students. In a recent study of 12 states that reported disability testing data, the National Center on Educational Outcomes (NCEO) found that between 50 and 80 percent of disabled students were actually participating in testing programs.

The NCEO study also examined how disabled students performed compared with standards set by the states. Compared with nondisabled students, the study found that between 30 percent and 50 percent fewer students with disabilities are meeting standards. This finding could create further problems, since some school districts hesitate to include disabled students in their testing programs for fear that they will lower the results.

III. Accommodations Categories

Certain students require special accommodations in order to complete the test. A testing accommodation is a change made to the test administration procedure to provide equal access for students with disabilities in order to demonstrate their knowledge and skills.

At CTB/McGraw-Hill, we group special accommodations into four categories—those relating to (1) test format, (2) response format, (3) test setting, and (4) test timing. Examples of the type of accommodations provided to respond to each of the categories of need include the following:

1. Accommodations relating to test format

- Braille edition
- Large-print edition
- Magnifying equipment such as magnifier or closed-circuit TV
- Oral reading of test directions
- Oral interpretation of test directions
- Amplifying equipment
- Repeated directions
- Directions given with English manual sign language
- Directions interpreted into American Sign Language
- Use of visual aids

2. Accommodations relating to response format

- Response marked in test booklet rather than on answer document
- Response dictated to a person or tape recorder to be entered on an answer document
- Large-print answer document
- Response given orally
- Braillewriter used for responses
- Slate and stylus used for responses

- Voice synthesizer used for responses
- Use of typewriter or computer/word processor

3. Accommodations relating to test setting

- Student tested alone in a test carrel or in a separate room or facility
- Student tested with small group of students
- Student tested at home
- Student tested in a special-education classroom
- Student seated in front of classroom
- Teacher or test administrator facing student (hearing impaired)

4. Accommodations relating to test timing

- Extended testing time
- More breaks during testing
- Extended testing sessions over several days

IV. The Inclusion of Special Populations in Norming Tests

Standardized tests are normed under certain specific conditions such as: a particular quarter-month of the school year, carefully worded instructions, exact time limits, and nationally representative samples of students (the norm group). All students in the national norming take the test under the same conditions, and accommodations are not provided.

When you administer the same test under the same conditions, the scores of the students you have tested can be accurately compared (considering the standard error of measurement) with the scores of the students in the norm group, allowing you to compare your students with students nationally.

The more a test administration varies from the standard conditions, the less accurate are the normative scores—the scores that compare the tested students with the norm group.

At CTB/McGraw-Hill, we ask school districts that participate in try-out or standardization (norming) studies to include every student who, under normal circumstances, would be included in the testing program.

To obtain background information for the evaluation and presentation of spring and fall standardization data, a demographic “School Characteristics” questionnaire is sent to each participating school. For reporting purposes, the schools are grouped in various ways, including (1) elementary/secondary, (2) geographic region, and (3) community type. Other specific data of particular relevance to this presentation are also collected. For example, in the recently published *TerraNova*, 11.7% of the students in the Spring norming group were classified as ESL (English as a Second Language). This compares to the U.S. average of 13.9%.

Data are also collected about the percent of special education students in the school and the percent which participates in the standardization, by type of disability. Nine disability categories were used in the *TerraNova* standardization, with “Learning Disability” and “Speech/Language Impairment” being the most commonly reported. (Data from the *TerraNova* Technical Bulletin are included in the Appendices.)

As the next generation of achievement tests are standardized, CTB will consider whether the student uses accommodations during normal classroom activities and

assessments, and whether the student has an IEP that recommends accommodations, or an IAP/504 Plan.

A representative sample of students with disabilities will again be included in the standardization sample, with specific disabilities and accommodations being documented. Among the disability categories being considered are the 13 identified by the IDEA Amendments of 1997. Working with Dr. Stephen Elliott, our consultant on accommodation issues from the University of Wisconsin-Madison, we plan to also capture a group of “must include” accommodations, and a second series of “high frequency, but not essential” accommodations. Taken together, these two groups will cover the vast majority of documented accommodations.

V. The Inclusion of Special Populations in Actual Testing Situations

Educators are familiar with instructional accommodations, such as providing extra time to complete work or securing a quiet location to minimize distractions, but many teachers are less familiar with testing accommodations. Testing accommodations are changes in the way a test is administered or responded to by a student. Testing accommodations are intended to offset distortions in test scores caused by a disability, without invalidating or changing what the test measures. Not all students with disabilities will need testing accommodations, but many will need them to provide a valid and accurate account of their abilities.

Though different testing accommodations are allowable, at CTB we recommend the following guidelines:

- Decisions regarding a student's participation in a testing program and the possible use of testing accommodations must be made on a case-by-case basis by the IEP team and must involve timely communications with the student's parents or guardians.
- A student's IEP should include a statement that he/she will or will not participate in a specific testing program, the subject areas that are appropriate for testing, any testing accommodations that must be made, and justification for the decision.
- The match between the content of a student's instructional program and test content is an important consideration when making a participation decision. The more similar instructional content is to test content, the more important it is to include the student in the testing program.
- Selection of appropriate testing accommodations is facilitated by a review of the student's current instructional accommodations and a clear understanding of what the test measures.
- No changes to the content of a test are allowable. Such changes will invalidate test scores.
- An accommodation should minimize any advantage or disadvantage of completing the test with the accommodation. In particular, if the accommodation under consideration is not used in instruction, then it should not be used in the testing situation. For example, if a student does not dictate answers in the classroom, then dictation of answers should not be used in the testing situation.

The goal is that the accommodation enables students with disabilities to demonstrate what they know and can do in a fair and equitable manner.

A report from the National Research Council, requested by Congress through the Goals 2000 legislation, recommends that testing accommodations be used solely to offset the impact of a disability and should be unrelated to the knowledge and skills being tested. For example, a student with a reading disability should not be offered reading assistance on a reading test. However, offering reading assistance to the same student on a mathematics or science test may be appropriate.

Braille Editions

CTB makes available special Braille editions of its tests through the American Printing House for the Blind (APHB). Although most of CTB's test items can be translated into Braille, a limited number use graphic elements to measure skills, and sometimes these graphic elements cannot be adequately transcribed into Braille. In such cases, a description of the graphic portion may be added to the item. In a very few cases, one or more items are omitted from the Braille edition.

Students reading a Braille test will require 2.5 times longer to take a test than readers of regular print. APHB includes a time schedule in its *Teacher's Notes to the Braille Edition*. APHB advises that children in kindergarten and first grade should not be tested with a Braille test because they are unlikely to be able to read Braille adequately. Also, even if they are able to read Braille, because lower level tests are heavily pictorial, a Braille adaptation may test something entirely different than the non-Braille version of the test.

Large-Print Editions

Students whose vision impairment is less severe can be tested with large-print editions of the test. These are available from CTB and are printed in 18-point type on special low-glare paper. Another accommodation is to allow students to recite their answers to an assistant who then marks those answers in a standard scorable test booklet or answer document. Many students with vision impairment, however, may be able to mark their own answers on a large-print answer document. (Certain graphic elements such as a metric ruler are not enlarged in these editions. These tools remain the same size as the standard measuring tools that students are taught to use in their classrooms.)

As with the Braille editions, the timing is adjusted to accommodate students with visual impairment. Some students will require little or no extra time; others may require more. In general, large-print readers should be allowed 1.5 times the amount of time to complete the test than readers of regular print.

Because testing times may differ and because the students may be dictating their answers or receiving oral instructions, students taking either the Braille or large-print tests should not be tested alongside each other, nor with students taking the regular print test.

Students with Hearing Impairment

For tests administered orally (typically in the early grades) no accommodation may be possible for students whose impairment has severely affected their early language development. Signing may be used for those children who understand it, but for those who do not, there may be no effective way to administer the test. If the signing is not transliteration—that is, manual English signing—but is instead a translation into American Sign Language (ASL), the test administrators should be aware of any problems introduced by translation.

At the upper levels, the restrictions primarily involve the student's ability to understand oral instructions. These instructions can be given to the student by signing, or in writing.

The test may be administered individually or within a small group to allow students with hearing impairments the opportunity to speechread the test administrator. Special care should be taken to ensure that a student is not expected to look at the booklet and speechread at the same time.

Test administrators should be sure that any specialized hearing equipment the student normally uses is in place and functioning properly.

Students Unable to Mark a Test Document

Some students may be unable to mark the test document due to physical disabilities. If required, an assistant may mark the answer document as the student directs, as well as turn pages. Time limits should be extended, and the assistant must be cautioned against inadvertently helping the student determine correct answers (for example, through facial expressions or body language).

The Assessment Accommodations Checklist

To assist educators in complying with the IDEA legislation, CTB/McGraw-Hill is introducing the new Assessment Accommodations Checklist (AAC)—a decision-making tool for the consistent documentation and implementation of testing accommodations for students with disabilities. The AAC was developed by Dr. Stephen Elliott, Dr. Thomas Kratochwill, and Aleta Gilbertson Schulte, M.S., and is based on extensive interaction with teachers and years of research.

The AAC is a powerful new communications tool. It facilitates the development of an assessment accommodations plan for students with disabilities. It describes the accommodations plan to those who will be administering the assessment. Finally, it provides important information to parents or guardians about the inclusion of their children in the testing program.

Active involvement of teachers is crucial to making decisions about including students with disabilities and implementing assessments fairly. The AAC offers valuable information about good testing practices and contributes to informed decisions about accommodating students with special needs.

VI. Reporting Test Results to Reflect the Inclusion of Special Populations

Whenever non-standard directions and time limits are used, norm-referenced comparisons should be treated with great caution, since the only norms available are those based on test administrations using standard directions and time limits.

Nonetheless, CTB believes that valuable information about the instructional strengths and needs of students can be obtained from a non-standard test administration. This is best done by focusing on the curriculum-referenced—or objective mastery—information that the tests can provide, including performance levels. Any decision to depart from standard procedures should be made carefully, and only with the awareness of how the changes might affect interpretation of the test scores. Obviously, the closer the actual test administration is to the standard test administration, the more likely the normative scores will be accurate.

CTB believes that legitimate comparisons can be made within groups of students given the test under the same non-standard condition. Whenever possible, interpretations of these scores should be validated based on local experience and evidence. Answer documents from non-standard administrations can be identified with a special code so that they may be easily separated from the aggregation of other scores.

In most cases, results from tests that were given under non-standard conditions should not be aggregated with results from tests given under standard conditions, since the norm-based scores may not be comparable. In addition, those viewing the results of tests given under non-standard conditions should understand that they should interpret norm-based data with caution.

If results from tests given under non-standard conditions are aggregated with results from tests given under standard conditions, it is important to include a statement with the report describing what was done and explaining that the scores that were aggregated together may not be comparable and that care should be taken in their interpretation.

However, it is important to remember that test results are only part of the information that should be used to understand a student and monitor his/her educational progress. Therefore, educational decisions should not be based on scores from a single test.

VII. Further Considerations

This presentation has emphasized those areas considered by a major test publisher with respect to the inclusion of special populations in (1) norming tests, (2) actual testing situations, and (3) reporting test results.

A number of areas not addressed here bear further consideration, and should be further examined as policies and procedures which relate to the inclusion of special populations in an assessment program are developed. For example:

- Most state assessment programs are customized to reflect the state's curriculum standards as well as the role played by testing in that state's reform plan and/or accountability system. Though policies may differ from state to state, Federal regulations typically effect all states in a uniform manner.
- Test results are used for a variety of different purposes, including for instructional improvement, program evaluation, and accountability. Where test results are used for high stakes decisions, policies dictating inclusion and accommodations must be precise, comprehensive, and legally defensible.
- A key part of CTB's test development process is to work with a usability analyst. Through a series of usability studies involving students and teachers, we examine the effects of new format and design concepts, and modify these elements according to actual observations. The studies help us design a test that is free of distraction and confusion, and that has a positive effect on performance, readability, and timing. It is important to also study the effects of test design on students with special needs in order to be sure that **all** students are appropriately supported in the test-taking process.

Appendices