

A DECISION FRAMEWORK FOR IEP TEAMS RELATED TO METHODS FOR INDIVIDUAL STUDENT PARTICIPATION IN STATE ACCOUNTABILITY ASSESSMENTS

For students to be appropriately included in large-scale assessments, Individualized Education Program (IEP) teams need to be aware of what to do, and not to do, when making individualized assessment decisions. Because the assessment methods vary and must fit individual needs, decisions could be made using inappropriate criteria. However, with an appropriate sequence of decision guides, IEP teams can ask a set of questions to arrive at an appropriate recommendation for having a student with a disability participate in a statewide assessment.

Depending on the state system, an IEP team currently may have up to five possible methods of participation to consider:

1. General assessment
2. General assessment with accommodations
3. Alternate assessment judged against grade-level achievement standards
4. Assessment judged against modified achievement standards¹
5. Alternate assessment judged against alternate achievement standards

Each of the five methods must produce achievement scores that can be used in calculating Adequate Yearly Progress (AYP), as required by the *No Child Left Behind Act (NCLB)*. Each method is derived from federal regulations and policies (U.S. Department of Education, 2004). Currently, states can decide whether to use modified and/or alternate achievement standards in judging the performance of students with disabilities. The U.S. Department of Education has announced plans to publish a notice of proposed rulemaking on the use of modified achievement standards in December 2005.

All of the assessment methods are based on the same state content standards. In Methods 1–3, student performance is judged against grade-level achievement standards. These standards are designed to enable inferences about the breadth and depth of content proficiency for a

¹See the U.S. Department of Education's interim policy on modified achievement standards at <http://www.ed.gov/policy/elsec/guid/raising/disab-options.html> (retrieved October 20, 2005).

respective grade level. Methods 1 and 2 (general assessments without and with accommodations) and Method 3 (alternate assessment judged against grade-level standards) allow for comparable inferences to be made about proficiency, given the changes that have been made. Methods 4 and 5 judge student performance against modified or alternate achievement standards, respectively. The modified and alternate achievement standards infer that accommodations and extensive supports have been used—particularly those involving assistive technologies, prompting, or scaffolding—and/or that the grade-level content has been changed in breadth, depth, and/or complexity. Again, the use of modified achievement standards is clarified in the Department's notice of proposed rulemaking.

Alternate achievement standards are designed to enable very stipulated inferences about grade-level expectations that have been extensively prioritized and narrowed. Alternate achievement standards also assume that student performance is contingent on having the supports used in the assessment.

The requirement that *all* students participate in these assessments may raise multiple issues for IEP teams to address. However, this paper focuses only on issues most closely related to the participation *methods*. The paper discusses the learning and behavioral characteristics of students likely to be appropriate for each testing method. IEP teams also should consider whether the participation method has consequences for meeting graduation requirements. Because graduation requirements differ by state, this paper does not address implications of the various participation methods on graduation. State-level testing guidelines should specify the impact of each method on meeting graduation requirements. We begin with the premise that all students, with or without disabilities, should participate in the general assessment without accommodations unless the IEP team determines otherwise.

Clarifying the IEP Team's Role in Decision Making

Since the 1997 amendments to the *Individuals with Disabilities Education Act (IDEA, 1997)*, all students with disabilities must be included in state and district assessments. The IEP team cannot decide that a student will not participate in a statewide assessment. All students unable to participate with accommodations must be provided with an alternate assessment. Some states may specify certain conditions under which parents may refuse to permit their children's participation; these exemptions apply to all students in a given state. For example, in Pennsylvania, students may be excused from the assessment if (and only if) their parents have

reviewed the test's content and have declared it to be inappropriate based on religious grounds. Beyond that, it is inconsistent with federal law for an IEP team to exempt a student from state assessments.

IEP teams must decide how students with disabilities will take the statewide assessment. These decisions are complex because of increased methods for having students with disabilities participate in state testing.² The decisions also have important implications for school accountability, reporting, and graduation rates. IEP teams develop individualized education programs that consider the effects of the disability on the needs of the individual student. These programs include recommendations to participate in statewide assessments. IEP teams may need guidance and training in recommending the most appropriate form of participation in statewide assessments for each student with a disability.

The IEP team should not select an assessment method based on a student's participation in a separate, specialized curriculum

Although test scores serve many purposes, we focus on the use of statewide assessment data for accountability (i.e., to estimate a student's achievement with regard to the state's academic content standards). All accountability assessments, including alternate assessments, must be linked to the state's academic content standards (U.S. Department of Education, 2003). Deciding that a student will participate in an alternate assessment judged against alternate achievement standards because he or she needs a functional or other specialized curriculum is inconsistent with this purpose.

The 1997 amendments to *IDEA* specify that all students must have access to the general curriculum. This access was reaffirmed in the *Individuals with Disabilities Education Improvement Act of 2004* (*IDEA*, 2004). Additionally, *NCLB* (2002) requires that all students be assessed in reading and math for accountability purposes. An important principle of assessment is that students have the opportunity to learn the material on which they will be tested. English and Steffy (2001) call this the "doctrine of no surprises." Because all students are to be assessed based on grade-level content standards, instruction for all students with disabilities should be aligned with grade-level content in reading and math (albeit reduced in breadth,

² States are not required to use every assessment method. Some states may have alternate assessments but not choose to use alternate or modified achievement standards. State guidelines should clarify which methods are available.

depth, and/or complexity for some students). The IEP team may decide that simple accommodations can be made in general education classroom instruction so (a) a statewide test can be given or taken and (b) a student's disability does not interfere with making proper inferences about his/her level of skill and proficiency. At the other extreme, an IEP team may decide that students with the most significant disabilities need additional instruction in daily living and functional skills that do not link to academic content standards. Or, they may decide that a student with a disability needs remedial work in reading or math, instruction in social skills or learning strategies, or other unique curricula. Specifying these additional curricular needs is an appropriate role for the IEP team, and specialized curricula may be prescribed to augment participation in the general curriculum. These augmentative curricula do not, however, imply any particular assessment model. For example, augmentative work in life skills may be appropriate for students participating in the general assessment and for students participating in an alternate assessment that is measured against alternate achievement standards.

NCLB sets the high expectation that *all* students achieve state standards in reading, math, and science. This expectation has substantially increased the educational—and specifically the curricular—opportunities for all students with disabilities. Evidence suggests that even students with the most significant cognitive disabilities can learn academic content, but continued research is needed to demonstrate how to teach the full breadth of the general curriculum to such students (Browder, 2005; Browder, Wakeman, Spooner, Ahlgrim-Dezell, & Algozzine, 2005). Alternate assessments with strong links to grade-appropriate content standards use academic tasks and responses, although functional activities also may be incorporated for the application of academic content (Browder et al., 2003). Modified achievement standards (Method 4) and alternate achievement standards (Method 5) may be applied to a small sample of students, but the content of the assessment needs to be linked to the academic curriculum and the academic content standards for the grade level.

The IEP team should not select the assessment method based on current placement

The decision about the most appropriate type of assessment for students with disabilities should not be based on current placement or the setting in which the student receives instruction. As noted previously, every student has the right to access to the general curriculum. Students also have the right to receive instruction from highly qualified teachers who are trained in the content area and the right to an appropriate education in the least restrictive environment (LRE) (*IDEA*,

2004). LRE does not define the way a student participates in a statewide assessment. Every type of educational setting includes students with disabilities who can be recommended for any of the assessment methods. For example, a student with learning disabilities who attends a separate day school might participate in the regular state assessment without accommodations. Or, a student with significant cognitive disabilities who is fully included in a general education classroom might participate in an alternate assessment judged against alternate achievement standards. In this decision making, a group other than the IEP team may make the placement decision (see CFR §300.552).

The IEP team should not select the assessment method based on disability classification

The type of assessment chosen for a student should not be based on the student's disability classification, which is used to determine his or her eligibility for special education services. The term "significant cognitive disabilities" does not define a new category of students with disabilities. A student's performance should not be judged against grade-level, modified, or alternate achievement standards based on his or her disability label. Instead, best practice dictates that the IEP team's decision about assessment be based on the types and intensity of support the student needs to show academic learning during ongoing instruction.

Furthermore, a student's disability should not serve as the basis for making accommodation decisions. Rather, direct measures of a student's behavior are needed to define their needs. For example, a student who is visually impaired may use specialized orientation strategies to access instructional materials and large print with high contrast to show what he or she knows and can do. The IEP team may decide to accommodate this student by recommending a general assessment in large print with high contrast. Another student might be easily distracted or have high anxiety in larger groups and need special accommodations in the location where the assessment is administered. Therefore, the IEP team might accommodate this student by recommending that he or she be assessed in a separate location. Nevertheless, the student's performance is still to be judged against grade-level achievement standards. In each case, the recommendation for participation and assessment method is based on the individual student's needs.

The IEP team should not select the assessment method to improve school AYP reports

Because of perceived pressure from the school or public, an IEP team may select an assessment method for a student that would most likely contribute to improved school accountability scores. Selecting a method for participation in statewide assessments, like all educational decisions made by the IEP team, should focus on creating an appropriate education for each student with disabilities. Although limits are in place on the number of students who can be reported as proficient using modified or alternate achievement standards (Methods 4 and 5, respectively), an unlimited number of students can be assigned to these alternate assessments. Thus, the IEP team should have the flexibility to select the assessment method that is best for each student and consistent with the state's guidelines. (See *IDEA* sections 612(a)(16) and 614(d)(1)(A)(i)(VI).) Similarly, if a student's needs are best met by participating in an assessment judged against grade-level achievement standards, even if scoring proficiently is a long shot for this student, the IEP team should select this method. By using evidence-based procedures and practices to teach the general education curriculum to all students, more students will achieve proficiency in whichever assessment they are assigned to take and school scores will improve.

The IEP team should select the assessment method based on educational needs

The current educational needs of students with disabilities are the most appropriate criteria to consider when selecting an assessment method. The IEP team identifies the types of supports and interventions that the student requires for educational success. The team has information on how the student has participated in various types of assessments in the past. From this information, the team can address the specific educational needs that relate to a statewide assessment and make a recommendation.

Considering Educational Needs to Select an Assessment Method

When considering an assessment method, IEP teams must be cognizant of their primary role: They need to determine if a student has a disability and if a student needs specially designed instruction to meet his or her unique needs (i.e., requires special education). This is a critical context for IEP teams as discussed in this paper. Once these determinations are made, a number of questions can be asked to arrive at a decision for the student's participation in statewide assessment:

- In what way does the student access the general education curriculum?
- What has been the student's response to academic interventions?
- How does the student interact with text?
- Do the supports required by the student to perform or participate meaningfully and productively in the general education curriculum change the complexity or cognitive demand of the material?
- What inferences can be made about how the student will generalize skills to different contexts (i.e., transfer information taught in one context to another)?

The next few pages discuss how the answers to these questions can lead an IEP team to a particular assessment recommendation.

Of course, in asking these questions, it is important for the IEP team to be fully informed about the state standards and assessments. In particular, the team needs to know about the demands, administration conditions, and response requirements of the general assessment and about the approaches to assessment for any alternate assessments promulgated by the state. If the IEP team is deciding whether a student should participate in the general assessment, the first questions should be: Is this student capable of taking the general statewide assessment? If not, why not? Is it because the student does not have access to appropriate content in the grade-level general education curriculum and, therefore, is not likely to know the specific content assessed on the statewide test? Is it because of the conditions of administration and/or response requirements? Or, is it because the student simply does not reach a high level of mastery on the specific content despite having ample and highly supported access? The answers to this first order of questions raise a number of other questions that can guide an IEP team in making an appropriate recommendation for student participation in the state assessment.

Question 1: In what way does the student access the general education curriculum?

Some students with disabilities access the general education curriculum in the same way as students who are not disabled; that is, students with disabilities are included in general education classes and/or are expected to master the general education curriculum to the same breadth, depth, and complexity as their nondisabled peers, although they may need some accommodations to do so (which hopefully does not change the construct being measured). Some of these students may have achieved grade-level reading and math skills but also have

significant physical challenges that require extensive accommodations. In judging access needs of the student, administration conditions and response requirements of the general statewide assessment should not differ greatly from those provided to the student to demonstrate grade-level reading and math proficiency during the school year. If extensive accommodations are used to determine that these students achieved grade-level reading skills during the year, then the same extensive accommodations should be used for the general statewide assessment. If these accommodations are not a routine part of either the teaching or assessment/testing, then unsystematic variance is introduced into the testing situation (and potentially becomes part of the construct irrelevant variance), making the test easier or more difficult for the student and masking his or her true score.

An IEP team should recommend that students who are focusing on grade-level achievement standards as part of their ongoing instructional programs take the general assessment without or with accommodations. IEP teams are likely to choose this method for most students with disabilities. In fact, in a recent summary of participation rates across states for the 2002–03 school year, the National Center on Educational Outcomes reported that 84% of special education students participated in the general reading statewide assessment without or with accommodations and that 76% of special education students participated in the general math statewide assessment without or with accommodations (Thurlow, Moen, & Wiley, 2005).

If a student has been taking the general assessment (either without or with accommodations) but has not achieved proficiency, IEP teams should consider the type and quality of instruction the student has been receiving before recommending an alternate assessment method that is judged against modified or alternate achievement standards. Because of past traditions in special education in which separate, specialized curricula have been used, students may not yet have had access to the general education curriculum for their assigned grade level. Given the diversity of models for delivering special education services, students' histories may reflect pullout for instruction in basic skills, strategy supports, or content tutorials, all of which may or may not preclude grade-level content delivered using research-based practice by highly qualified teachers. Therefore, a more specific analysis of instructional focus is needed. Before recommending an assessment other than the general statewide test, without or with accommodations, the IEP team should consider these three questions:

- Has the student received instruction in the grade-level academic content?
- Was this instruction evidence-based?

- Was instruction delivered by a highly qualified teacher?

If the answer to any of the three questions is “No”, then the IEP team should recommend that a student’s instructional program be altered before considering an assessment method based on modified or alternate achievement standards. This recommendation is based on best practice.

Students who participate in general education settings during most of their school day may need the delivery of that instruction to focus on access or prerequisite skills. Students with the most significant cognitive disabilities may need to have their general education curriculum streamlined or prioritized. A number of options exist for changing the general education curriculum to accommodate challenges in short-term memory and transfer of knowledge that students with significant cognitive disabilities may need within ongoing instruction to target specific skills and provide frequent opportunities to learn. The National Alternate Assessment Center discusses some of the variables that relate to cognition for students with significant cognitive disabilities (Kleinert et al., 2005). Whatever changes need to be made, student access to the general education curriculum often involves ongoing team planning about how the student can participate in each instructional unit or weekly lesson.

Access also may require dual instruction (i.e., coordinated teaching from general and special education teachers) and the use of a double dose of time. Dual instruction can occur when teachers plan to focus on the same skills and knowledge with different contexts: the general education teacher within the grade-level content and the special education teacher within the context of skills to access the content. In this model, students with significant disabilities get double the opportunity to learn.

For example, the supports of many students may need only simple adjustments (e.g., amount of time, setting, prompts, scaffolds, etc.) to deliver important grade-level content. In this case, the statewide test should be a fair reflection of what the students have learned. As such, the accommodations made in the classroom must also be acceptable for use on the statewide test. In contrast, students with the most significant cognitive disabilities may be working on emergent literacy or numeracy skills in the context of grade-level content. For example, a fifth-grade student with the most significant cognitive disabilities may be using stories adapted from fifth-grade books to learn to identify pictures. Or, the student may be learning the concept of numbers but concurrently gaining awareness of how numbers are used in simple equations. If a student is receiving an extensive level of prioritization within the general education curriculum,

then the IEP team may need to consider recommending an alternate assessment judged against alternate achievement standards.

Question 2: What has been the student's response to academic interventions?

Many students with disabilities respond to appropriate, intensive interventions aimed at improving performance on academic, behavioral, or social skills. Their progress can be reliably documented, measured, and reported using various curriculum-based measures that are predictive of performance on state assessments. With teachers monitoring students' progress, instructional adjustments can be made along the way (during the year) so that students have a maximal opportunity to catch up. Ideally, with instruction continually informed by student progress, students can keep pace with the grade-level curriculum and perform proficiently on the statewide assessments in a timely fashion. With this process, a considerable effort is needed to truly provide all students with disabilities with an opportunity to reach proficiency by 2014. Presently, most students with disabilities are not reaching proficiency: The average proficiency rate among special education students taking the general assessment (without or with accommodations) is 21% for reading and 12% for math (Thurlow et al., 2005). Even with the allowance of the 2% and the 1% to be counted as proficient, considerable focus is needed on the formative evaluation of instructional programs so that teachers can determine students' responses to academic interventions. Otherwise, as students with disabilities participate more in the general assessment, it may be likely that lower percentages of them will achieve proficiency.

Nevertheless, with appropriate focus on skills and with ongoing, systematic instruction³ on prioritized skills (Browder & Spooner, in press), students with the most significant cognitive disabilities can make academic progress. It is quite likely, however, that teachers will also need to consider making changes in the number of grade-level content standards that are addressed (breadth), the number of objectives considered within any of the content standards (depth), or their complexity as reflected in the requisite skills needed for successful completion of the material covered by standards. To borrow a term used in functional skills instruction, the target goal is "meaningful partial participation" rather than mastery of the entire content or construct. By appropriately including students with the most significant cognitive disabilities through manipulations of breadth, depth, or complexity, at least some subset of grade-level content standards will be within the student's educational experience.

³ The term "systematic instruction" is used here to refer to the prompt fading procedures like time delay, least intrusive prompts, and similar methods used to promote skill acquisition for this population.

Some states have developed curricular frameworks or statements of the critical essence of their state standards to give teachers examples of how participation can be meaningful and aligned with the grade-level content. The National Alternate Assessment Center (<http://www.naacpartners.org>) also provides resources on making grade-level links with prioritized skills that are focused on higher expectations for academic learning than assumed in the past. For students whose academic program focuses on their learning essential and highly prioritized academic content, alternate assessments judged against alternate achievement standards may be appropriate.

Question 3: How does the student interact with text?

For many students with disabilities, their interaction with text is the focus of their instruction: They learn to read and complete math problems in a traditional manner, using the symbol systems of the alphabet and numbers and operations. For this group of students, the focus is likely to be on accommodations and adjustments in the statewide testing program that provide better access to that text.

A student who can learn with text and instructional supports that do not change the breadth, depth, or complexity of the general education curriculum should have the opportunity to demonstrate grade-level achievement through Methods 1–3. If accommodations (e.g., Braille, enlarged text, extended time to read, etc.) are needed, then the IEP team can recommend participation in the general assessment with accommodations (Method 2).

In contrast, students with the most significant cognitive disabilities may have inconsistent or rudimentary basic skills in reading and math. For example, they may be gaining word or number awareness while using symbols to fill in reports and other student assignments, or they may be able to understand a concept in a content text if the text is not only simplified and made accessible with technology or a human reader, but also supplemented with extensive picture or auditory cues. Students with the most significant cognitive disabilities may also use minimal sight word vocabulary to glean meaning from phrases, headlines, and other signs. In all of these examples, the critical issue is the appropriate balance of skill and content knowledge. Interacting with text in reading and math requires learning appropriate symbol systems. In reading, alphabetic principles are used; in math, numeric and operational rules are used. The IEP team should balance the needs of the student in learning both the skill and the content.

Unfortunately, to date, few researchers and schools have focused on how to teach students with the most significant cognitive disabilities to read (Kliewer & Biklen, 2001; Joseph & Seery,

2004). In the absence of an adequate research base on which to define evidence-based practice, descriptive resources provide some illustrative adaptations that are suitable for this group of students. For example, Koppenhaver, Erickson, and Skotko (2001) used adapted texts and communication to promote participation in storybook reading for students with Rett Syndrome. Similarly, Downing (2005) made text accessible using a tactile alphabet book. A number of researchers have taught picture reading using assistive technology (Mechling & Langone, 2000; Musselwhite & King-DeBaun, 1997; Snyder, Freeman-Lorentz, & McLaughlin, 1993). And, Musselwhite and King-DeBaun (1997) embedded pictures or auditory cues so students could keep pace with the reading of a story; they used assistive technology to “say” repeated phrases (e.g., to read a repeated story line). Students who access text by focusing primarily on key words, pictures, and auditory cues may be candidates for alternate assessments judged against alternate achievement standards.

Question 4: Do the supports required by the student to perform or participate meaningfully and productively in the general education curriculum change the complexity or cognitive demand of the material?

Some students with complex physical or sensory challenges can perform on grade level if given alternative ways to demonstrate learning. One student may have significant physical challenges and communicate in a way that requires extensive time and possibly a translator to convey the message. Another student may have serious medical challenges that require providing assessments using unique responses and contexts. If students with these types of challenges have been able to access text and other instruction in the general education curriculum in ways that do not change its complexity or cognitive demand, then they may be candidates for either the general assessment with accommodations (Method 2) or an alternate assessment judged against grade-level achievement standards (Method 3).

Students with the most significant cognitive disabilities may lack the symbolic communication skills typically used to engage in academic instruction. Thus, they may need extensive support for academic learning. Browder, Ahlgrim-DeLzell, Courtade-Little, & Snell (2005) have described three levels of symbol use that have relevance for access to the general education curriculum. Some students who do not yet use symbolic communication may make their needs known through gestures, sounds, or other means. To access the general education curriculum, these students need support to use new symbols while learning academic concepts. For example, a student may be able to use a symbol for a story character on a voice output communication device to participate in the reading of a story. Some students with the most significant cognitive disabilities may use and comprehend a small vocabulary of spoken words or symbols. These

students have alternatives to begin applying symbols in the context of grade-level content. By using assistive technology, these students may be able to fill in simple charts by using picture symbols or numbers. In other cases, students with significant cognitive disabilities may have more expanded symbol systems and speech but still need extensive supports (pictures, visual cues, objects) to apply these skills in the context of a grade-level curriculum.

In addition to assistive technology to compensate for underdeveloped symbolic communication, some students with the most significant cognitive disabilities may need social supports and instruction in self-directed learning. Some may benefit from learning from nondisabled peers (Fisher & Frey, 2001; Hunt, Staub, Alwell, & Goetz, 1994). For example, a student may be more responsive to a peer's prompting than a teacher's or more likely to imitate a peer's model than a teacher's. Other students may be more responsive if allowed to choose materials or activities (Kennedy & Haring, 1993; Stephenson & Linfoot, 1995). Some may be able to show partial learning (Shriner, 2000; Thurlow, Lazarus, Thompson, & Robey, 2002). Students with significant cognitive disabilities who need extensive assistive technology support for symbol use and who need environmental supports, such as peer models or teacher scaffolding, are likely candidates for an alternate assessment through which they can demonstrate achievement using these supports and have their performance judged against alternate achievement standards.

An important caveat to remember is that all students need the opportunity to complete assessment tasks and make a response. Just as color-coding the answers in a test booklet is not an appropriate form of support (unless the test is intended to assess color recognition), physically guiding a student with the most significant cognitive disabilities through every task provides no information on whether the student has learned the material. This type of prompting may be important to early learning but should be phased out so that students can demonstrate independence. While students with the most significant cognitive disabilities may need extensive supports to participate in assessment tasks, these supports should not compete with or prevent the student from being able to show the necessary level of independence and problem solving. Changes in cognitive, perceptual, and physical demands can differ in many ways (between or within assessment methods and among test takers receiving the assessment in different ways) as long as construct underrepresentation and construct irrelevance are within acceptable limits.

Question 5: What inferences can be made about how the students will generalize skills to different contexts (i.e., transfer information taught in one context to the other)?

Generalization or transfer of learning always exists within some limits. The extent of these limits differs among students with disabilities. Some students with disabilities can demonstrate transfer of learning with little or no direct instruction on generalization. Most students with disabilities, however, have some difficulty generalizing learned information to novel situations. Students may master content material in one educational setting but fail to apply that information to another general education class or real-life setting (Scruggs & Mastropieri, 1984). For example, students who learned basic division in school may not automatically apply this skill to dividing the cost of a pizza among four friends. While such generalization problems also are encountered in students without disabilities, they can be magnified in students with disabilities. However, many of these same students respond well to generalization training that helps them to apply what they have learned to different life situations. When these students participate in assessments judged against grade-level achievement standards (Methods 1, 2, and 3), the assessment items are assumed to sample grade-level content. For example, if students can solve a particular word problem in a math assessment, then presumably they can apply that same math competence to other scenarios (real life or textbook) that require similar levels of mathematical reasoning and computation.

However, students with disabilities need to have systematic instruction that is oriented to generalization in reading and math to make appropriate inferences about what they can do. Without this, their skill level on a statewide test cannot possibly be understood. Indeed, the core basis for resistance to intervention is based on the assumption that students can learn and that they have been provided with appropriate opportunities to learn across a range of conditions.

For students with the most significant cognitive disabilities, the most conservative assumption is that they can demonstrate achievement if assessed under the same conditions and with the same supports used in instruction. For example, Horner's research on general case instruction demonstrated that teaching students with multiple exemplars sampled from the range of variation for a task (not just those being taught) can lead to performance of untaught tasks (Horner & Albin, 1988; Horner & McDonald, 1982). Therefore, when achievement beyond the assessment items cannot be assumed, the student's performance should probably be judged against modified or alternate achievement standards (Methods 4 or 5).

Summary and Recommendations

Table 1 summarizes the educational characteristics of students that IEP teams should consider when making recommendations about student participation in statewide assessments. States may specify additional considerations in their individual statewide assessment guidelines and guidance regarding the development of IEPs. Also, states that do not choose to use all of the assessment methods available in the regulations and summarized here should offer specific guidance about students with the most significant cognitive disabilities.

Table 1

Decision Framework for IEP Teams to Use When Choosing Assessment Methods, by Type of Method and Student Educational Characteristics

Prerequisite Considerations	<ul style="list-style-type: none"> ▪ Has the student had access to grade-level content? ▪ Has the student had evidence-based instruction? ▪ Was instruction by a highly qualified teacher? 				
<p>If the answer to any of these questions is “No”, then address access considerations and continue to apply grade-level achievement standards and evaluate response to intervention.</p> <p>If the answer to all three questions is “Yes”, then consider the methods and questions below.</p>					
Questions to Consider	Assessment Recommendation				
	Method 1. General Assessment	Method 2. General Assessment, with Accommodations	Method 3. Alternate Assessment, Grade-Level Achievement	Method 4. Assessment, Modified Achievement	Method 5. Alternate Assessment, Alternate Achievement
Question 1: In what way does the student access the general curriculum?	Shows progress in the full scope and complexity of the grade-level curriculum but may not yet be on grade level.			Does not show grade-level achievement; needs changes in complexity and scope of curriculum to show progress in grade-level content.	Due to significant cognitive disabilities (e.g., memory, transfer of learning), needs extensive prioritization within grade-level content.
Question 2: What has been this student’s response to academic interventions?	Responds to grade-level instruction but may not yet be on grade level.			Academic problems persist despite appropriate and intensive instruction; multiple years behind grade-level expectations.	Requires ongoing systematic instruction to learn prioritized skills; needs to focus on critical essence of content.
Question 3: How does this student interact with text?	On or near grade level in reading.			Needs controlled vocabulary/ reduced reading level; may also need text reader.	Needs key words, pictures, and auditory cues embedded in adapted or controlled text; may need text reader to use these cues; may have some emerging

	Assessment Recommendation				
Questions to Consider	Method 1. General Assessment	Method 2. General Assessment, with Accommodations	Method 3. Alternate Assessment, Grade-Level Achievement	Method 4. Assessment, Modified Achievement	Method 5. Alternate Assessment, Alternate Achievement
Question 4: Do the supports required by this student to perform or participate meaningfully and productively in the general education curriculum change the complexity or cognitive demand of the material?	None needed.	Needs accommodation.	Needs modified presentations and responses but on grade level.	Needs supports that reduce complexity or breadth of assessment items, such as aids that reduce judgment needed to do task or teacher scaffolding during assessment.	Needs extensive supports, such as simplified symbol system, peer model or motivation through choice making to retrieve response.
Question 5: What inferences can be made about the student's generalization/ transfer of learning?	Shows transfer of learning to the extent expected for the grade level during ongoing instruction.			Transfer of learning is more limited in scope than grade level; may only transfer to similar or familiar content or contexts.	Needs systematic instruction to generalize; because generalization is especially challenging during instruction, should not be assumed unless assessed.

IEP teams should use a systematic process for recommending how students with disabilities participate in large-scale assessments. When choosing assessment methods for students with disabilities, IEP teams should consider the following factors:

1. Data that focus primarily on students' skills and needs
2. The type of assessment that measures the student against appropriate achievement standards (i.e., grade-level, modified, or alternate)

3. Results of annual evaluations that, when examined over time, measure students as they have better and more complete access to the general education curriculum.

References

- Browder, D. (2005, June 7). *Research on academic learning by students with significant cognitive disabilities*. Presented at the OSEP 15th Technical Assistance and Dissemination Conference, Washington, DC. Retrieved June 9, 2005, from http://education.uncc.edu/access/ppt/DOE_June_7_05_lit_review_sw5-24.ppt.
- Browder, D. M., & Spooner, F. H. (in press). Teaching reading, math, and science to students with significant cognitive disabilities. Baltimore: Paul H. Brookes.
- Browder, D., Ahlgrim-Delzell, L., Courtade-Little, G., & Snell, M. (2005). General curriculum access. In M. Snell & F. Brown (Eds.), *Instruction for students with severe disabilities* (6th ed.) (pp. 489–525). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Browder, D. M., Spooner, F., Ahlgrim-Delzell, L., Flowers, C., Algozzine, R., & Karvonen, M. (2003). A content analysis of the curricular philosophies reflected in states' alternate assessments. *Research and Practice for Persons with Severe Disabilities, 2*, 165–181.
- Browder, D., Wakeman, S., Spooner, F., Ahlgrim-Delzell, L., & Algozzine, B. (2005). Research on reading for students with significant cognitive disabilities. Manuscript submitted for publication.
- Clay, M., & Cazden, C. (1992). A Vygotskian interpretation of reading recovery. In L. C. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of socio-historical psychology* (pp. 206–222). New York: Cambridge University Press.
- DeStefano, L., Shriner, J. G., & Lloyd, C. A. (2001). Teacher decision making in participation of students with disabilities in large-scale assessments. *Exceptional Children, 68*, 7–22.
- Downing, J. E. (2005). Teaching literacy to students with significant disabilities. Thousand Oaks, CA: Corwin Press.
- English, F. W., & Steffy, B. E. (2001). Deep curriculum alignment: Creating a level playing field for all children on high-stakes tests of educational accountability. Lanham, MD: Scarecrow Press.
- Fisher, D., & Frey, N. (2001). Access to the core curriculum: Critical ingredients for student success. *Remedial & Special Education, 22*, 148–157.

Horner, R. H., & Albin, R. W. (1988). Research on general case procedures for learners with severe disabilities. *Education and Treatment of Children*, 11, 375–388.

Horner, R., H., & McDonald, R. S. (1982). Comparison of single instance and general case instruction in teaching a generalized vocational skill. *Journal of the Association for the Severely Handicapped*, 7, 7–20.

Hunt, P., Staub, D., Alwell, M., & Goetz, L. (1994). Achievement by all students within the context of cooperative learning groups. *Journal of the Association for Persons with Severe Handicaps*, 21, 53–71.

Individuals with Disabilities Education Act of 1997, 120 U.S.C. §1400 et seq. (1997).

Individuals with Disabilities Education Improvement Act of 2004, 20 U. S. C. §1400, H. R. 1350 (2004).

Joseph, L. M., & Seery, M. E. (2004). Where is the phonics? A review of the literature on the use of phonetic analysis with students with mental retardation. *Remedial and Special Education*, 25, 88–94.

Kennedy, C. H., & Haring, T. G. (1993). Teaching choice making during social interactions to students with profound multiple disabilities. *Journal of Applied Behavior Analysis*, 26, 63–77.

Kleinert, H., Browder, D., & Powles-Reeves, E. (2005). The Assessment Triangle and Students with Significant Cognitive Disabilities: Models of Student Cognition. National Alternate Assessment Center, Interdisciplinary Human Development Institute, University of Kentucky. Retrieved December 5, 2005, from <http://www.naacpartners.org/Products/Files/NAAC%20Assmt%20Triangle%20White%20Paper%20-%20FINAL%20HK.doc>.

Kliewer, C., & Bilken, D. (2001). “School’s not really a place for reading”: A research synthesis of the literate lives of students with severe disabilities. *The Journal of The Association for Persons with Severe Handicaps*, 26, 1–12.

- Koppenhaver, D., Erickson, K., & Skotko, B. (2001). Supporting communication of girls with Rett syndrome and their mothers in storybook reading. *International Journal of Disability, Development and Education*, 48, 395–410.
- Mechling, L., & Langone, J. (2000). The effects of a computer-based instructional program with video anchors on the use of photographs for prompting augmentative communication. *Education and Training in Mental Retardation and Developmental Disabilities*, 35, 90–105.
- Musselwhite, C., & King-DeBaun, P. (1997). Emergent literacy success: Merging technology and whole language for students with disabilities. Park City, UT: Creative Communicating.
- No Child Left Behind Act of 2001*, Pub. L. No. 107–110, 115 Stat. 1425 (2002).
- Scruggs, T. E., & Mastropieri, M. A. (1984). Issues in generalization: Implications for special education. *Psychology in the Schools*, 21, 397–403.
- Shriner, J. G. (2000). Legal perspectives on school outcomes assessment for students with disabilities. *Journal of Special Education*, 33, 232–239.
- Snyder, T. L., Freeman-Lorentz, K., & McLaughlin, T. F. (1993). The effects of augmentative communication on vocabulary acquisition with primary age students with disabilities. B. C. *Journal of Special Education*, 17, 73–93.
- Stephenson, J., & Linfoot, K. (1995). Choice-making as a natural context for teaching early communication board use to a ten-year-old boy with not spoken language and severe intellectual disability. *Australia and New Zealand Journal of Developmental Disabilities*, 20, 263–286.
- Thurlow, M. L., Lazarus, S. S., Thompson, S. J., & Robey, J. (2002). 2001 *State policies on assessment participation and accommodations* (NCEO Synthesis Report 46). Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved June 9, 2005, from <http://education.umn.edu/NCEO/OnlinePubs/Synthesis46.html>.

Thurlow, M. L., Moen, R. E., & Wiley, H. I. (2005). *Annual performance reports: 2002-2003 State assessment data*. Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved June 22, 2005, from <http://education.umn.edu/nceo/OnlinePubs/APRsummary2005.pdf>.

U. S. Department of Education. (2003, December 9). Title I—Improving the academic achievement of the disadvantaged; Final rule, 68 Fed. Reg. 236.

U. S. Department of Education. (2004). Standards and assessment peer review guidance: Information and examples for meeting the requirements of the No Child Left Behind Act of 2001. Washington, DC: Author.

This document was produced in December 2005 under U.S. Department of Education Contract No. EDO4CO0025/0002 with the American Institutes for Research. Renee Bradley served as the contracting officer's representative. No official endorsement by the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this report or on Web sites referred to in this report is intended or should be inferred.