PROFESSIONAL DEVELOPMENT ON ASSESSMENT SYSTEMS

Large-scale assessment systems need to be technically adequate so that the public has confidence in the accountability decisions being made from them. Technical adequacy is established when the process for developing and implementing state assessments is explicit and well documented, and the state provides evidence that its assessments are reliable and support the decisions that are being made (i.e., validates the claims or inferences). To develop and implement assessment systems with this kind of technical adequacy, states must invest considerable resources in professional development. The investment should focus on four groups of professionals: (a) measurement experts, who need to know more about students with disabilities and the assessments that are appropriate for them; (b) special education professionals, who must become more proficient in understanding measurement principles in general and their applicability to assessments designed for students with disabilities; (c) education leaders and administrators, including principals, who oversee the participation of all students in large-scale assessments; and (d) individuals likely to serve on Individualized Education Program (IEP) teams, which are responsible for recommending a particular assessment method for each individual student with disabilities. This paper provides a brief overview of some professional development principles, defines what each constituent group needs to know, and lists topics and resources for each group.

Professional Development Principles

Context, process, and content are the three key elements in designing effective professional development (National Staff Development Council, 2001). The *context* for professional development must be conducive to learning, which may be achieved through the creation of learning communities under the guidance of effective leaders who can appropriately deploy critical resources. The *process* of training should focus on data use and learning outcomes, including an evaluation of training effectiveness. The *content* of training should be scientifically based, current, and responsive to the needs of stakeholders (i.e., test coordinators, teachers, related service providers, and administrators). The National Staff Development Council (2001) provides standards for each of these elements to guide staff development personnel in designing professional development experiences. As an example of a state that explicitly addresses these key elements, the Maryland Department of Education (2001), in its guide on professional development, notes that professional development is most effective when it is

designed to take place in vibrant professional learning communities (context), be data-driven, utilizing rigorous analysis of data (process), and lead to knowledge, skills, and dispositions that apply research to decision making (content).

Effective professional development also must be a continuing process that succeeds in creating lasting changes in behavior and practice (Jones & Lowe, 1990). Effective professional development cannot be a one-time event in which information is presented with little or no follow-through. To have any chance of its effects being sustained over time, professional development must be continuous and results-oriented. Ideally, professional development takes advantage of both external and internal expertise and actively involves the educators who sign up for the training. Further, professional development must occur frequently enough to provide timely and accurate information. To be responsive to changes in policy and new research on assessing students with disabilities, states must develop systems for ongoing delivery of information. One indicator of the effectiveness of this type of system is whether professional practice becomes more consistent with new policy and research over time.

Professional development needs to be aimed at improving the technical adequacy of assessment practices for students with disabilities, including the technical adequacy of the procedures for implementation of the assessment as well as the technical adequacy of the outcomes for decision making. For example, teachers need professional development aimed at ensuring that they follow proper procedures for gathering student work samples for alternate assessments, such as portfolio assessments or performance tasks, and that they carefully score the portfolios or performance tasks to ensure the dependability and credibility of the work samples for making accountability decisions. However, for at least two reasons, the training may not necessarily lead directly to immediate improvements in student learning (Sparks & Hirsh, 2000). First, student performance data obtained from an improved assessment system may not be comparable to previously reported data. Second, professional development on participation guidelines for students with disabilities may not, in itself, be expected to improve student performance. Instead, educators need information on how to improve the quality of curriculum and instruction and how to use research-based procedures like understanding key measurement, assessment, and inclusion principles (Elliott, Braden & White, 2001) and applying progress monitoring to improve student outcomes (visit http://www.studentprogress.org for more information about progress monitoring). However, as school personnel become more informed about the appropriate assessment of what students are taught and as they use

technically adequate approaches and methodologies, the impact on achievement may be quite noticeable.

Therefore, professional development must address curricular and instructional components as well as focus on results and outcomes. Only then will it be possible to provide a complete validity argument that includes a claim (or inference) supported by both reliability and validity evidence focusing on procedural and statistical components of the entire process. That is, professional development is not only about the technical adequacy of the outcomes (reaching grade-level content standards) but also about providing students systematic access to instruction focused on the standards and access to high-quality implementation of assessments aligned with those standards. Claims of performance and proficiency are much stronger (validated) when teaching and learning are systematically related.

Content for Professional Development

The following sections assume that the design of professional development incorporates appropriate consideration of context and process. This section focuses specifically on content.

Primary and Additional Resources for Developing the Content of Professional Development

Two primary resources should form the basis of professional development on the participation of students with disabilities in large-scale assessments. The first is the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). The second set of resources is the federal regulations that specify this participation, such as the *Individuals with Disabilities Education Improvement Act of 2004* (*IDEA*) (PL 108-446), the *No Child Left Behind Act of 2002* (*NCLB*), the regulations on alternate achievement standards (Federal Register, Dec. 9, 2003), and the most current policy statements on the U.S. Department of Education's Web site, which recognize a need for modified achievement standards (http://www.ed.gov/policy/elsec/guid/raising/alt-assess.html). States also may want to include their state guidelines for the participation of students with disabilities in state assessments.

Technical assistance centers offer additional resources that may be useful to professional development planners. For example, the IEP team may benefit from the information on linking

assessments to academic content standards for students with significant cognitive disabilities—available through the National Alternate Assessment Center (http://www.naacpartners.org). The National Center on Educational Outcomes offers numerous reports on the participation of students with disabilities in large-scale assessments (http://education.umn.edu/nceo). The Access Center provides direct assistance, networking, and Web-based resources to assist states in building the capacity of all students to access the general curriculum (http://www.k8accesscenter.org). The National Center on Universal Design for Learning provides a variety of resources to improve understanding of universal design for learning and support its implementation (http://www.udlcenter.org/).

What Measurement Professionals Need to Know

Measurement professionals working with state assessment systems have expertise in and in-depth knowledge of the *Standards for Educational and Psychological Testing* (American Educational Research Association et al., 1999). However, they may not be familiar with the need to apply these standards to the entire range of assessment methods available for students with disabilities because they will likely have had limited exposure to students across the full range of disabilities and, therefore, may not fully appreciate why different modes of application are needed and how to apply these different modes according to different types of disabilities. Their major need, therefore, is to understand students with disabilities and the implications of their disabilities for participation in and performance on statewide accountability assessments. Professional development might begin with specific information about special education and students who have IEPs. State measurement professionals should be able to use current terminology in referring to individuals with disabilities and should have some understanding of the variation in students' response modes and support needs. These professionals may need to learn the current categories of disabilities in *IDEA* 2004, including both definitions and terminology; current state categories and definitions also would be relevant. In this context, it may be useful to explain why *IDEA* 2004 refers to this population as "*individuals with disabilities"* rather than as "*handicapped children"* and to emphasize the importance of using language that is respectful to the persons to whom one is referring.

State measurement professionals also must understand that neither IEPs in general nor assessment participation decisions in particular are based on disability categories. Once a student is eligible for special education services, his or her needs must be considered in planning a free, appropriate public education and in selecting an assessment method. In this

process, it is essential to consider instruction designed for students with disabilities, to note specific student needs, and to help organize appropriate student services.

Measurement professionals need to understand that students with disabilities may demonstrate learning in a wide variety of response modes. As they design and develop assessment methods, measurement professionals must allow for this individualization of response and participation, and they must understand the inferences that can be made from scores derived from different testing formats. They need to apply principles of universal design to provide accessibility for many students who were previously unable to participate in assessments or demonstrate their knowledge. In this process, then, assessments are "designed and developed from the beginning to allow participation of the widest possible range of students, and to result in valid inferences about performance for all students who participate in the assessment. Universally designed assessments add a dimension of fairness to the testing process" (Thompson, Johnstone, & Thurlow, 2002). Measurement experts must consider universal design, which is part of *IDEA* and of Title I of the *Elementary and Secondary Education Act* (*ESEA*), Title I regulations in particular. Finally, they must appreciate the importance of response variations in considering appropriate accommodations.

State measurement professionals must be familiar with current federal regulations concerning the participation of students with disabilities in statewide assessments and accountability systems. Providing them with copies of these policies, along with state guidelines, is important. Detailed knowledge of these regulations is particularly critical for measurement professionals who develop alternate assessments or state-level policies for participation in assessment.

Measurement professionals need working knowledge of the concept of access to the general curriculum and should know that this is an expectation for all students with disabilities. In this context, it may be useful to clarify that some terms used by measurement specialists can be confusing when applied to the education of students with disabilities, their access to the general curriculum, and their achievement of academic content standards. For example, in measurement circles, the term "*developmental*" is used to describe a type of derived or transformed score, such as developmental age or developmental quotient. Early childhood educators use "*developmentally appropriate*" to refer to an educational curriculum that is appropriate to students' current abilities. Among those involved in the education of students with severe disabilities, "developmental" refers to the outmoded practice of applying an early childhood curriculum throughout the student's lifespan by planning an education program based

on his or her mental age[1]. In the same way, "*off grade level*" may have different meanings for the measurement and special education communities. For measurement specialists, the term may refer to the scaling of content. To special educators, it may describe the selection of appropriate teaching materials from a lower grade level to help a student access the general education grade-level content (for example, teaching a fifth-grade curriculum using a book written at a second-grade readability level).

Several resources are available to help measurement professionals understand access to the general curriculum. Technical assistance centers that focus on general curriculum access (e.g., http://www.k8accesscenter.org) provide summary documents that define general curriculum access and provide examples. Applications of this content to students with significant cognitive disabilities are available on the National Alternate Assessment Center Web site (http://www.naacpartners.org).

Professional development for measurement specialists also may need to include specific references to the application of measurement principles in the development and validation of alternate assessment formats. Few states have created or circulated technical reports on their alternate assessments. Although specific technical issues, such as item discrimination and differential item functioning, may need to be reconsidered when applied to alternate assessment formats, proper documentation and dissemination of technical adequacy are required for these areas just as for the general assessment.

If validity arguments for each testing format used by a state are to be adequately addressed, measurement professionals in the state may need increased knowledge of approved accommodations, the state's inclusion criteria for participation in assessment methods, and standardized reporting of student performance. In particular, measurement professionals need to address construct misrepresentation and construct-irrelevant variance as they relate to assessments for students with disabilities. Further, scoring constructed-response assessments requires careful planning and analysis. Because subjective scoring may introduce bias into the judgments of student performance, scorers must be adequately trained and made aware of potential biases.

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[1]The current focus in educating students with severe disabilities is to use chronologically age-appropriate educational activities and those that provide opportunities to participate in the learning of grade-level content.

With greater knowledge of students with disabilities, test accommodations, and technical considerations, measurement professionals can make more substantive contributions to the annual review of technical data related to all the assessment approaches used within a state for students with disabilities. In this way, they can help to strengthen or increase the inferences made from those assessments. Table 1 on the next page summarizes content that might be used in professional development for measurement specialists responsible for including students with disabilities in the statewide assessment and accountability systems.

Table 1

Summary: What Measurement Professionals Need to Know about Including Special Education Students in Statewide Assessment and Accountability Systems

Topic	Examples	Possible Resources
Standards for testing	• Definition of terms • Standards for validity	American Educational Research Association et al. (1999)
Application of standards to students with disabilities	• Inferences to be made • Alternate assessments • Accommodations	Tindal & Haladyna, (2002)
Students with disabilities—categories, response variation, support	• Categories used • Respectful language • Why accommodations may be needed • Supports used by students in alternate assessment	*IDEA* 2004 State policy http://education.umn.edu/nceo
Federal law and regulations	• All students participate • Not assigned to assessment method based on disability • AYP and students with disabilities	*IDEA* 2004 Federal Register, Dec. 9, 2003 http://www.ed.gov http://idea.ed.gov/ http://www.ed.gov/policy/speced/guid/nclb/index.html
Access to general curriculum	• Expectations for access • Applicability of state content standards	http://www.k8accesscenter.org http://www.naacpartners.org

What Special Educators Need to Know About Measurement

Special educators involved in state planning for how students with disabilities participate in large-scale assessments need a thorough knowledge of current federal laws and regulations (Federal Register, Dec. 9, 2003; *IDEA* 2004; *NCLB*; and new guidelines as they appear). Because policies and regulations about this participation evolve rapidly, ongoing professional development is particularly critical for this group. In addition to information about policy and regulations, they need copies of new policies and regulations in hand as they develop guidelines for participation and new alternate assessments for use in individual states. Helpful resources are available from the National Center on Educational Outcomes (http://education.umn.edu/NCEO).

In 2000, Nolet and McLaughlin pointed out that access of students with disabilities to the general curriculum was a new topic for many special educators. This may have created some confusion as to how the participation of students with disabilities is planned and carried out. Just as special educators expect measurement experts to be current in their knowledge of standards for assessment, measurement professionals expect special educators to have the most current information on access to the general curriculum to plan how to assess students' achievement of state academic content standards. Professional development on access to the general curriculum can begin with Web site summaries of the issues and preferred practices (http://www.k8accesscenter.org and http://www.naacpartners.org). However, professional development also should include more detailed information on how to promote this access (Agran, Alper, & Wehmeyer, 2002; Browder & Spooner, in press; King-Sears, 2001; Wehmeyer, Lattin, & Agran, 2001).

Special educators also need a thorough understanding of accommodations and how they affect participation in large-scale assessments. The *Standards for Educational and Psychological Testing* (American Educational Research Association et al., 1999) defines "accommodations" as any actions taken in response to a determination that an individual's disability requires a departure from established testing protocol. Koretz and Barton (2003) acknowledge that, although there is limited research on the selection of appropriate accommodations for students with disabilities, a key to devising those accommodations is understanding which biases may be caused by the disability and which alterations of the test might alleviate those biases without producing an unfair advantage.

Because special educators are aware of the needs of students and the range of available accommodations, they may be better able to perform the difficult task of selecting appropriate accommodations, which should be made for individual students and not applied uniformly to all students with disabilities. But before special educators can do that effectively, they must be familiar with the extent to which accommodations may influence the construct being measured, the state and local guidelines related to accommodations and assessment, and the ways in which an accommodation may manifest itself within the assessment format (Elliott, McKevitt, & Kettler, 2002; Thurlow, House, Boys, Scott, & Ysseldyke, 2000).

However, approved accommodations typically vary by state. Special educators must be aware of which accommodations in their state are approved and nonapproved and what the use of those accommodations means in terms of test scores and accountability for students. Bielinski,

Sheinker, and Ysseldyke (2003) discuss states' disaggregation of student test scores according to the use of accommodations. States may report all test scores in the aggregate, report accommodated scores separately, or report both. These reporting differences can reflect intended and unintended consequences for students and schools.

To be effective partners in planning, administering, and interpreting appropriate statewide assessments for students with disabilities, special educators should be much more familiar with acceptable standards for assessment, scoring, and reporting of scores. Few special educators—whether they are teachers in the field or administrative personnel working in a state department of education—have solid foundations in measurement either in general or as it applies to assessment of students with disabilities in particular. Special educators need more knowledge about the major considerations required in making a validity argument: (a) achievement constructs and how they are measured; (b) reliability; (c) test scores and the importance of a validity argument; (d) validity evidence, both procedural and empirical; and (e) construct misrepresentation and construct-irrelevant variance. They should have a general understanding of how inferences are validated with the use of an assessment. In the context of statewide assessments, they must have a thorough understanding of the differences between content and performance standards (or, in the language of *NCLB*, achievement standards). Special educators need information from the *Standards for Educational and Psychological Testing (*American Educational Research Association et al., 1999). Additional resources may also be useful to develop this understanding (see Tindal and Haladyna, 2002).

Table 2 on the next page summarizes the content that might be addressed in ongoing professional development for special educators whose students with disabilities will be included in the statewide assessment and accountability systems.

Table 2

Summary: What Special Educators Need to Know About Measurement of Students with Disabilities Who Will Be Included in Statewide Assessment and Accountability Systems

Topic	Examples	Resources
Federal regulations	▪ All students participate ▪ Not assigned to assessment method based on disability ▪ AYP and students with disabilities	*IDEA*, 2004 *NCLB* Federal Register, Dec. 9, 2004 http://www.ed.gov/policy/speced/guid/nclb/index.html
Standards for testing application to students with disabilities	▪ Definition of terms ▪ Standards for validity ▪ Applications to students with disabilities	Tindal & Haladyna (2002)
Access to general curriculum	▪ How to promote access ▪ How relates to assessing achievement of state standards	Browder & Spooner (in press) Kleinert & Kearns (2001) Nolet & McLaughlin (2000) Agran, Alper, & Wehmeyer (2002) King-Sears (2001) Wehmeyer, Lattin, & Agran (2001)
Impact of accommodations on inferences	▪ Research on accommodations ▪ Appropriate inferences	Bilenski, Sheniker, & Ysseldyke (2003) Elliott, McKevitt, & Kettler (2002) Koretz & Barton (2003) Thompson, Blount, & Thurlow (2002)

What Education Leaders Need to Know

The need for professional development for principals in special education has been well established in the literature (DiPaola & Walther-Thomas, 2003; Goor, Schwenn, & Boyer, 1997; Monteith, 2000; Sage & Burrello, 1994). Specifically, education leaders need professional development to understand the participation of students with disabilities in large-scale assessments. School leaders are keenly aware of AYP and the requirement to report separately on the subgroup of students with disabilities. As required by *ESEA* (as amended by *NCLB* in 2002), each school is held accountable for the AYP of all students within the school, including those with disabilities. However, as Farkas, Johnson, and Duffett (2003) report, 48% of principals surveyed in 2001 and 2003 identified as unreasonable the requirement to demonstrate AYP with special education students and English as a second language learners. As student annual performance scores are more and more routinely disaggregated by disability

status, the performance of students with disabilities may have serious consequences for students, schools, and administrators.

McLaughlin and Thurlow (2003) have documented the shift in accountability for special education, which ranges from simple compliance to access to education to evidence of student learning and performance. To keep pace with this shift, administrators not only must understand special education law (Davidson & Algozzine, 2002; Davidson & Gooden, 2001); they also must have knowledge of psychological and educational assessments; of inclusive assessment practices, including universal design; and of indicators of best practice instructional strategies for students with disabilities (Monteith, 2000; Patterson, Marshall, & Bowling, 2000). As students with disabilities participate in large-scale assessments with the various participation methods, administrators must have specific knowledge of each type of assessment and must be familiar with the needs of students who participate.

Administrators need training related to the selection and use of state-adopted accommodations and alternate assessments. Elliot, Braden, and White (2001) describe the parameters on which decisions should be based to include all students in large-scale assessments. Administrators who are familiar with these parameters can effectively participate in IEP team meetings and facilitate discussion of inclusive instructional practices, including the use of classroom accommodations (when appropriate). It is important that principals also understand the alternate assessment formats used in their states, the content measured on the assessments, performance requirements for students using those assessments, and the inferences that can be made when the performance of students with disabilities is judged against modified or alternate achievement standards.

Additionally, administrators must be vigilant in their efforts to ensure that instruction for all students is aligned to state grade-level content standards. Greene-Bryant (2002) describes the need for assessment and instruction to be in direct alignment for all students, including those with disabilities. As all students are included in assessments that are linked to or derived from general education grade-level content standards, administrators must be aware of initiatives that help bridge students' access to instruction based on the goal of reaching those standards. School administrators must lead their schools in aligning instruction, content, and assessment, and at the same time in avoiding narrowing the curriculum excessively or "teaching to the test."

Finally, administrators must be able to help teachers use assessment data to inform their decisions about modifying instruction. The Interstate School Leadership Licensure Consortium (Council of Chief State School Officers, 1996) defines standards for school leaders that include the use of assessment data in shaping the school vision and the instructional program. The American Association of School Administrators Web site, www.aasa.org, lists a variety of software tools, links to research, and sample plans to assist administrators in making data-based decisions. A summary of what school leaders need to know appears in Table 3.

Table 3

Summary: What Education Leaders Need to Know About Participation of Students with Disabilities in Statewide Assessment

Topic	Examples	Resources
Accommodations	▪ Guides for use ▪ Support	Elliott, Braden, & White (2001) Greene-Bryant (2002) McLaughlin & Thurlow (2003) State policy manuals
Alternate assessments	▪ Guides for use ▪ Build knowledge	Browder, et al. (2003) Greene-Bryant (2002) Hager & Slocum (2005) State policy and assessment administration manuals
Alignment of instruction, content standards, and assessment	▪ Relationship of educational objectives, content, and test	Elliott, Braden, & White (2001) Greene-Bryant (2002) Roach, Elliott, & Webb (2005) Tucker & Codding (2002) State technical manuals
Data-based decisions	▪ Types of data to collect ▪ Use of data	Educational Research Service (2003a) Educational Research Service (2003b) Jaeger & Tucker (1998) www.aasa.org

What IEP Teams Need to Know

The fourth group seriously in need of professional development comprises individuals who are likely to serve on IEP teams, including parents; general education teachers; special education teachers; special and general education administrative personnel (supervisors, principals, and local education agency representatives); school psychologists; and others. It is the responsibility of the IEP team to make the critical decision about an assessment method for each student with

a disability. To make appropriate recommendations, team members must be equipped with knowledge about instruction, supports, curricula, and assessment components.

To begin, potential IEP team members should understand state and federal legislative requirements and their impact on students with disabilities. This understanding lays the foundation for building consensus about a particular student's strengths and needs as students access the general curriculum and participate in statewide assessment. State and local education agencies are charged with communicating legislative mandates clearly to support the community's understanding of education law.

IEP team members must understand the methods for participation in large-scale assessments by students with disabilities and the distinguishing elements of each method. They need clear insights into the content of the assessments (i.e., the complexity and cognitive demand of each assessment method), the performance requirements (e.g., the inclusion of universal design concepts in grade-level assessments), and the participation parameters (i.e., descriptions or checklists created by states that help determine for which students the assessments are most appropriate). States, districts, and schools must educate IEP team members, including parents and advocates, about these critical issues.

Teams also must understand the consequences of their decisions for each student and be aware of state and district diploma requirements (particularly if they assign a student to an alternate assessment based on alternate achievement), because the standards may result in a student's not being placed in a diploma track. In addition, IEP members, including special education teachers, must recognize that assessments are not tied to disability category or placement. Students with disabilities who are assigned to the same classroom may participate in different assessment methods.

IEP teams must be keenly aware of the curricular basis for the assessment decision. An IEP team that values goals outside of grade-level content may decide to incorporate augmentative curricular elements into a student's IEP. However, it is the grade-level content standards that are the foundation for what is addressed in the annual statewide assessment, regardless of the type of assessment selected. Teams should have knowledge of grade-level content to set any necessary priorities related to both what and how much of the content standards should be covered during the IEP timeframe. Their recommendation to simplify grade-level content may lead the IEP team to recommend participation in statewide assessments judged against

modified or alternate achievement standards. Teams that have a clear understanding of the content of instruction and the assessment methods are better equipped to make suitable recommendations that support student learning.

In states where alternate assessment requires the special education teacher and the IEP team to create a portfolio of student accomplishments, members of the IEP team are likely to need extensive training on determining priorities within grade-level academic standards and on documenting progress on these priorities. They may need training on selecting assessment items and aligning them to general education content standards.

Accommodations for students with disabilities are not necessarily new to IEP team members. What may be new is the form those accommodations may take or the adoption of new accommodations by states. Teams must know which acceptable instructional and assessment accommodations their states have adopted for students with disabilities.

Because student performance scores "count," teams must understand what those scores mean for instruction and performance. They can use assessment information to make appropriate decisions about what the student's IEP should include in terms of the content to be covered and the supports needed. Teams also must be cognizant that assessment content and outcomes should accurately reflect the student's learning. Because, at this point, it is critical for assessments to be considered valid, team members must be knowledgeable about the uses and meanings of student scores.

Finally, IEP members need practice in making decisions about appropriate assessment methods. This practice might include discussing different decisions that may be appropriate, using either simulated records or actual files of students for whom decisions are not made or do not need to be made.

Table 4 summarizes content that might be addressed in professional development for potential members of IEP teams who are responsible for recommending a participation method for each student with disabilities for whom they plan an appropriate IEP.

Table 4

Summary: What IEP Teams Need to Know about Participation of Students with Disabilities in Statewide Assessment

Topic	Examples	Resources
Federal and state policies	▪ Who participates ▪ AYP ▪ Accommodations ▪ Alternate Assessments	*IDEA*, 2004 *NCLB* State policy manuals
All of the participation methods	▪ State's allowable accommodations ▪ State's types of alternate assessments ▪ Alternate and modified achievement standard methods if available in state ▪ Decision guide	State policy manuals
Consequences of participation decision	▪ Impact on graduation ▪ Scope and complexity of curriculum student expected to learn	State policy manuals
Access to general curriculum	▪ How to align IEP goals to state standards ▪ IEP goals that do and do not relate to achieving academic content standards	Courtade-Little & Browder (2005) Kleinert & Kearns (2001) Nolet & McLauglin (2000) Thompson, Quenemoen, Thurlow, & Ysseldyke (2001)
Accommodations	▪ Allowable accommodations ▪ How to plan for use of accommodations in instruction	Clapper, Morse, Lazarus, Thompson, & Thurlow (2005) Elliott, McKevitt, & Kettler (2002) Thompson & Thurlow (2003) Thurlow, House, Boys, Scott, & Ysseldyke (2000)

Summary

This paper includes an overview of the types of information needed by the various professionals involved in the participation of students with disabilities in large-scale assessments. States may find that other content is needed to address the unique assessment methods and administration guidelines for their context. Our goal was to provide a resource in planning this professional development.

References

Agran, M., Alper, S., & Wehmeyer, M.L. (2002). Access to the general curriculum for students with significant disabilties: What it means for teachers. *Education and Training in Mental Retardation and Developmental Disabilities, 37,* 123-133.

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.

Bielinski, J., Sheinker, A., & Ysseldyke, J. (2003). Varied opinions on how to report accommodated test scores: Findings based on CTB/McGraw-Hill's framework for classifying accommodations (NCEO Synthesis Report 49). Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved June 30, 2005, from http://education.umn.edu/NCEO/OnlinePubs/Synthesis49.html.

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. M., Spooner, F., Algozzine, R., Ahlgrim-Delzell, L., Flowers, C., & Karvonen, M. (2003). What we know and need to know about alternate assessment. *Exceptional Children*, *70*, 45–61.

Clapper, A. T., Morse, A. B., Lazarus, S. S., Thompson, S. J., & Thurlow, M. L. (2005). 2003 state policies on assessment participation and accommodations for students with disabilities (NCEO Synthesis Report 56). Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved June 30, 2005, from http://education.umn.edu/NCEO/OnlinePubs/Synthesis56.html.

Council of Chief State School Officers. (1996). Interstate school leadership licensure consortium standards for school leaders. Washington, DC: Author.

Courtade-Little, G., & Browder, D. M. (2005). Aligning IEPs to academic standards for students with moderate and severe disabilities. Verona, WI: Attainment Company.

Davidson, D. N., & Algozzine, B. (2002). Administrators' perceptions of special education law. *Journal of Special Education Leadership*, *15*(2), 3–8.

Davidson, D. N., & Gooden, J. S. (2001). Are we preparing beginning principals for the special education challenges they will encounter? *ERS Spectrum*, *19*, 42–49.

DiPaola, M. F., & Walther-Thomas, C. (2003). *Principals and special education: The critical role of school leaders* (COPSSE Document No. IB-7). Gainesville: University of Florida, Center on Personnel Studies in Special Education.

Educational Research Service. (2003a). *Essentials for principals: Data-based decision making*. Arlington, VA: Author.

Educational Research Service. (2003b). Using data for instructional improvement. *ERS Focus On*. Arlington, VA: Author.

Elliott, S. N., Braden, J. P., & White, J. L. (2001). *Assessing one and all: Educational accountability for students with disabilities.* Arlington, VA: Council for Exceptional Children. (ERIC Document Reproduction Service No. ED458746).

Elliott, S. N., McKevitt, B. C., & Kettler, R. J. (2002). Testing accommodations research and decision-making: The case of "good" scores being highly valued but difficult to achieve for all students. *Measurement and Evaluation in Counseling and Development*, *35*, 153–166.

Farkas, S., Johnson, J., & Duffett, A. (2003). Stand by me: What teachers say about unions, merit pay and other professional matters. New York, NY. Public Agenda.

Goor, M. B., Schwenn, J. O., & Boyer, L. (1997). Preparing principals for leadership in special education. *Intervention in School and Clinic, 32,* 133–141.

Greene-Bryant, B. (2002). *Including students with disabilities in large-scale assessments: A necessary element of school reform efforts.* Reston, VA: National Association of Secondary School Principals. (ERIC Document Reproduction Service No. ED463603).

Hager, K. D., & Slocum, T. A. (2005). *Using alternate assessment to improve educational outcomes.* Rural Special Education Quarterly*, 24, 54–59.*

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), P. L. No. 108–446, 20 U.S.C. sections 611–614.

Jaeger, R. M., & Tucker, C. G. (1998). Analyzing, disaggregating, reporting, and interpreting students' achievement test results: A guide to practice for Title 1 and beyond. Washington, DC: Council of Chief State School Officers.

Jones, E. V., & Lowe, J. (1990). Changing teacher behavior: Effective staff development. *Adult Learning*, *1*, 8–10.

King-Sears, M. E. (2001). Three steps for gaining access to the general curriculum for learners with disabilities. *Intervention in School and Clinic*, *37*, 67–76.

Kleinert, H. L., & Kearns, J. F. (Eds.). (2001). Alternate assessment: Measuring outcomes and supports for students with disabilities. Baltimore: Paul H. Brookes.

Koretz, D. M., & Barton, K. (2003). *Assessing students with disabilities: Issues and evidence* (CSE Technical Report 587). Los Angeles: University of California, Center for the Study of Evaluation Retrieved June 27, 2005 from http://www.cse.ucla.edu/reports/TR587.pdf.

Maryland Department of Education. (2001). *Maryland teacher professional development standards.* Annapolis, MD: Author. Retrieved June 27, 2005, from http://www.mdk12.org/instruction/professional_development/teachers_standards.html.

McLaughlin, M. J., & Thurlow, M. (2003). Educational accountability and students with disabilities: Issues and challenges. *Educational Policy*, *17*, 431–451.

Monteith, D. S. (2000). Professional development for administrators in special education: Evaluation of a program for underrepresented personnel. *Teacher Education and Special Education*, *23*, 281–289.

National Staff Development Council. (2001). *NSDC standards for staff development.* Oxford, OH: Author. Retrieved June 27, 2005 from http://www.nsdc.org/standards.

No Child Left Behind Act of 2001, Pub. L. No. 107–110, 115 Stat. 1425 (2002).

Nolet, V., & McLaughlin, M. J. (2000). *Accessing the general curriculum.* Thousand Oaks, CA: Corwin Press.

Patterson, J., Marshall, C., & Bowling, D. (2000). Are principals prepared to manage special education dilemmas? *NASSP Bulletin, 84,* 9–20.

Roach, A. T., Elliott, S. N., & Webb, N. L. (2005, January). Alignment of alternate assessment with state academic standards: Evidence for the content validity of the Wisconsin alternate assessment. *Journal of Special Education*, *38*(4), 218–231.

Sage, D. D., & Burrello, L. C. (1994). Leadership in educational reform: An administrator's guide to changes in special education. Baltimore: Paul H. Brookes.

Sparks, D., & Hirsh, S. (2000). Strengthening professional development. *Education Week*, *19*, 42–43.

Thompson, S., Blount, A., & Thurlow, M. (2002). *A summary of research on the effects of test accommodations: 1999 through 2001* (NCEO Technical Report 34). Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved July 12, 2005, from http://education.umn.edu/NCEO/OnlinePubs/Technical34.htm.

Thompson, S. J., Johnstone, C. J., & Thurlow, M. L. (2002). *Universal design applied to large-scale assessments* (Synthesis Report 44). Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved October 20, 2005, from http://education.umn.edu/NCEO/OnlinePubs/Synthesis44.html.

Thompson, S. J., Quenemoen, R. F., Thurlow, M. L., & Ysseldyke, J. E. (2001). *Alternate assessments for students with disabilities*. Thousand Oaks, CA: Corwin Press.

Thompson, S., & Thurlow, M. (2003). 2003 state special education outcomes: Marching on. Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved June 30, 2005, from http://education.umn.edu/NCEO/OnlinePubs/2003StateReport.htm.

Thurlow, M., House, A., Boys, C., Scott, D., & Ysseldyke, J. (2000). *State participation and accommodation policies for students with disabilities: 1999 update* (NCEO Synthesis Report 33). Minneapolis: University of Minnesota, National Center on Educational Outcomes. Retrieved July 12, 2005, from http://education.umn.edu/nceo/OnlinePubs/Synthesis33.html.

Tindal, G., & Haladyna, T. M. (Eds.). (2002). Large-scale assessment for all students: Validity, technical adequacy, and implementation. Mahwah, NJ: Erlbaum.

Tucker, M. S., & Codding, J. B. (2002). The principal challenge: Leading and managing schools in an era of accountability. San Francisco: Jossey-Bass.

Wehmeyer, M. L., Lattin, D., & Agran, M. (2001). Achieving access to the general curriculum for students with mental retardation: A curriculum decision-making model. *Education and Training in Mental Retardation and Developmental Disabilities*, *36*, 327–334.