

Teacher Decision Making in Participation of Students With Disabilities in Large-Scale Assessment


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ABSTRACT: *This article reports on the findings of a study to test the effectiveness of an intervention with teachers and administrators to improve decision making regarding participation and accommodation for students with disabilities in large-scale assessments. Using a pretest/posttest, multiple measures design involving more than 80 teachers, the study assessed the impact of training on teacher's knowledge and confidence about participation and accommodation, accommodation decisions for hypothetical students, and actual accommodation decisions the following year. Results indicate that after training, there was a stronger relationship among participation/accommodation, curriculum, and instructional needs. Teachers expressed high confidence in their ability to make accommodation decisions after training.*

 ver the past decade, the standards movement in education has increased pressure on teachers and districts to demonstrate higher levels of student achievement as shown through student test results. During this time, the inclusion of students with disabilities in standards-based curriculum and assessment gained attention incrementally. At the outset, students with disabilities were essentially ignored with regard to the development dissemination of standards and assessments (Ysseldyke, Thurlow, &

Shriner, 1992). Gradually, however, federal laws (e.g., Improving America's Schools Act [IASA], Goals 2000: Educate America Act [Goals 2000], Individuals with Disabilities Education Act [IDEA]) helped focus the efforts of standards groups and states to include students with disabilities in their efforts to implement higher standards and more rigorous measures of achievement. To some degree, each law promoted increasingly stronger connections among students' instructional experiences, the content of the general curriculum, and assessments of student performance (Rouse, Shriner, & Daniel-

son, 2000). IDEA is the most prescriptive of the laws in that it strengthens the principle of the least restrictive environment (LRE) by requiring explicit consideration and documentation of the relevance of the general curriculum for each student with an IEP and of the means for including all children in the state's assessment and accountability system (Yell & Shriner, 1997).

While IDEA is straightforward in its intent to promote more meaningful inclusion of students with disabilities in standards and assessment, there are major concerns regarding the decisions that must be made for individual students. Currently, these concerns include (a) the burden placed on students with disabilities based on the high-stakes nature of testing, (b) how test results will influence graduation status, (c) to what extent special education programs will be held accountable for student results, and (d) how valuable test results will be for educational programming decisions if students with disabilities are excluded (Chard, 1999). Also, there exists great variability among state rules as to who participates in assessments and the degree in which these guidelines are implemented. In a survey report by the National Center for Educational Outcomes (Thompson & Thurlow, 1999) on state testing and special education, nearly all states reported that guidelines were in place for student participation. However, wide variability in the implementation of these guidelines at the state and district level contributed to the exclusion from testing of students with disabilities. In addition, the high stakes attached to reported test scores (funding decisions, rewards, and sanctions), exposure to and relevancy of the general education curriculum being tested, and limited monitoring of guidelines ranked high as reasons hindering optimal participation.

States reported that teachers, parents, and students are unsure about the relevance of standards and testing outcomes. This fact, as well as the amount of exposure to the curriculum that students with disabilities receive, demonstrates that there is a need for professional development in these areas. Special educators must ensure that the curriculum is accessible to their students as testing becomes more regulated (McDonnell, McLaughlin, & Morison, 1997). Nearly all states now report that improvement

of the match between state standards and tests is an ongoing effort (Thompson & Thurlow, 1999) and that students with disabilities are included in these discussions. To enable this evolving process, teachers must be educated about how this connection can be made in the classroom so students are prepared to participate in state testing. Unfortunately, perhaps as a result of the previously discussed conflicting and loosely enforced and interpreted state policies, *local* decision making, in some respects, reflects even greater variability. DeStefano (1998) conducted a three-school case study in Illinois over 3 years and found practice varied tremendously among districts in terms of participation, who made the decisions, and range and use of accommodations in testing. In addition, she noted concerns that students' instructional needs were often not considered in participation and accommodation decisions, nor were these decisions always made on an individual basis.

Other research also suggests that educators need to know more about how to evaluate the use of certain accommodations on an individual basis prior to their use in a high-stakes testing situation. For example, Elliott, Thurlow, and Ysseldyke (1996) found virtually no accommodations that were universally accepted by states and some, such as the use of a scribe to record answers, that were permitted in one and prohibited in another. Tindal, Heath, Hollenbeck, Almond, and Harniss (1998) caution teachers that not all accommodations have the effect many people assume they have—specifically, that an accommodation will improve the test performance of students with disabilities but not substantially alter the work of students without disabilities. For example, these authors found that allowing students to mark in test answer booklets had no effect on the performance of any student group. Testing this assumption requires research on the part of the teacher implementing the accommodation and the individualized education plan (IEP) team responsible for assessment recommendations (Braden, Elliott, & Kratochwill, 1997). DeStefano (1998) suggests establishing a link between accommodations use for assessment and instructional needs, documenting their use, and evaluating the efficacy and impact of accommodations.

Chard (1999) suggests that research on accommodations and modifications should influence state and local policies and therefore provide IEP teams with a research and policy base on which to make decisions regarding testing participation and accommodations.

Teachers are the only participants in the child's education who have ongoing knowledge and access to information regarding how the student is doing in relation to standards, what accommodations are helpful, and whether or not the curriculum is meeting the child's needs. Hence, in order to foster an awareness of these components, teachers should be the focus of professional development and training more often than just at the IEP meeting.

This article describes the findings of the first year of a 3-year, Office of Special Education Programs (OSEP)-funded study. The study was designed to investigate Illinois Standards Achievement Test (ISAT) participation, accommodation, and reporting of students with disabilities and to test the effectiveness of our intervention with teachers and administrators on decision making regarding participation and accommodations for students with disabilities.

Year 1 activities focused on three objectives:

- To describe the strategies teachers use to make decisions about participation and accommodation of students with disabilities.
- To design and implement an intervention to train teachers to make these decisions on the basis of access to the general curriculum and needed instructional accommodations.
- To test the effects of that intervention by monitoring participation and accommodation patterns pre- and postintervention and analyzing documentation of participation decisions on the IEP.

CONCEPTUAL FRAMEWORK

As a consequence of these changes in thought, practice, and law, a significant shift has taken place in the role of assessment in special education. In addition to their historical role as support for eligibility and placement decisions,

assessment considerations now emphasize participation and accommodation decisions for large-scale testing. Rouse et al. (2000) list six "curriculum-assessment" scenarios derived from IDEA that can be implemented by people involved in making these decisions. These can be seen in Figure 1.

The central component in the model is that access to the general curriculum should be the determining factor in whether or not a student participates in an assessment of that curricular area. This does not mean that the student has to receive instruction in the general education classroom in that area, but that the instructional content parallels that of the general curriculum wherever instruction is delivered (Rouse et al., 2000). Assessment accommodations should parallel those needed for instruction as documented by the IEP and routinely delivered in the classroom (Hock, 1998; Poulson & Fognani-Smaus, 1998; Thurlow, Ysseldyke, Erickson, & Elliot, 1997). Only those students whose instructional goals are clearly different from those of the general curriculum should participate in alternate assessment. Students whose instructional goals differ only in certain content areas should be considered for partial participation, that is, taking the parts of the general assessment that are relevant and participating in the alternate assessment for areas where their instructional goals are not related to the general curriculum.

A second guiding principal of the study is that testing accommodations should be selected from the domain of instructional accommodations that are provided during routine instruction and classroom assessment. They should be selected to mediate the effects of "access" skill deficits but not invalidate the assessment of "target" skills. (Access skills are defined as those that allow the student to do the task; target skills are defined as the task or process of measurement interest; Tindal, et al., 1998; Phillips, 1999.) For example, if a student routinely has assignments and classroom assessments read to him, that is a possible accommodation for the statewide test. It would be appropriate as an access skill accommodation on the math or social studies test where the *target* skill is mathematics or social studies content knowledge and reading

FIGURE 1
Possible Scenarios for Assessment Under IDEA

	Curriculum Goals Addressed by Student	Assessment Scenario	Percent Included
(1)	General education goals	Participation in all parts of general education assessment with no accommodations	85% of Students with Disabilities
(2)	General education goals	Participation in all parts of general education assessment with accommodations for some parts	
(3)	General education goals	Participation in all parts of general education assessment with accommodations for all parts	
(4)	General education goals + Student specific goals	Participation in some parts of general education assessment without accommodations and alternate assessment for student specific goals	
(5)	General education goals + Student specific goals	Participation in some parts of general education assessment with accommodations and alternate assessment for student specific goals	
(6)	Student specific goals	No participation in general education assessment with alternate assessment for student specific goals	15% of Students with Disabilities

Note: From National assessment and special education in the United States and England and Wales, by M. Rouse, J. Shriner, and L. Danielson. In M. McLaughlin & M. Rouse (Eds), *Special education and school reform in the United States and Britain* (pp66-97). London: Routledge. Reprinted with permission.

is necessary to *access that* content. It would not be an appropriate accommodation on the reading test where reading ability is the *target* skill.

METHOD

Our intent was to first document the extent to which current teacher decision making and the resulting student participation and accommodation followed the “Six Scenarios” model. Second, we designed an intervention to train general and

special educators and administrators to use the model in making participation and accommodation decisions. Finally, we tested the impact of the intervention by assessing changes in teacher decision making and student participation and accommodation following training.

DOCUMENTING CURRENT TEACHER DECISION MAKING (PRETEST)

Working with six large high schools in an urban high school district and over 100 special educa-

tion teachers in those districts, we collected data on teacher decision making using an individual student survey and IEP analysis. For all special education students at the 10th grade (the only grade assessed by the 1999 ISAT at the high school level), teachers completed a survey that assessed student demographics, the extent to which the student's curriculum consisted of student-specific or general education goals across seven subject areas, the extent to which the student participated in the 1999 ISAT, the instructional accommodations the student received routinely, and the accommodation received on the ISAT. In addition, each student's IEP was analyzed to determine how participation and accommodation decisions were documented and the nature of the student's curriculum. This information was obtained for approximately 150 students within the district. The demographic characteristics of the students are presented in Table 1. They represent the entire population of 10th grade special education students attending the schools during that year. (Table 1 shows that 7.1% of the students were noted as in 11th grade, although their earned credits put them at the 10th grade level and eligible for ISAT.)

TRAINING TEACHERS AND ADMINISTRATORS

Participants and Training Format. Site-based management teams of special education and general education teachers, general education department heads, and special education directors from each school participated in seven training sessions held from March through November 1999. The Director of Assessment for the district also participated. (The training did not include parent representatives, nor did it include all related-services personnel. One school psychologist attended some of the training sessions. However participants were encouraged to share this information with all members of future IEP teams.)

One districtwide training session was held for all team members in December 1999. The training sessions were followed by telephone contacts and on-site observation of IEP meetings and planning sessions to offer continued technical assistance and support throughout the spring of 2000.

CONTENT OF TRAINING

IDEA Requirements. Teacher and administrator training focused on decision-making strategies that district personnel could use to support defensible participation and accommodation options for students with disabilities under the IDEA '97 regulations and Illinois State Board of Education (ISBE) policies. A key element of this initial part of training was an extended discussion as to how these requirements had changed in recent years and what options for student participation were now available. Options to maximize the participation of students with disabilities were presented via the "Six Scenarios" available for testing students under IDEA '97 (see Figure 1). At the time of training, the State of Illinois did not have a system for alternate assessment in place. (Since the study was conducted, Illinois has implemented an alternate assessment system. In most districts, students who did not take the ISAT were evaluated on the basis of IEP goal attainment.) However, the possibility of district-level alternate assessment existed during the training; thus, alternate assessment was kept as an option.

IEP Modifications. The actual IEP forms used by the individual schools within the district were examined and changes were made in order to reflect the process as presented during the training. In previous years, the district's individual schools used IEPs in which the participation decisions for district and state assessment were positioned first in the IEP document and curriculum validity and instructional needs were addressed after the assessment decisions were prepared. We reversed those sections. The change in organization allowed the process to flow from curriculum to assessment in a manner that addressed individual student needs in relation to the general curriculum first, before deciding on the provisions for assessment and accountability. IEP forms were further modified at the building level to reflect the decision-making flow chart, which is shown in Figure 2. The flow chart serves as a guide through the IEP process from documentation of present levels of performance in a curricular area, to consideration of individual student educational needs,

TABLE 1
Demographic Characteristics of Students (N = 157)

<i>Characteristics</i>	<i>Percentage</i>
Gender	
Male	61.1
Female	38.9
Primary Disability	
Learning Disability	71.3
Behavior Disorder	13.7
Mental Retardation	8.6
Speech/Language	0.6
Orthopedic Impairment	—
Other Health Impairment	1.3
Visual Impairment	0.6
Hearing Impairment	0.6
Autism	1.3
Traumatic Brain Injury	1.3
Other	1.3
Ethnicity	
American Indian or Alaskan Native	1.3
African-American	10.2
Asian or Pacific Islander	1.3
Hispanic, Regardless of Race	19.7
Caucasian (not of Hispanic origin)	67.5
Grade Level	
10th	92.9
11th	7.1

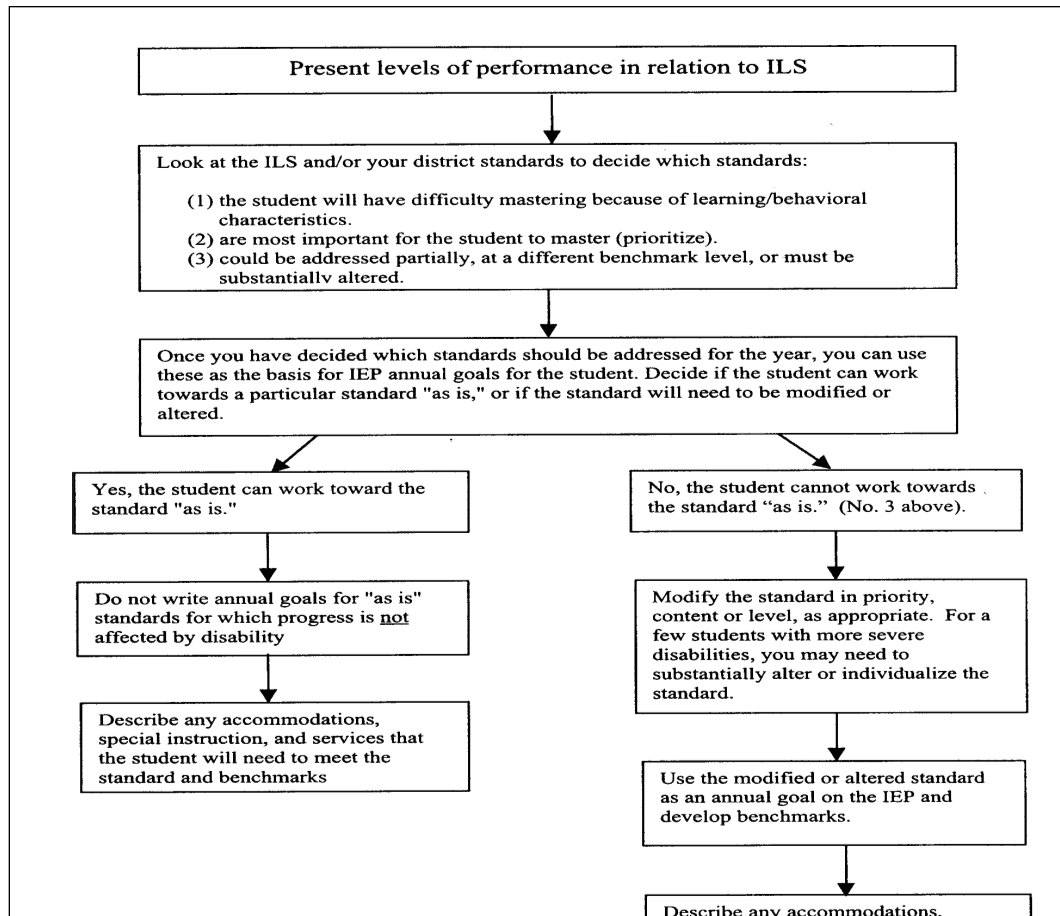
and ends with the appropriate decisions regarding instructional accommodations.

Familiarity with Content Standards. To address curriculum validity issues of the Illinois

Learning Standards (ILS, IBSE, 1997) for students with disabilities, a significant amount of time was devoted to familiarizing all participants with the content and structure of the ILS. The

FIGURE 2

Flow Chart Illustrating Uses of the IEP for Accommodation and Participation Decisions



Note: 1 = Adapted from Poulson, J., & Fognani-Smaus, K. (1998). *Using the IEP as a tool to access curriculum an instruction.* (Report for Special Services Unit). Aurora, CO: Aurora Public Schools.

ILS were constructed around the major content areas (e.g., English/language arts, mathematics, science, and social studies). They compose the central knowledge and skills on which all students at benchmark levels in the state are expected to demonstrate performance. (There are no official modified or alternate standards for students in special education in the state of Illinois. The ILS serve as common standards for all students across the state. Decisions to vary from the ILS are made on an individual basis by the IEP team as noted in Figure 2. In this study, we refer to any variation from the ILS as “student-specific” goals.) The NCEO recommends that special educators be knowledgeable about state and district standards, since decisions about par-

ticipation in assessment should be based, in part or in whole, on whether the student received instruction in the content areas covered by the assessment or whether the assessment provides a valid measure of the student’s curriculum (Thurlow, Seyfarth, Scott, & Ysseldyke, 1997). However, investigating the curriculum relevance of standards for an individual student within the IEP process remains, at best, a haphazard effort in many schools, sometimes because the standards themselves are unfamiliar or difficult to interpret. In other cases, the IEP process itself may not be conducive to consideration of the student’s program in relation to a standards framework.

Documenting Student Participation in General Curriculum. During training, participants were presented the Standards Sets prepared by ISBE. These sets are specific groupings of the individual standards and are helpful in communicating both the content of the standards and what ISAT scores mean. As an example, Figure 3 is a planning sheet listing the Six Standards Sets for the content area of reading. One can see that Standard Set 1, Comprehension of Literary Works, combines the individual standards of 1B; 1C; 2A; and 5A, B, and C. The original standards, while important individually, were not helpful in communicating what a student's instructional program is or should be covering. The sheer number and specificity of the ILS made them too cumbersome and technical to discuss at an IEP session or planning meeting. The Standards Sets, however, represented instructional content in concise and understandable terms that participants felt were helpful in communicating with parents and other educators. They were a helpful way during IEP meetings to organize discussion about the relevance of the individual student's goals and instructional needs in relation to the general curriculum as defined by the ILS.

In the training session, time was spent examining the degree to which the Standard Sets matched the content and courses taught in the schools, both in general education and special education settings. For individual students, then, the Standards Sets were used as a manageable means of documenting the extent to which the general curriculum was appropriate for a particular student and for prioritizing within content areas the knowledge and skills to be addressed during instruction. Planning sheets with Standards Sets for other content areas (e.g., math, science) were presented for appropriate grade levels. Through this exercise, teachers were asked to map out the extent to which a student's instructional program overlapped with the ILS as defined by the Standard Sets. In cases where a student's program varied from the ILS (student-specific goals), teachers were asked to document and justify that departure in terms of student strengths and instructional needs. They were also asked to consider how the student-specific goals might best be assessed. It should be noted

that student-specific goals were not always specific to a content area. Many students had instructional goals related to behavior or study skills that were not represented in the ILS. Therefore, a student might participate fully in the general curriculum, but still have student-specific goals in a noncurricular area.

Use of Accommodations. Third, a significant portion of the training focused on the use of accommodations for students with disabilities in both the instructional and assessment processes (cf. Phillips, 1999; Tindal et al., 1998). As noted earlier, the differentiation between access and target skills is relevant to the focus of the IEP and subsequent testing participation and accommodation decisions. Trainees spent time identifying access and target skills for various subtests of the ISAT. Phillips (1999) advises that it is critical that instructional accommodations be documented as carefully as possible, as these accommodations are likely to be those that will be allowed during the assessment process at year's end. Trainees analyzed current IEP forms and made improvements in how instructional accommodations were assigned and documented. Training also addressed the issue of overaccommodation (Phillips, 1999), a situation that occurs when students "automatically" receive instructional or testing support and do not receive direct instruction of important academic and behavioral skills. For example, if a math test is always read to a student, there may be a diminished effort to teach reading as an access skill for math and other areas.

General and Special Education Roles. Also discussed were the roles of the general education teacher and the special education teacher in providing instruction relevant to the general education curriculum. This is important because there is a strong need for the special education professional to be aware of the content of the general curriculum. Also, general education professionals need to be aware of the instructional accommodations that will help the student access the general curriculum as much as is appropriate and to make sure that the expectations for student achievement are high and relevant to individual student needs.

FIGURE 3

Planning Sheet With Illinois Learning Standards and ISAT Standards Sets for Reading

IEP / Illinois Learning Standards (READING)			
Goals / Standards	Instruct. Assignment		Accommodations/Modifications Level / Content / Instruction
	Special Ed. Teacher	Gen. Ed. Teacher	
Standard Set 1 (1B, 1C, 2A, 2B, 5A-C) COMPREHENSION: LITERARY WORKS Fiction, Non-fiction from novels, short stories, & periodicals			
Standard Set 2 (1B, 1C, 2A, 2B, 5A-C) COMPREHENSION: INFORMATIONAL SOURCES Non-fiction only: periodicals, newspapers, Biographies, essays, speeches			
Standard Set 3 (1B, 5A) APPLICATION OF STRATEGIES: EXPLICIT IDEAS Identification of important ideas from text			
Standard Set 4 (1C, 2A, 2B, 5B, 5C) APPLICATION OF STRATEGIES: INFERENCES FROM TEXT Use text to draw logical conclusions			
Standard Set 5 (1A) VOCABULARY			
Standard Set 6 (1A) WORD ANALYSIS (3 RD GRADE)			

Standards*:

- 1A. Apply word analysis and vocabulary skills to comprehend selections
- 1B. Apply reading strategies to improve understanding and fluency
- 1C. Comprehend a broad range of reading materials
- 2A. Understand how literary elements and techniques are used to convey meaning
- 2B. Read and interpret a variety of literary works
- 5A. Locate, organize, and use information from various sources to answer questions, solve problems, and communicate ideas
- 5B. Analyze and evaluate information acquired from various sources
- 5C. Apply acquired information, concepts and ideas to communicate in a variety of formats

Note: Standards 3 & 4 address writing, listening, and speaking.

Practice Decision Making. Once discussions were completed concerning the relevance of the curriculum for individual students and the appropriateness of accommodations during instruction, the training focused on making participation and accommodation decisions for the ISAT. Students were selected at random from the caseloads within the participating schools in the PAR study, and names were changed in order to protect confidentiality. Decisions about participation by content area in the Illinois Standards Achievement Test (ISAT) were then made based on the appropriateness of the individual student's curriculum in relation to the Standards

Sets that were prepared for the ISAT. The goal of these activities was to examine the curriculum validity of the individual ISAT subtests and any instructional accommodations needed to deliver instruction to students in the general curriculum. In an attempt to avoid overaccommodation, one activity focused on teaching participants how to document the extent to which instructional accommodations were also useful for assessment purposes prior to selecting an accommodation for ISAT testing. Finally, the training included a chance for discussion about decision recommendations for ISAT testing. During this discussion, administrators and

TABLE 2
Cross-Year Comparison of the Relationship Between Curriculum and Participation in Statewide Assessment, Math (N = 157)

<i>Nature of Curriculum</i>		<i>Participation Level</i>				
		<i>Accommodation Level</i>			<i>Partial</i>	<i>Alternate</i>
		<i>No</i>	<i>Some</i>	<i>All</i>		
Year 1 Participation Totals		47%	8%	36%	1%	9%
General Education	[55%]	57%	8%	29%	1%	5%
Student Specific	[45%]	34%	8%	44%	0%	14%
Year 2 Participation Totals		22%	1%	51%	9%	17%
General Education	[40%]	35%	2%	42%	15%	6%
Modified General Education	[35%]	24%	2%	54%	9%	11%
Student Specific	[25%]	0%	0%	59%	0%	41%

teachers exchanged goals and concerns relevant to the participation and accommodation of students with disabilities in future ISAT administrations.

TESTING THE IMPACT OF THE INTERVENTION (POSTTEST)

In March 2000, the individual student survey was repeated with all 10th-grade special education students. The survey referred to participation and accommodation in the 2000 ISAT. These findings were compared with pretest results to assess any changes in participation and accommodation that may have occurred since the pretest.

Because the population of students being tested (10th graders) changed from year to year, direct comparisons using the surveys described above may not be an accurate measure of teacher change. To supplement our understanding, we added a “same student scenario” activity in which teachers were presented with an assessment decision they made last year for an actual student and asked to comment on that decision given what they now knew as a result of training. They were also asked if and how they would change the decision. These data were analyzed by noting the magnitude and direction of the

change. Finally, teachers were asked to rate their confidence to make participation and accommodation decisions.

RESULTS AND CONCLUSIONS

The Relation Between Participation and the General Curriculum. Tables 2 and 3 present the cross-year comparisons of the relations among curriculum, participation, and accommodation for the statewide assessment in math and reading, respectively. During Year 1 in math, the largest subgroup of students (47%) took the entire test with no accommodation, followed by students who took the whole test with accommodation. Nine percent of students were evaluated using alternate assessments. Because there was no state alternate assessment at this time, for most of these students, alternate assessment was described as “attainment of IEP goals.” Fifty-five percent of the students were pursuing general education goals; 45% had special education goals. Ninety-four percent of students with general education goals took the entire ISAT; 29% had accommodation on all parts; 8% had accommodation on some parts. Eighty-six percent of students with student-specific goals took the ISAT; 44% had accommodation on all parts;

TABLE 3
Cross-Year Comparison of the Relationship Between Curriculum and Participation in Statewide Assessment, Language Arts (N = 157)

<i>Nature of Curriculum</i>	<i>Participation Level</i>					
	<i>Accommodation Level</i>			<i>Partial</i>	<i>Alternate</i>	
	<i>No</i>	<i>Some</i>	<i>All</i>			
Year 1 Participation Totals		47%	8%	35%	1%	9%
General Education	[49%]	61%	5%	27%	1%	6%
Student Specific	[51%]	34%	10%	44%	0%	12%
Year 2 Participation Totals		22%	1%	51%	9%	17%
General Education	[35%]	44%	2%	40%	9%	6%
Modified General Education	[32%]	22%	0%	54%	16%	8%
Student Specific	[33%]	0%	2%	60%	2%	36%

8% had accommodation on some parts. A similar pattern was seen for Year 1.

After training, changes were seen in both participation and accommodation on the math and language arts assessment. During Year 2, fewer students took the entire ISAT without accommodation compared to Year 1 (22% vs. 47%). More than half of the students took the entire test with accommodation (compared to 35% the year before). A slightly higher percentage of students took only part of the ISAT (9% vs. 1%). More students participated in alternate assessment (17% vs. 9%). The modal category for all students was full participation with accommodation. However, the next largest category for students with general or modified general curricula was full participation with no accommodation. For students with student-specific goals, the next largest category was alternate assessment (41% in math, 36% in language arts).

The Relationship Between Instructional and Assessment Accommodations. Table 4 presents the cross-year comparisons of instructional and testing accommodations. During Year 1, testing accommodations were given at higher rates than instructional accommodations. Those

students with disabilities who were given assessment accommodations tended to receive the same ones: oral reading of items, separate testing room, oral response or writing directly on exam booklet, and extended time. During Year 2, instructional accommodations increased from Year 1, and testing accommodations decreased, particularly in the areas of presentation and response. Teachers were less likely to accommodate target skills such as reading the reading test or having the student dictate the writing test. Separate setting and extended time were also assigned less frequently.

Changes as Measured by the "Same Student Scenario." Figure 4 presents the findings of the "same student scenario," in which teachers were asked to reconsider a participation/accommodation decision from a year ago and indicate if and how they would change that decision. Thirty-eight percent of the teachers indicated that they would change their decision. The majority of these changes were associated with full participation with accommodation on all parts of the test (Scenario 3), where teachers amended 43% of their prior decisions. After training, teachers recommended partial participation for more than a third of this group. In general, teachers were

TABLE 4
Cross-Year Comparison of Instructional and Testing Accommodations (N = 157)

<i>Accommodation Type</i>	<i>Year 1</i>	<i>Year 2</i>
Instructional		
Presentation	27%	57%
Setting	46%	71%
Response	18%	51%
Schedule	43%	74%
Testing		
Presentation	55%	35%
Setting	61%	44%
Response	50%	29%
Schedule	67%	52%

more likely to recommend accommodations, partial participation, and alternate assessment after training than they were before. When they were asked to rate their confidence in making participation decisions after training, 50% of them rated themselves as “Confident” or “Very Confident.” Ninety-six percent of the teachers rated themselves “Confident” or “Very Confident” with regard to accommodation decisions after training.

SUMMARY AND DISCUSSION

Results from the study indicate that prior to training, participation rates and accommodation patterns did not appear to be based on access to the general curriculum or the nature of instructional accommodations. Participation tended to be an “all or none” phenomenon. Students either participated in the entire assessment or they did not. Although taking only part of the ISAT is allowed and even encouraged, less than 10% of the students did so. Accommodation was also an “all or none” phenomenon. Students tended

to receive a large number of accommodations or no accommodation. Which accommodations a student received were not closely linked to instructional accommodations. A more typical pattern was that all students with disabilities received the same set of accommodations. Students tended to receive more assessment accommodations than instructional accommodations. Accommodations addressed both target and access skills. The most typical accommodations were extended time, small group or individual administration, extra breaks, alternate setting, and reading the test aloud. Few students who did not participate in the state assessment were given any type of alternate assessment. The most prevalent alternate assessment was “attainment of IEP goals.”

After training, teachers were less likely to recommend full participation with no accommodation (Scenario 1), particularly for students with student-specific goals. They were more likely to recommend full participation with accommodation for all parts (Scenario 3), partial

FIGURE 4

Pre-Posttraining Comparisons of Participation/Accommodation Decisions in “Same Student” Assessment Scenarios (N = 86)

		Actual Participation/Accommodation					Row Total
		1	2	3	5	6	
Posttraining Decision	1	14		1			15 17.4%
	2	6	3	4			13 15.1%
	3	1	1	26			28 32.6%
	5			18	4	1	23 26.7%
	6				1	6	7 8.1%
	Column Total	21 24.4%	4 4.7%	49 57.0%	5 5.8%	7 8.1%	86 100%

Note: 1 = Full participation, without accommodations; 2 = Full participation, with accommodations on some parts; 3 = Full participation, with accommodations on all parts; 4 = Partial participation without accommodations (not used); 5 = Partial participation with accommodations; 6 = Alternate assessment

participation with accommodation (Scenario 5), and alternate assessment (Scenario 6) than they were prior to training. They designated more instructional accommodations and fewer testing accommodations after training. Most apparent was the reduction of accommodation of target skills, such as reading the reading test to students and allowing students to dictate the writing test. They were less likely to assign the same accommodations to all students. After training, teachers expressed high confidence in their ability to make participation and accommodation decisions.

Did the training improve the quality of teachers’ decision making? In the absence of direct knowledge of the students and information about their performance on the test, this is difficult to ascertain. We can say that after training, teachers’ decisions about assessment participation and accommodation did show a stronger link to students’ access to the general curriculum and needed instructional accommodations than

decisions prior to training. Accommodations for target skills were markedly reduced. Furthermore, after training, teachers reported high levels of confidence in their accommodation decision making. Confidence in participation decision making was notably lower. Some of this lack of confidence might be due to the absence of a state alternate assessment at the time of the intervention. When teachers recommended students for alternate assessment, they were aware that this often meant lack of assessment of any kind for that student. A second source of concern for teachers was that, for political and logistical reasons, the “right” participation decisions might not be feasible in their districts. For example, teachers often remarked that the same set of accommodations (separate room, extended time, reading items aloud) were given routinely to large groups of special education students (regardless of instructional accommodations) because it was easiest to test these students together in a parallel administration. Others

noted that their principal had said publicly that all students would take the ISAT. They wondered how he or she would react to a greater number of recommendations for participation in alternate assessment. Even though administrators supported and participated in the training, teachers feared that “correct” assessment decisions might be reversed due to politics or logistics.

Because teachers were more likely after training to recommend accommodations, partial participation, and alternate assessment, it may be interpreted that the training created a more restrictive testing environment in the sense that students in special education were more differentiated from their general education peers (through accommodation), and fewer special education students took the full exam (through partial participation and alternate assessment). We argue that the training produced a more consistent, coherent, and legally defensible basis for participation and accommodation decisions than we saw prior to training. The concept of “least restrictive environment,” as applied to testing, may be defined as a testing situation in which (a) students take assessments that match the goals of their educational programs (assuming these are appropriate) and (b) receive accommodations that focus on mediating the effects of their disability on access skills and are consistent with those received in instruction and classroom assessment.

Finally, it should be noted that the changes achieved here were the result of approximately 10-15 hours of direct training and many more hours of informal consultation and feedback. Helping teachers and administrators to implement participation and accommodation decisions on the basis of access to the general curriculum and instructional needs required major transformations in their understanding of assessment, accountability, access to the general curriculum, access versus target skills, instructional accommodation, and the role of the IEP.

IMPLICATIONS FOR PRACTITIONERS

Overall, the current research holds several implications that are related to a central theme—con-

siderations and directions for professional development. We think the findings highlight continuing issues of (a) addressing knowledge and procedural needs for *both* special educators and general educators, (b) maintaining the individuality of assessment decisions in the context of system-level assessment and accountability demands, and (c) systematic planning for the scope and duration of professional development investments.

First, both special educators and general educators have knowledge and experiential needs related to standards-based reform, accessibility of the general curriculum, and participation options for students with disabilities in large-scale testing. Participation in this training and research project was, for many participants, their first exposure to these issues. Although L. D. O’Shea, Stoddard, and D. J. O’Shea (2000) reported that most special educators believe they have an adequate understanding of the general curriculum content and of how to adapt instruction and tests to improve accessibility, special education teachers involved in this investigation did not express such confidence. Rather, at the outset of training, most special educators were not familiar with the content and format of the Illinois Learning Standards and had little conceptual knowledge about linking accommodations for instruction and assessment and evaluating their effects (cf. Fuchs, L. S., Fuchs, D., Eaton, Hamlett, Binkley, & Crouch, 2000). It was also clear from our work that general education teachers were ill informed about the educational experiences of students with disabilities. This was particularly true with our participants from the secondary settings, where the role of providing accommodations for instruction and assessment was viewed initially as a “special education issue.” In essence, there remains a great need for general educators and special educators to be aware of each others’ efforts. This lack of experience and understanding makes sound judgments about curriculum and test options difficult. Participation in this training and research project, while helpful, does not fill the professional development void for these teachers.

Second, practitioners are encouraged to use a proactive, explicit, and flexible approach to

assessment decision making that considers the students' needs as part of the IEP process. Participants in this study had utilized an "all or none" approach to participation and accommodation decisions prior to the training. In addition, DeStefano (1998) has documented the tendency of IEP teams to relegate issues of state and district testing to last minute and hurried decisions. We think it is important to emphasize the role of the IEP as a forum for discussing the relevance of the content standards, the appropriateness of accommodations, and the most sensible testing scenario for every student. For example, this attention may help practitioners be more vigilant about the use of accommodations to avoid possible misuse (e.g., over-accommodation) that may deny students important instructional opportunities (cf. Phillips, 1999). The direct relationship between instructional plans and year-end testing options must be discussed thoroughly and documented clearly, especially in circumstances where the stakes attached to such assessments are high.

Finally, there are significant system-level implications for time and resource investments associated with the type of professional development described here. Essentially, we entered into ongoing training and consultation arrangements with the participating districts. We found through our formal and informal involvement that unanticipated information and technical assistance needs arose quite often. Perhaps this should not have been surprising, given that many educators report that they gained the majority of their assessment knowledge and decision-making skill through "on-the-job, trial-and-error learning" (Wise, Lukin, & Roos, 1991, p. 39). In addition, though we considered our training efforts to be well planned, the evolving political and practical environments of state assessments often required immediate attention and shifts in thinking. Practitioners addressing assessment issues in their districts or states should be prepared to plan for comprehensive, flexible, and ongoing activities to support the participation requirements of IDEA.

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