IV. RESULTS

Interim Report From the National Assessment

Graduation Requirements and High School Completion for Students with Disabilities

State Improvement and Monitoring

Progress in Implementing the Transition Requirements of IDEA: Promising Strategies and Future Directions

NAEP

INTERIM REPORT FROM THE NATIONAL ASSESSMENT[1]

Introduction

In the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA), Congress sought to address some of the concerns and issues that have emerged since the law's initiation through a mandate for a national evaluation. Section 674 (b) of the 1997 amendments specifically requires the Department of Education to undertake an evaluation of the implementation and progress toward meeting the goals of the act. Nine target issues are specified in the law (see table IV-1). The assessment must examine how well schools, local education agencies (LEAs), States, other recipients, and the Department are achieving the purposes of the act, including:

- improving the performance of children with disabilities in general scholastic activities and assessments as compared to nondisabled children;
- providing for the participation of children with disabilities in the general curriculum;
- helping children with disabilities make successful transitions from early intervention to preschool education; preschool education to elementary school; and secondary school to adult life;
- placing and serving children with disabilities, including minority children, in the least restrictive environment (LRE);
- preventing children with disabilities, especially children with emotional disturbances and specific learning disabilities, from dropping out of school;
- addressing behavioral problems of children with disabilities as compared to nondisabled children;
- coordinating services provided under IDEA with other educational and pupil services (including preschool services), and with health and social services funded from other sources;

[1] This module is based in part on work performed by Margaret McLaughlin, Ann Milne, and Maurice McInerney at the American Institutes for Research through a task order contract to design, consistent with IDEA Section 674(b), a national evaluation of the implementation and impact of the IDEA Amendments of 1997.

Table IV-1
Nine Target Issues

1.	Improving Scholastic Performance
2.	Accessing the General Education Curriculum
3.	Supporting Successful Transitions
4.	Providing Placement in the Least Restrictive Environment
5.	Preventing School Dropouts
6.	Addressing Children's Behavioral Problems Effectively
7.	Coordinating Services for Children and Families
8.	Supporting Full Family Participation in Children's Education
9.	Resolving Disputes Through Mediation

- providing for the participation of parents of children with disabilities in the education of their children; and

- resolving disagreements between education personnel and parents through activities such as mediation.

The national evaluation must specifically include an assessment of the status of the nine target issues, as well as a comprehensive design for describing how States, local school districts, and schools are interpreting key provisions related to each of the issues. These issues became targets for the evaluation because they represent major new provisions in the special education legislation and/or have been persistently difficult to implement. The implementation of provisions relating to each of the nine issues has the potential of significant and positive impacts on children with disabilities, their families, and the schools that provide them with special education and related services. This module first discusses seven studies that the Office of Special Education Programs (OSEP) has funded to address the national assessment requirements of IDEA. The module then describes the status of each of the nine issues to be addressed by the national assessment and presents an overview of its conceptual design. The module concludes with several summary statements regarding the background context for the nine target issues.

OSEP Studies and Evaluation

In 1999, OSEP funded seven nationally representative studies that collectively address the Section 674(b) national assessment requirements. Each of the studies is in either the data collection or design phase; several of the studies are being conducted in two stages. The first is a design phase using a task order contractor to manage conceptual development, sampling, instrumentation, and OMB clearance procedures. The second stage involves the implementation of the study's data collection, analysis and reporting.

This second stage is conducted by a contractor selected through a full and open competition.

A brief description of each study is provided below, followed by a timeline of all the studies' design and implementation stages.

National Early Intervention Longitudinal Study (NEILS). This longitudinal study of Part C will provide data on child and family characteristics of the infants and toddlers served in Part C. Issues surrounding services and service delivery as well as provider characteristics and systems issues are investigated in this study. A second cohort of infants in 2000 will provide OSEP with comparative data which will be used to assess the impact of Part C over time.

Pre-Elementary Education Longitudinal Study (PEELS). PEELS will involve a national sample of children ages 3 through 5 in preschool special education programs. Data collection will be scheduled so that PEELS children and many NEILS children will be ages 3 through 5, inviting comparisons of the preschool experiences of children who had been in early intervention and those who had not. The general aim is to study longitudinal growth patterns and outcomes of children with disabilities within the context of their home and education environments as they progress from preschool to elementary school. The study will investigate characteristics of the children and families; characteristics of the programs and service providers; services provided and settings for their delivery; parental expectations, involvement, and satisfaction; intervention for behavior problems; and early reading instruction. It is expected that data collection will be in the form of surveys for parents and school personnel, as well as direct assessment of students.

Special Education Elementary Longitudinal Study (SEELS). This 6-year longitudinal project will study the educational, vocational, social, and personal development of elementary and middle school students with disabilities and the familial, social, institutional, and cultural factors that may affect that development. Three waves of data will be collected from parents, teachers, and principals. In addition, the study will include direct assessment of students' academic and social-emotional skills. The sampling will take place in two stages: the first stage includes more than 300 LEAs, and the second stage includes students within those LEAs. The second-stage nationally representative sample of more than 14,000 will comprise seven cohorts of students who are ages 6 through 12 in the first year of the study. Those students will be ages 11 through 17 at the time of the third data collection in the fifth year of the study. Results of the study will be generalizable to each of the seven age cohorts and to each of the 13 OSEP disability categories.

Longitudinal Study of Secondary and Postsecondary Outcomes for Students with Disabilities (NLTS-2). In 1983, a National Longitudinal Transition Study (NLTS) for students with disabilities was mandated by Congress under Section 8 of Public Law 98-199. That study followed 8,000 students, ages 13 through 21 in the 1985-86 school year, for a 5-year period from the 1985-86 school year through the 1989-90 school year. NLTS was extremely broad in scope, gathering data on a wide range of characteristics, experiences, and outcomes of youth with disabilities. OSEP used the results of the NLTS to guide the IDEA Amendments of 1997 as well as to suggest directions for its discretionary programs.

In order to get more recent data that adequately capture advances in transition services and postschool outcomes for students with disabilities, OSEP is supporting a second National Longitudinal Transition Study (NLTS-2). The NLTS-2 will be designed to follow a cohort of students through high school and into early adulthood, documenting the progress of these students in academic, vocational, and life-skills curricula (as appropriate) and their postschool outcomes such as postsecondary participation, employment, and independent living. This study has three goals:

(1) to examine longitudinally the educational, vocational, social, and personal achievements of students with disabilities during adolescence and early adulthood together with the familial, social, institutional, and cultural factors that account for the variability in those outcomes;

(2) to compare changes in the secondary and postschool experiences and outcomes of students with disabilities from the first longitudinal transition study to this one; and

(3) to use this information to suggest improvements to education policy, implementation, and practice.

State and Local Implementation of IDEA (SLI-IDEA). This 5-year study will evaluate the state and local implementation of the 1997 amendments to IDEA and the impact of this legislation on schools, districts, and States. The evaluation will provide an accurate description of the short- and long-term effectiveness of IDEA in improving educational services for children and youth with disabilities. The study will focus on the implementation of the IDEA amendments of 1997, factors which contribute to effective implementation, contextual factors that influence results, outcomes of IDEA, and emerging issues related to IDEA. In addition to large sample surveys of State education agencies (SEAs) (all 50), LEAs (about 800), and schools (about 3200), three focus studies will also be conducted. These will include in-depth qualitative examination of IDEA policies and procedures related to discipline, dispute resolution, and parent involvement.

Study of Personnel Needs in Special Education (SPeNSE). This study provides extensive information on general and special education teachers, speech language pathologists, preschool service providers and paraprofessionals serving students with disabilities. The study describes the adequacy of that workforce, both in terms of shortages and quality, and attempt to explain variation in workforce adequacy. Results from SPeNSE will be used for a variety of purposes. First, they will be disseminated to State and local education agencies, institutions of higher education, and technical assistance providers to help improve the quality of the workforce. Second, they will inform OSEP's personnel preparation activities. Third, they will be used for congressional reports on the implementation of IDEA.

The sample design for SPeNSE resulted in a large, nationally representative sample of personnel serving students with disabilities. The first-stage sample is a nationally representative sample of LEAs (460), independent education units (IEUs) (40) and the State-operated schools for students with visual and hearing impairments (72). The LEA sample was stratified by geographic region and LEA size (i.e., student enrollment). Stratifying by region ensured a geographically representative sample and ensures data necessary to analyze geographic variation in the need for adequately trained and competent service providers. The geographic regions correspond with those served by OSEP's six Regional Resource Centers. IEUs and state-operated schools were stratified by geographic region only.

The second-stage sample design is a stratified simple random sample of service providers from rosters of personnel that will be obtained from sampled LEAs, IEUs, and State schools. The roster sample will be stratified by the following types of personnel:

- special education teachers who serve primarily students with sensory impairments;
- speech/language therapists and teachers;
- special education teachers who serve primarily students with emotional disturbance;
- special education teachers who serve primarily children with disabilities ages 3 through 5;
- special education teachers who are not included in the previous four categories;
- general education classroom teachers; and

- special education paraprofessionals.

Project design staff developed four different data collection instruments for use in the study. These instruments will be administered using a computer-assisted telephone interview (CATI) with approximately 8,000 respondents. The surveys will gather information on such issues as workforce policies, severity of district personnel shortages, credentials and tested ability of personnel, demographic characteristics of personnel, classroom teaching practices (particularly in the areas of instructing English language learners, behavior management, reading instruction, secondary transition, and inclusive practices), working conditions, and opportunities for continuing professional development.

Special Education Expenditure Project (SEEP). OSEP is supporting a new Finance Center to conduct research and disseminate information on special education finance and related issues, as well as to design and implement an expenditure survey to collect data on costs of special education and related services. SEEP is the first comprehensive, nationally representative study of special education undertaken in more than a decade. The major foci of the Finance Center are to examine the costs and patterns of expenditures in special education and to update statistics related to implementation of Part B, similar to that gathered for previous cost studies. The survey will focus on obtaining information primarily from LEAs and other service providers regarding expenditures for educational services for students with disabilities (including special education and related services). Supplementary sources include SEAs and special education and/or finance entity officials and records. Information gathered will be used to determine total per pupil expenditures for special education and related services in the United States, examine how state and local funding of special education affects general education, and study the financial impact of cost-related provisions of the IDEA Amendments of 1997.

An eighth study is proposed, but projected dates for initiating the design are not yet firm.

State and Local Implementation of IDEA-Part C (SLIIDEA-C). Many of the administrative issues and concerns in Part C will be investigated in the state and local implementation studies. Some of the issues include parent participation; individualized family service plan development and implementation; alternative dispute resolution; personnel training and availability; numbers of children and families served; the impact, challenges, and advantages of serving at-risk infants and toddlers; and identification of exemplary models of implementation. This information is needed to measure outcomes for the Part C GPRA indicators as well as to provide state and local officials with needed information to improve the implementation of Part C.

Overarching Design Considerations

The 1997 reauthorization of IDEA occurred within a context of intense change in American education. There is little precedent for the level of scrutiny and involvement in public education of politicians, the business community, and the public at large. The result of this attention is an array of laws and other programs at the Federal, State, and local levels that have created new initiatives such as new content and performance standards, assessments, new graduation policies, safe school laws, charter schools, and new approaches to funding education. Within this highly charged context, IDEA was reshaped both to respond to broader changes in education as well as to address issues that have arisen in the implementation of IDEA and during the two decades since Federal special education policy was established.

Critical to an evaluation of the IDEA Amendments of 1997 is an understanding that many of the current provisions were established in the 1975 Federal legislation (P.L. 94-142) and its Federal legislative precedents and in other State laws and regulations. Over the years, amendments to the 1975 legislation as well as judicial decisions and State and local policies have established the basic foundation for current special education practices.

Congress' basic intent in enacting the 1975 P.L. 94-142 was to ensure the statutory right of every child with a disability to a free appropriate public education. Passage of the 1975 legislation came after years of debate and significant court actions as well as State legislation. Thus, at the time that formal Federal legislation was passed, there was already significant special education policy and practice established within States, albeit with great variability (Ballard, Ramirez, & Weintraub, 1982; Sarason & Doris, 1979).

Immediately after passage of the 1975 legislation, the Bureau of Education of the Handicapped commissioned several studies to evaluate the implementation issues of interest to Federal policy makers. These issues include evaluations of individualized education programs (IEPs), service implementation, and local districts' responses to other requirements of the legislation (Pyecha, 1980; SRI, 1982). Other studies of the Federal special education program (e.g., General Accounting Office, 1981, Hargrove, 1981; Moore et al., 1983) revealed the critical importance of various stakeholders, including principals, program administrators, and practitioners, in interpreting and shaping Federal policies so that service providers and families could work to implement policy. One important result of the 1975 Federal legislation was the elevation of special education within each State department of education and subsequent importance of establishing accountability for policy as well as stronger technical assistance (Moore, Walker, & Holland, 1982). At the local level, research indicated that early implementation efforts focused on interpreting procedural guidelines and putting into place mechanisms for managing the program and ensuring that various procedures were

being followed within required timelines (Pyecha, 1980; SRI, 1982). However, the research also documented that both States and local districts quickly moved beyond developing and routinizing procedures to developing services and filling gaps in programs for specific students. Quickly apparent was the critical importance of having well-prepared teachers and adequate service providers. Over the years, the *Annual Reports to Congress* have documented funded studies as well as other data concerning the status of implementation. Reviews of Annual Report data provide snapshots of critical service issues that have emerged over the years in the implementation of Federal special education policy. While OSEP has made significant investments in special education research since the passage of the 1975 legislation, the prospective national evaluation will be the first comprehensive national evaluation of the implementation of the Federal special education program in almost two decades.

Nine Target Issues

The nine issues identified in Sec. 674(b) to be addressed in the national evaluation are not all new. Some reflect current, and in some cases persistent, issues in implementing IDEA. Many have a long history and a base of State and local policies and practices. In some areas, a substantial body of case law has emerged. Other provisions such as the new requirements around assessment and accessing the general education curriculum have little or no policy base or instructional history. The challenge of the national evaluation will be to understand the substantial implementation history as well as current status pertaining to each of the nine issues. The evaluation must establish a baseline of current practice as well as track changes in implementation over time.

The following sections provide an overview of the status of the knowledge base within each of the issues as well as brief descriptions of specific statuary provisions that address each issue. Some issues have been extensively researched or examined, while others are relatively new. Within the limitations of this module, only the most salient aspects of each issue will be addressed.

A central goal of IDEA is to improve the academic outcomes of children with disabilities. Indeed, while this is listed as only one of nine issues, it is probably accurate to say that the other eight issues support this primary goal. Specifically, issues 2 through 7 all relate to improving the opportunities of children with disabilities to learn challenging and important content and to ensure that they leave public education equipped with the knowledge and skills, as well as supports, necessary to access postsecondary education and training, employment, and overall full citizenship. Issues 8 and 9 support higher achievement and better results for students through enhancing collaboration with parents and reducing adversarial litigation.

Improving Scholastic Performance

The first issue to be addressed in the national evaluation is improving scholastic performance.

The current IDEA addresses for the first time the inclusion of children with disabilities in State and local school accountability measures that have been adopted for all students. Students with disabilities are to be included in general state- and district-wide assessment programs, with necessary accommodations. Some students with significant disabilities may participate in alternate assessments, and guidelines for these assessments are to be developed and students are to be participating in these assessments. Participation rates and performance of students with disabilities on general and alternate assessments must be reported.

States are also required to establish formal goals for the performance of children with disabilities that are consistent with goals and standards for general education students. Each SEA is also to establish indicators to assess progress toward goals. At a minimum, these indicators must address the performance of children with disabilities on assessments, dropout rates, and graduation rates (§612(a)(16)(B)). Data relative to student progress on the performance goals must also be publicly reported.

By adding these provisions, the law defines statewide assessments as contributing to a student's educational opportunity. The provision also aligns special education policy with those of Goals 2000 and the Improving America's Schools Act.

Currently, we know little about the scholastic performance of students with disabilities. This is due in part to the lack of their representation in national large-scale data sets (McGrew, Thurlow, & Spiegel, 1993). In addition, in 1998 the National Center for Educational Outcomes (NCEO) reported that only 13 States were able to report performance data on children and youth with disabilities. In 1997, NCEO found that about half of the States have policies concerning the participation of these students in statewide assessments.

Participation of students with disabilities in the National Assessment of Educational Progress (NAEP) is now required. However, during the first half of the decade, NAEP's written guidelines specified that students with disabilities could be excluded from assessment if they spent less than 50 percent of their time in mainstream classes or were considered incapable of participating meaningfully in the assessment. New guidelines were adopted in 1995 to encourage greater inclusion of students with disabilities in NAEP while retaining local decision making. However, analyses of participation rates still indicate wide disparities in students with disabilities' participation, and research into

decision making indicated that nonstudent factors, including logistical arrangements and staff availability, were more influential in excluding a student from assessment than a student's instructional program (American Institutes for Research, 1998).

Rossi, Hertig, and Wolman (1997) conducted an analysis of the NELS:88 subsample of students who were identified as having disabilities. While recognizing numerous problems with how disability was defined and lack of systematic inclusion of this subpopulation in the national sample, the analyses yielded information regarding scholastic performance. For example, students with disabilities in general were more likely to have been retained prior to eighth grade and to have earned fewer units in core subject matter areas. They also had lower rates of gains on mathematics proficiency tests and fewer of them had taken or planned to take either the SAT or ACT. Findings relative to school performance did differ somewhat by type or nature of disability, with those students reporting physical or health disabilities comparing most favorably to nondisabled students on most performance measures.

Many of these findings are consistent with those reported by Wagner and colleages (1992) relative to the National Longitudinal Transition Study (NLTS), the congressionally mandated study of how students with disabilities were making the transition from secondary school to young adulthood. The numerous findings of the NLTS have been reported in previous annual reports to Congress.

At the elementary level, a secondary analysis of the Title I Prospects study conducted for the National Academy of Sciences Committee on Goals 2000 and Students with Disabilities (McDonnell, McLaughlin, & Morison, 1997) compared achievement levels of elementary-age students with disabilities to their peers. While students with disabilities as a group scored considerably lower, when their third grade achievement was considered using a value-added analysis that controlled for prior achievement, their progress was commensurate with their nondisabled peers.

The lack of scholastic data comparable to those reported for nondisabled peers will be addressed through new IDEA requirements. Moreover, the attention to the scholastic performance of children with disabilities served under IDEA will focus efforts on improving access to important knowledge and effective participation in the general education curriculum.

Accessing the General Education Curriculum

This issue, similar to that of improving scholastic performance, has as its foundation the desire to establish challenging standards and high expectations for students with disabilities. Like the new assessment provisions, access to the general education

curriculum is designed to increase educational opportunities for students with disabilities. Prior to the changes in the IEP that have been made in the IDEA Amendments, individualized planning for students with disabilities was largely confined to specifying the special education and related services that each child required. Despite the fact that in 1994-95, 2.2 million students with disabilities between the ages of 6 through 21 spent at least 80 percent of their school day in general education classes (U.S. Department of Education, 1997), there has been little research related to how these students access the general education curriculum and what accommodations (supports and services) are provided to enable the child to benefit from the general instructional program provided to all students.

As noted earlier, nationally representative data are limited regarding how many and to what extent students with disabilities currently participate in the general education curriculum and instruction. The NLTS (and to a lesser degree the NELS:88 and Prospects Study) provided some data on grade point average, course-taking, time spent in general education classes, failure rates, and diploma status. These give some sense of how children with disabilities have accessed the general education curriculum.

Recent studies such as surveys conducted by NCEO (November, 1997) and the Council of State School Officers (CSSO) and the Center for Policy Research on the Impact of General and Special Education Reform (Rhim & McLaughin, 1996), and case studies of high-reform districts (McLaughlin, Henderson, & Rhim, 1997; McLaughlin, Henderson, & Morando-Rhim, 1998) have demonstrated that as almost every State has developed new content and performance standards directed at improving learning opportunities, only some have policies requiring the participation of *all* children, including those with disabilities. In 1996, this represented 35 States, with nine additional States deferring the decision to the individual IEP team (Rhim & McLaughlin, l996). The 1997 annual State survey conducted by the NCEO (November, 1997) indicates that only six States required IEP teams to document how a student's IEP goals and objectives are aligned with a State's content or curriculum standards. However, 41 States required IEP teams to document instructional accommodations. Little is known at the national level about how students with disabilities will participate in the standards and the effects on their ability to access the general education curriculum. Yet, local case studies (McLaughlin et al., 1997; 1998; Raber & Roach, 1998) indicate that both general and special education teachers will require significant guidance and support as they implement new IEP provisions requiring access to the general education curriculum.

Supporting Successful Transitions

Children with disabilities may experience several transitions during their preschool and school years. Issues related to the transition from school to postschool environments were identified early in the implementation of IDEA, and the 1983 amendments to

Federal law first addressed the need for transition planning by authorizing specific support for research, systems change, and other activities related to transition. In 1990, IDEA required a formal statement regarding needed transition services in the IEP. The 1997 Amendments required the development of a statement of transition service needs focusing on the student's course of study.

The new transition planning requirements for older students have come from almost a decade of research and experience with providing services to youth with disabilities that allow them to move successfully from school to adult life. Most of the research has focused on identifying practices that relate to such postschool outcomes as employment, postsecondary education, and community living (Hasazi, Furney, & DeStefano, 1998; McDonnell, Ferguson, & Mathot, 1992; Wagner et al., 1992; Wehman, 1996). Effective practices include facilitating self-determination among students, participation of family and cultural perspectives in planning, interagency collaboration, and the establishment of community networks of services.

A recent national study of effective transition practices in local districts (Hasazi et al., 1998) validated the importance of self-determination, effective and substantive interagency collaboration, extensive cross-agency professional development, a climate that supports transition, coordination across educational as well as other agency programs, and sustained leadership. Among the challenges to effective transition planning were the lack of available community programs and the often fragmented and unsystematic nature of the planning.

For certain students with disabilities, transition has posed even greater challenges. For example, transition of urban youth has been less successful than that of suburban and rural youth in terms of rate of employment and participation in postsecondary education or training (U.S. Department of Education, 1996). However, the research has generally been more comprehensive as it pertains to low-incidence disabilities, particularly students with mental retardation, than with students with learning disabilities or students with emotional disturbance (Patton & Blalock, 1996), and programs have often been more comprehensive and well developed.

During the past decade, with the emergence of early intervention and preschool programs, the importance of transition for young children with disabilities and their families has been realized. Transition planning was required for children moving from an IFSP to an IEP in an effort to ensure a seamless service system and prevent any disruption in services between placements (Chandler, 1995). However, transition issues have also arisen for children moving from preschool programs into elementary schools. Indeed, issues related to successful transition of preschoolers in general are addressed in other Federal legislation such as The School Readiness Act and is the first of the national goals (Ooms, 1991).

A number of effective practices have emerged from research related to early childhood transitions and include the need for interagency collaboration and thinking of transition as a long-term process as opposed to an event (Chandler, 1995). IDEA requires transition planning for young children only when the child will be leaving early intervention services (and entering preschool or other services). However, because transition planning may occur at other key points (e.g., preschool to elementary school, elementary to middle school, and middle to high school) any transition services provided at these points may be considered related services under the definition provided in IDEA.

Providing Placement in the Least Restrictive Environment

The issue of what constitutes education in the LRE has been one of the most controversial and persistent in special education. Indeed, one might argue that LRE principles such as "normalization" (Nirge, 1970; Wolfensberger & Menolascino, 1970) are at the core of national special education policy.

To ensure placements consistent with the principle of LRE provisions, SEAs must revise any funding mechanisms that result in placements that violate the LRE concept. Other requirements designed to promote more inclusive education are found in the IEP process as well as the explicit identification of supports and accommodations regarding how a child will participate in the general education curriculum and classrooms and extracurricular activities or nonacademic activities.

The literature related to the impacts of inclusive education is extensive and represents position papers and descriptions of best practices as well as some emerging empirical evidence regarding students (e.g., Fuchs, Fuchs, & Fernstrom, 1993; McGregor & Vogelsberg, 1998; McLaughlin, Warren, & Schofield, 1996). The growing literature base suggests that outcomes for students in inclusive settings can be positive in a number of domains but are significantly related to the amount and types of support provided to the student and teachers.

Preventing School Dropouts

Increasing concern is being expressed by educators, parents, and policy makers about students who leave school without graduating. While the dropout rate for students in general is significant, research has demonstrated that the dropout rate among students with disabilities is even higher (e.g., Hasazi, Johnson, Hasazi, Gordon, & Hull, 1989; Rossi et al., 1997; U.S. Department of Education, 1992). Among all students with disabilities, the dropout rate is approximately 33 percent, with certain groups of students

with disabilities (e.g., those with emotional disturbance) approaching 50 percent (Wagner et al., 1991).

Numerous problems are associated with estimating dropout rates in general. These problems are compounded in special education by the different types of exit documents that have been awarded to different types of children and the fact that, over the years, many children with disabilities were not educated with their age cohorts and "age out" of school after they reach the mandatory exit age of 21 or above. The *14th Annual Report to Congress* (U.S. Department of Education, 1992) reported findings related to students with disabilities who dropped out of school. Students who felt an emotional bond with school, whose friendships did not overly compete with the time needed to meet school responsibilities, and who abided by social rules sufficiently to avoid disciplinary problems were less likely to fail academically and were more likely to persist in school. Absenteeism and academic failure were strongly related to dropping out.

School programs can play a significant role in the prevention of dropouts. Promoting good attendance and social bonds with teachers and peers makes a difference. Providing relevant coursework and individual support services, including counseling, facilitating active participation in sports and other nonacademic activities, and monitoring progress toward graduation, are all components of successful approaches (Christianson, Sinclair, Thurlow, & Evelo, 1995; Wagner et al., 1992).

Addressing Children's Behavioral Problems

Perhaps one of the more difficult issues arising during the 1997 reauthorization of IDEA was how to provide effective positive discipline to students with disabilities and preserve their rights to FAPE. Public concerns about school safety and preventing violence and aggression in schools are at an all-time high. The result is an increase in developing and enforcing tougher discipline codes (Skiba, Peterson, & Williams, 1997). Within this climate of zero-tolerance are public perceptions that certain students with disabilities are more likely to exhibit behaviors--typically aggression--that should result in suspension or expulsion. Amidst congressional and public concerns that children with disabilities who displayed behavior harmful to themselves or others were being inappropriately protected from disciplinary actions imposed on nondisabled students for the same behavior, Congress amended IDEA in several ways. First, the amendments establish a set of procedural steps that must be taken when children with disabilities display disciplinary problems (see table IV-2). Included are precise guidelines about placements and timelines. In many cases, a review (by the IEP team and other qualified personnel) must be conducted of the relationship between the child's disability and the behavior subject to disciplinary action to determine the applicability of discipline procedures applied to children without disabilities. The legislation also contains

procedural rules for parental appeal and also requires consideration of positive behavior interventions and supports.

States now have the option not to provide special education and related to services to incarcerated 18- to 21-year-olds who, prior to their incarceration in an adult correctional facility, were not identified as eligible for special education or who did not have IEPs. A State may also require local school districts to include in the records of a child with a disability a record of any current or previous disciplinary action and transmit the statement to the same extent that such disciplinary information is transmitted with student records of nondisabled students.

A number of revisions in the 1997 law pertain to the procedures used to change the educational placements of students with disabilities who have violated school rules regarding use or sale of drugs or the carrying of a weapon. School personnel may order a change in placement to an appropriate interim alternative educational setting (IAES), another setting, or suspension, but strict timelines and conditions apply.

Application of these provisions is complicated by lack of data on the prelevance of certain disciplinary events among students with disabilities. Additionally, research reveals little consensus among administrators regarding what constitutes aggression or disruption or who should be suspended (Costenbader & Markson, 1994). Brantlinger (1991) reports that low socioeconomic, minority, and special education students appear to be at greater risk for receiving harsher discipline. Two studies of the actual nature of offenses as well as suspension and expulsion, including at least two statewide examinations of records, reveal that students with disabilities do not commit acts of aggression or other serious offenses at greater rates but are more likely to be suspended than a nondisabled peer for the same offense (Cooley, 1995; Michigan Department of Education, n.d.).

While students with disabilities as a group may pose no greater threats to school safety, no one denies that some may indeed exhibit antisocial behaviors such as aggression, hostility, defiance, and destructiveness and require intensive and positive interventions. In every school, there are children, with and without IEPs, who are at-risk or have already developed antisocial behaviors (Kazdin, 1993; Walker, Colvin, & Ramsey, 1995). These students not only disrupt the learning process in the school but severely jeopardize their own future through lowered achievement, substance abuse, disengagement, dropping out, and higher mortality (Duncan, Forness, & Hartsough, 1995; Walker et al., 1995).

Table IV-2
Provision of IDEA Regarding Nine Target Issues of the National Assessment

Issue/Provisions	Summary
Issue #1: Improving Scholastic Performance	
Sec. 612 (a) (16)	States must establish performance goals for children with disabilities that are consistent with those for other children. States must also establish performance indicators to assess progress toward achieving goals.
Sec. 612 (a) (17) (A)	States and districts must include students with disabilities in regular assessments to the greatest extent possible and establish alternative assessments where inclusion is not possible.
Sec. 612 (a) (17) (B)	States must report the number of students with disabilities participating in regular and alternative assessments. States must report the aggregate performance of students with disabilities with the same periodicity and detail as students without disabilities.
Sec. 614 (a) (1) (B)	The child's initial evaluation must determine whether a child is a child with a disability and the educational needs of such a child.
Sec. 614 (a) (2) (A)	The LEA is responsible for conducting a reevaluation when warranted, when a parent or teacher requests one, or at least every 3 years.
Sec. 614 (b) (3) (A)	The tests used to evaluate children must be: nonracially discriminatory, administered in the child's native language, validated for the purpose for which they are used, administered by trained personnel, administered in accordance with instructions provided by the test publisher, assess the child in all areas of suspected disability, and provide relevant information that directly assists in determining the educational needs of the child.
Sec. 614 (d) (1) (A) (i) and (ii)	The IEP must establish baseline performance measures and annual goals that are measurable.
Sec. 614 (d) (1) (B) (ii)	The IEP team will consist of the parents, at least one special education teacher of the child, at least one regular education teacher of the child if the child is or may be participating in the regular education environment, a representative of the LEA, other individuals who have appropriate knowledge or expertise, and the child, as appropriate.
Sec. 614 (d) (2) (A)	The IEP must be in place by the beginning of the school year.
Sec. 614 (d) (4) (A) (i)	The IEP team will review the child's IEP at least annually to determine whether annual goals are being met.
Issue #2: Accessing the General Education Curriculum	
Sec. 614 (b) (2) (A)	In conducting an evaluation for an IEP, the LEA is required to gather functional and developmental information, and use a variety of assessment tools and strategies, that will help design an IEP that enables the child to be involved in and progress in the general curriculum.
Sec. 614 (d) (1) (A)	The IEP must include a statement about how the child's disability affects the child's involvement and progress in the general curriculum. It must also include measurable goals and objectives that will enable the child to be involved and progress in the general curriculum.
Sec. 614 (d) (4) (A)	The IEP team will review the child's IEP at least annually to determine whether annual goals are being met.

Table IV-2 (cont'd)

Issue/Provisions	Summary
Issue #3: Supporting Successful Transitions	
Sec. 612 (a) (9)	An IEP or IFSP, as appropriate, must be developed and implemented by age 3 for children with disabilities participating in early intervention programs under Part C and who will be participating in preschool programs under Part B. The IEP/IFSP must address how to make this transition smooth and effective.
Sec. 613 (g) (1-3)	If a State agency grants permission to an LEA to develop a school-based improvement plan, the LEA will be responsible for supervising all activities relating to the design, implementation, and evaluation of a school-based improvement plan established in a public school in the LEA's jurisdiction. Local agencies may use funds to permit a public school to design, implement, and evaluate a school-based improvement plan that will improve educational and transitional results for all children with disabilities.
Sec. 614 (d) (1) (A) (vii-viii), (d) (5-6)	IEPs must include a statement of transition service needs focusing on the child's educational needs by age 14 and annually thereafter. At age 16 and annually thereafter, the IEP must include a statement of transition service needs including, when appropriate, a statement of interagency responsibilities and needed linkages. The IEP must also include a statement of how the child's progress towards annual goals (including transition goals) will be measured. Beginning at least 1 year before the child reaches the age of majority under State law, the IEP must include a statement that the child has been informed of the rights that will transfer to him or her upon reaching the age of majority.
Sec. 618 (a) (1) (v), (b)	States must collect data annually on the number of children with disabilities who, for each year from ages 14 to 21 stopped receiving special education and related services because of completion and/or other reasons. These data must be compiled by race, ethnicity, and category of disability. States also must collect data on the number of children birth through 2 who stopped receiving early intervention services by race and ethnicity. The data may be obtained by sampling, at the discretion of the Secretary.
Issue #4: Providing for Placement in the Least Restrictive Environment	
Sec. 612 (a) (5) (A)	To the maximum extent appropriate, children with disabilities are to be placed in the least restrictive environment--placement with children who are not disabled, and minimal use of special classes, separate schooling, or other removal of children with disabilities from the regular education environment.
Sec. 612 (a) (5) (B)	State funding mechanisms cannot create incentives for placing students in more restrictive environments. If States have funding systems that create incentives for restrictive placements, they must promise to change their systems as soon as is feasible.
Issue #5: Preventing Dropouts	
Sec. 612 (a) (16)	States must establish performance indicators to be used in assessing State progress towards reducing dropout rates among children with disabilities.

Table IV-2 (cont'd)

Issue/Provisions	Summary
Issue #6: Addressing Children's Behavioral Problems Effectively	
Sec. 612 (a) (22)	States are required to track data on suspension and expulsion rates to determine if significant discrepancies exist between the rates for disabled and nondisabled children. If there are discrepancies, the State or LEA is required to review and revise its policies relating to the development and implementation of IEPs, use of behavioral interventions, and procedural safeguards.
Sec. 613 (j)	States can require LEAs to include in the records of children with disabilities a statement of current or previous disciplinary action taken against a child but only to the same extent that they require it for children without disabilities.
Sec. 614 (d) (3) (B) (i)	The IEP team shall consider strategies, including positive behavioral interventions and supports, to address student behavior when that behavior impedes the learning of the child or others.
Sec. 615 (j)	During any proceedings concerning either discipline or an alternative educational placement, the child shall remain in his/her current placement, unless the SEA or LEA and the parents agree otherwise.
Sec. 615 (k) (1) (A)	School personnel may order the child to an appropriate interim alternative educational setting, another setting, or suspension for not more than 10 school days. This 10-day period can be extended for up to an additional 45 days if the child: carried a weapon to school, possesses, uses, or sells illegal substances while at school or a school function.
Sec. 615 (k) (1) (B)	If a child who has been suspended has never had a functional behavioral assessment and does not have a behavioral intervention plan, the LEA shall convene an IEP meeting to develop an assessment plan that addresses the child's behavior either before or within 10 days of taking disciplinary action. If the child already has a behavioral intervention plan, the IEP Team shall review the plan and modify it, as necessary.
Sec. 615 (k) (2)	A hearing officer may order a change in placement to an appropriate interim alternative educational setting for not more than 45 days if s/he determines that the public agency has demonstrated that maintaining the current placement is substantially likely to result in injury to the child or others, considers the appropriateness of the child's current placement, considers whether the public agency has made reasonable efforts to minimize the risk of harm in the child's current placement.
Sec. 615 (k) (3)	Any interim alternative educational setting in which a child is placed must enable the child to continue to participate in the general curriculum and to continue to receive services that will enable the child to meet the goals set out in his/her IEP.
Sec. 615 (k) (4)	Any time disciplinary action that might result in a change in the child's educational placement or a suspension is considered, parents must be notified not later than the date on which the decision to take that action is made. Within 10 school days of the decision to take action, the IEP team shall review the relationship between the child's disability and the behavior subject to the disciplinary action.

Table IV-2 (cont'd)

Issue/Provisions	Summary
Sec. 615 (k) (5)	If the manifestation determination review demonstrates that the behavior was not a manifestation of the child's disability, relevant disciplinary procedures applicable to children without disabilities may be applied.
Sec. 615 (k) (6)	If the child's parent disagrees with a determination that the child's behavior was not a manifestation of the disability, or with any other decision, the parent may request an expedited hearing.
Sec. 615 (k) (7)	During a hearing, the child shall remain in the interim alternative educational setting. If school personnel maintain that it is dangerous for the child to be in the current placement, the LEA may request an expedited hearing.
Sec. 615 (k) (8)	A child who has not been determined to be eligible for special education and related services under Part B may assert any of the protections provided for if the LEA had knowledge that the child was a child with a disability before the behavior that precipitated the disciplinary action occurred.
Sec. 615 (k) (9)	The IDEA Amendments of 1997 do not prohibit LEAs from reporting a crime or prevent State agencies from exercising their responsibilities with regard to the application of Federal and State law to crimes committed by children with disabilities.
Issue #7: Coordinating Services for Children and Families	
Sec. 612 (a) (12) (A)	The chief State school officer is responsible for ensuring that there is an interagency coordination agreement in effect between the SEA and any other public agencies that provide and pay for services that are needed to ensure a free and appropriate public education, such as services relating to assistive technology services and devices, related services, supplementary aids and services, and transition services.
Sec. 613 (f) (1)	Up to 5 percent of Part B funds can be used by an LEA in combination with other funds to coordinate services.
Sec. 611 (f) (3) (G)	SEAs may use up to 1 percent of Federal funds to supplement other funds to coordinate services.
Sec. 613 (f) (3)	If an LEA is carrying out a coordinated services program under Title XI of ESEA, the agency shall use coordinated services funds from IDEA in accordance with the requirements of Title XI.
Issue #8: Supporting Full Family Participation in Children's Education	
Sec. 612 (a) (10) (C) (i)	LEAs may refuse to pay for the cost of education, including special education and related services, if the agency made a free and appropriate public education available to the child and the parents elected to place the child in a private school or facility.
Sec. 612 (a) (10) (C) (iii)	LEAs may reduce or deny payment for private educational services if the parents did not give written notice of their intention to remove their child from the public schools at least 10 business days prior to the removal of the child from public school and at the most recent prior IEP team meeting.

Table IV-2 (cont'd)

Issue/Provisions	Summary
Sec. 612 (a) (21) (A) (B)	States must establish and maintain an advisory panel for the purpose of providing policy guidance to the State with respect to special education and related services. The advisory panels will be appointed by the governor or other State official so authorized and include individuals concerned with the education of children with disabilities, and parents must constitute a majority of the members of the panel.
Sec. 612 (a) (21) (D)	The advisory panels will advise on unmet needs within the State in the education of children with disabilities, comment on any rules or regulations proposed by the State regarding the education of children with disabilities, advise the SEA in developing evaluations and reporting data, advise the SEA in taking corrective action to address findings identified in response to required Federal monitoring reports, and advise the SEA in developing and implementing policies relating to the coordination of services for children with disabilities.
Sec. 613 (g) (6) (A)	If a school has a school-based improvement plan, parents of children with disabilities must be included as members of the school improvement team. Their role will consist of being involved in the design, evaluation, and implementation of the school-based improvement plan.
Sec. 614 (d) (1) (A) (viii) (II)	Parents must be informed of their child's progress at least as frequently as parents of nondisabled children and must receive information on their child's progress toward meeting the annual goals and the extent to which that progress is sufficient to enable the child to achieve the goals by the end of the year.
Sec. 614 (a) (1), (c) (3)	Parents must give consent for evaluations and reevaluations.
Sec. 614 (b) (1), (4)	Parents are members of the group making the eligibility determination and must be given notice about the evaluation and provided a copy of the evaluation report and eligibility determination.
Sec. 614 (c) (1)	Parents' role as members of the IEP team includes providing information about the strengths of their child and their concerns for enhancing the education of their child.
Sec. 614 (f)	Parents will participate in decisions concerning the educational placement of their child.
Issue #9: Resolving Disputes Through Mediation	
Sec. 611 (f) (3) (C)	Certain Federal money may be used to establish and implement the mediation process required by Sec. 615 (e), including the costs of mediators and support personnel.
Sec. 615 (b) (1)	SEAs and LEAs must set up procedures to allow the parents of any child with disabilities to examine all records relating to the child and to participate in meetings regarding the identification, evaluation, and educational placement of the child.
Sec. 615 (b) (4)	Parents are entitled to written notice in their native language if an SEA or LEA proposes to change the placement of a child. If the parent does not agree with the change, the parent is entitled to mediation or a due process hearing.

Table IV-2 (cont'd)

Issue/Provisions	Summary
Sec. 615 (b) (7)	Parents, or an attorney representing the child, must provide the SEA or LEA in writing with notice of why they are contesting the identification, evaluation, or placement of the child, and provide a proposed solution if they have one.
Sec. 615 (b) (8)	SEAs must develop a model form to assist parents in filing a complaint.
Sec. 615 (d) (1)	Parents are entitled to a copy of the procedural safeguards upon initial referral for evaluation, with notice of each IEP meeting and upon reevaluation of the child, and upon registration of a complaint.
Sec. 615 (d) (2)	The notice to parents of procedural safeguards will be written in an easily understandable manner in the parent's native language (unless it is clearly not feasible to do so).
Sec. 615 (e) (1)	States are required to provide mediation as an alternative to due process whenever a hearing is required in all disputes involving the identification, evaluation, or placement of a child with disabilities.
Sec. 615 (e) (2) (A)	Participation in mediation procedures must be voluntary, not deny or delay a parent's right to a due process hearing, and be conducted by a qualified and trained mediator.
Sec. 615 (e) (2) (B)	SEAs and LEAs may establish procedures to require parents to meet with a disinterested third party who will explain the benefits of mediation.
Sec. 615 (e) (2) (C)	States will maintain lists of mediators who are knowledgeable in laws relating to special education.
Sec. 615 (e) (2) (D)	States will pay all costs associated with mediation.
Sec. 615 (e) (2) (E)	Mediation sessions shall be scheduled in a timely manner at convenient locations.
Sec. 615 (e) (2) (F)	All agreements resulting from mediation shall be put in writing.
Sec. 615 (e) (2) (G)	Discussions during mediation will be confidential and not used in any subsequent due process hearings or mediation.
Sec. 615 (f) (1)	Whenever a complaint is received relating to the identification, evaluation, or educational placement of a child, or placement of a child in an alternative educational setting for discipline purposes, parents are entitled to an impartial due process hearing by the SEA or LEA.
Sec. 615 (f) (2)	At least 5 business days prior to a due process hearing, all parties will disclose to all other parties any evaluations and any recommendation made on those evaluations they intend to use at the hearing. If they do not disclose them, the hearing officer may bar them from presenting the evidence.
Sec. 615 (f) (3)	Employees of the SEA or LEA involved in the education or care of the child may not conduct the hearing.
Sec. 615 (g)	Any party may appeal a decision from a hearing conducted by the LEA to the SEA. An SEA officer will review the decision and make an independent decision.

Table IV-2 (cont'd)

Issue/Provisions	Summary
Sec. 615 (h)	Participants in a hearing have the right to a lawyer and other expert help, the right to present evidence and cross examine, the right to a transcript of the hearing, and the right to written or, at the option of the parents, electronic findings of fact and decisions.
Sec. 615 (i)	A decision made in a hearing is final unless there is the right to appeal from the local to the State level and it is appealed. All decisions at the State level are final unless they are appealed to a State court or U.S. District Court.

Students with persistent patterns of antisocial behavior require more intensive interventions and can benefit from intensive individualized services that involve families, community agency personnel, educators, administrators, and support staff. These strategies require comprehensive assessments of the problem and involve flexible, comprehensive, and sustained interventions (Walker et al., 1996). According to some researchers, every school could benefit from a three-tiered intervention strategy of primary and secondary prevention that may prevent the development or escalation of antisocial behaviors (Walker et al., 1998).

Schoolwide primary prevention activities may include teaching conflict resolution, emotional literacy, and anger management skills on a schoolwide or universal basis. Such interventions have the potential not only to establish a positive school climate but also to divert students mildly at risk of antisocial behaviors. Primary prevention can prevent 75 percent to 85 percent of student adjustment problems. A majority of students who do not respond to primary prevention will respond to more individualized secondary prevention efforts, including behavioral or academic support, mentoring, and skill development. Secondary prevention strategies also include small-group social-skills lessons, behavioral contracting, specialized tutoring, remedial programs, counseling, and mentoring.

Early intervention with young children who exhibit antisocial behavior is the most effective method of intervention (Walker et al., 1998). Antisocial behavior can be identified as early as age 3, yet services often do not begin until late in elementary school (Duncan et al., 1995; Walker, Severson, & Feil, 1994). Successful programs coordinate services among home, schools, and communities and recognize that energies and resources that are expended on discipline can be better invested in prevention.

Coordinating Services for Children and Families

Recognizing that children with disabilities often require multiple services, including those that are not available under IDEA, several provisions were added during reauthorization of IDEA that are designed to facilitate access to, and coordination of, other services that may enhance the education and lives of children with disabilities and their families. There are several issues within the topic of coordinated services; however, issues related to multi-agency arrangements and programs for infants and toddlers will not be reviewed here. Within the general school-aged population, there are issues related to coordination of programs and resources within education (e.g., Title I, bilingual, etc.), the development of school-linked models, and third-party billing for services. The 1997 amendments address each of these issues.

Coordinating Educational Programs

New flexibility in the use of targeted Federal assistance has occurred amid efforts to increase coordination among educational programs such as Title I and special education. These efforts have been motivated by concerns over policy fragmentation (Moore et al., 1982; Verstegen, 1996) as well as research demonstrating the mixed effects of pull-out or resource programs (c.f. Allington & McGill-Franzen, 1989; Anderson & Pelicer, 1990; Kavale, 1990; Kavale & Glass, 1982). However, research has questioned whether blended educational funding serves the interest of the target populations. Some researchers suggest that blended funds can replace State and local aid over time or may become broader grants-in-aid (GAO, 1982; 1995; Levin, Zigmond, & Birch, 1983; Verstegen, 1996). Nonetheless, several provisions in the IDEA Amendments of 1997 provide for greater flexibility in use of Part B resources. These include a new authority to use a small portion of Federal funds within Title I schoolwide programs and the opportunity for LEAs to use special education resources that are used in accordance with an IEP to benefit non-special education students.

School-linked Services

Like the consolidation of educational programs, the issues of linking agencies and resources are motivated by desires to improve programs and reduce fragmentation in services and redundancies in funds. School-linked services models are comprehensive programs that attempt to improve educational outcomes of students at risk for learning and behavior problems as well as those already identified as requiring special education by addressing their multiple needs in a coordinated manner. An additional benefit is cost-sharing among agencies for providing services and coordinated planning and decision making.

School-linked service models have been developed in almost every State in an effort to provide necessary related services as well as to improve the quality of the overall special education programs (Morrill, 1992; Stroul,1993). Among school special education, the focus of many of these models has been primarily on students with emotional disturbance. The services emphasize linkages with mental health and the provision of "wrap-around" services designed to keep students in their homes and communities (Kutash & Duchnowski, 1997). Students with emotional disturbance have some of the more segregated placements, including high rates of placements (39.9 percent) in residential facilities (U.S. Department of Education, 1997). The goals of the school-linked service models are to maintain the student in the community, to promote family unity, to promote consistency of treatment and inclusion, and to reduce costs.

Often these models depend on a multi-agency agreement at the local level that commits a portion of program funds to the school-linked model. Some multi-agency efforts maintain separate funding streams but access funds through use of a case manager or other service providers who coordinate services. Usually, these individuals are jointly (multi-agency) supported or, in a very few models, are receiving core support from the State or local government (McInerney, Kane, & Pelavin, 1992). A number of funding sources can support school-linked service models. Farrow and Joe (1992) identified five major sources of Federal funding for social services and six sources for health services, including Medicaid. In addition, an array of State, county, and/or local program funds are used to support school-linked services.

Evaluations of school-linked service programs for at-risk populations have generally demonstrated moderate impacts on reducing dropout rates, increasing attendance, and improving some basic academic performance (Wang, Reynolds, & Walberg, 1995).

Cost Sharing

Congress never intended for education to bear the total costs of providing required noneducational services. The IDEA Amendments of 1997 address the SEA's payment obligations as well as add provisions designed to promote greater sharing of costs for mandated services as well as overall school improvement. For example, a new IDEA amendment requires the governor (or designee) of each State to establish an interagency agreement with other public agencies that are assigned responsibility to provide or pay for any services that are also considered special education or related services, including assistive technology devices, supplementary aids and services, and transition of services. Also at the State level, SEAs are allowed to use funds set aside for State-level activities in the amount of up to 1 percent of the total amount of the Part B State grant set-aside funds to supplement other Federal, State, and local funds for the development or implementation of a statewide coordinated services system designed to improve results for preschool and school-aged children and their families. Further, LEAs are allowed

to use not more than 5 percent of their Part B funds, in combination with amounts other than education funds, to develop and implement a coordinated services system. Such funds can be spent for (1) improving effectiveness and efficiency of service delivery; (2) service coordination and case management that facilitates the linkage of IEPs and IFSPs under multiple Federal and State programs; (3) developing and implementing health, mental health, and social services, including transition and related services; and (4) interagency personnel development for individuals working on coordinated services. An LEA can also use funds for a coordinated services project it is carrying out under Title XI of the Elementary and Secondary Education Act of 1965. While integrating multiple services for children with disabilities is not new (Part C has included such a provision since 1986), allowing the use of Part B funds for the purposes enumerated above marks an important change for providing needed services to preschool and school-aged children.

Supporting Full Family Participation in Children's Education

Parental involvement has been a critical component of educating students with disabilities. Parents are generally their childrens' first and best teachers and advocates. In their seminal article regarding the implementation of special education policy in Massachusetts, Weatherly and Lipsky (1977) reported that one of the major challenges for special education was creating the opportunities for meaningful parental involvement. To foster parents' involvement in their childrens' education, IDEA includes language specifically outlining parents' rights and responsibilities to participate in the evaluation and development of an education plan for their child with a disability.

Studies have found that parental involvement is positively related to student achievement as measured by academic outcomes and student behavior (c.f. Wagner, Blackorby, Cameto, & Newman 1993; U.S. Department of Education, 1993). Parental involvement in designing special education incorporates parents' involvement with their child at home with their involvement in school in both formal and informal ways. The vast majority of the research conducted on the relationship between parental involvement and achievement for students with disabilities has focused upon parents' involvement in the IEP process. Research has found that the IEP process has worked well for some parents but has been less positive for others (National Council on Disability, 1995). Among the barriers identified as limiting the effectiveness of parental involvement are low parent attendance, the limited amount of time allocated to IEP development, use of educational jargon by IEP team members, lack of parent knowledge of special education and, in turn, undervaluing parental input (McDonnell et al., 1997).

Recent changes in IDEA address some of the barriers that have at times limited parents' meaningful involvement in the development of their child's IEP. IDEA contains

language that explicitly expands upon parents' rights to be actively involved with the evaluation and placement process. Requiring States to ensure that parents are "members of any group that makes decisions on the education placement of their child" will hopefully ensure that their role shifts from merely signing off on IEPs to actively contributing to decisions regarding how their child will receive services. Parents play a key role in ensuring that schools fulfill their obligations stipulated in IDEA, and the new provisions in IDEA strengthen the emphasis upon parental involvement.

Resolving Disputes Through Mediation

Mediation has been practiced as an alternative to civil litigation since the late 1970s. Mediation is defined as a dispute resolution process in which an objective facilitator assists parties to "identify and discuss issues of mutual concern, explore solutions, and develop mutually acceptable agreements" (Schrag, 1996, p. 4). The search for alternative methods of dispute resolution has arisen out of growing concerns about the increasingly litigious nature of due process proceedings related to IDEA that have become adversarial, political, time consuming, and expensive (Suchey & Huefner, 1998; Zirkel, 1994; Boscardin, 1987). The 1997 amendments introduced language that encourages parents and schools to resolve special education due process complaints through mediation as opposed to expensive and time-consuming litigation. States must bear the expense of the mediation, which is voluntary and cannot be used to delay parents' due process rights. In addition, in contrast to a more traditional hearing officer who issues decisions and has the authority to enforce, a mediator's role is limited to recommending solutions that may be rejected by either parties involved (Suchey & Huefner, 1998).

Language explicitly requiring States to "ensure that procedures are established and implemented to allow dispute resolution through mediation" is new to IDEA. However, individual States have been using alternative dispute resolution techniques and specifically mediation systems to resolve special education disputes for more than 20 years (Ahearn, 1994; Schrag, 1996). A 1994 survey found that 39 of the 50 States had developed and implemented special education mediation procedures, with two additional States in the process of developing a mediation system (Ahearn, 1994). Yet, there are very little data available regarding the number of special education mediations conducted in any given year. The lack of data may be attributable to the decentralized nature of mediation and the fact that a great deal of "informal mediation" occurs at the school level in the process of making decisions regarding special education (Ahearn, 1994).

A recent study of complaint procedures found that when States ranked alternative complaint procedures, the majority of the State-level complaint managers responding (35 of 50 responded to the survey) reportedly preferred mediation over other forms of alternative resolution such as the State complaint process or the hearing process in

terms of cost, effectiveness, parental satisfaction, and LEA satisfaction (Suchey & Huefner, 1998). Research conducted on mediation in general finds it preferable to due process hearings in terms of timeliness, cost, and ability to facilitate communication between parents and educators (Ahearn, 1994). In addition, states report a high rate of resolution of disputes through mediation (Schrag, 1996). Finally, mediation may potentially help less affluent parents access a means to introduce and resolve conflict that previously would not have been available through a formal hearing due to limited knowledge of the system and means to hire an attorney.

Concerns about mediation raised over the past 30 years include questions about objectivity of mediators employed by SEAs, the reality that mediation is frequently introduced after a relationship has deteriorated, and that mediation may potentially subvert individual legal rights. In addition, mediation may not be the best alternative for all conflicts. A 1995 study identified specific circumstances where mediation may not be appropriate: legal interpretation of IDEA is necessary, a parent wants the district to make a personnel change, one of the parties is unwilling to participate in mediation, and one of the parties may be unable to benefit from mediation due to personal circumstances such as a disability or an individual's diminished capacity (Schrag, 1996).

Issues that should be taken into consideration when developing State-level mediation systems will include how States select and pay mediators to avoid potential conflicts of interest, involvement of attorneys in mediation sessions, ongoing training of mediators, and procedures to maintain a balance of power between the district and parents in mediation to ensure that mediation procedures are fair (Schrag, 1996). In addition, research suggests that mediation efforts should be initiated as soon as conflicts arise, and evaluation systems are needed to track utilization of mediation and measure the effectiveness and impact of mediation on special education due process complaints.

Summary

This module has highlighted some current thinking within nine specific issues that have been identified by Congress as requiring specific attention as part of a national assessment of the status of the implementation of IDEA. As noted in the introduction, many of the issues have both an extensive implementation history as well as a significant knowledge base. In other areas, we know little about the impact of IDEA.

While this module could not do justice to the breadth of the relevant research and policy literature, it does point to some of the critical indicators that should be considered for evaluation. For example, the nature and intensity of supports provided to assist students with disabilities to access both general education environments and curriculum are clearly evident in the research literature as substantial contributors to achieving effective access. Similarly, the importance of interagency collaboration as well

as coordination across educational programs are documented features of successful transition processes as well as positive approaches to dealing with behavior problems of students with disabilities.

A national assessment of IDEA should be conducted within the context of what is known about effective policies and practices in implementing key provisions of the law and the degree to which these proven policies and practices are evident in States, local districts, and schools.

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GRADUATION REQUIREMENTS AND HIGH SCHOOL COMPLETION FOR STUDENTS WITH DISABILITIES

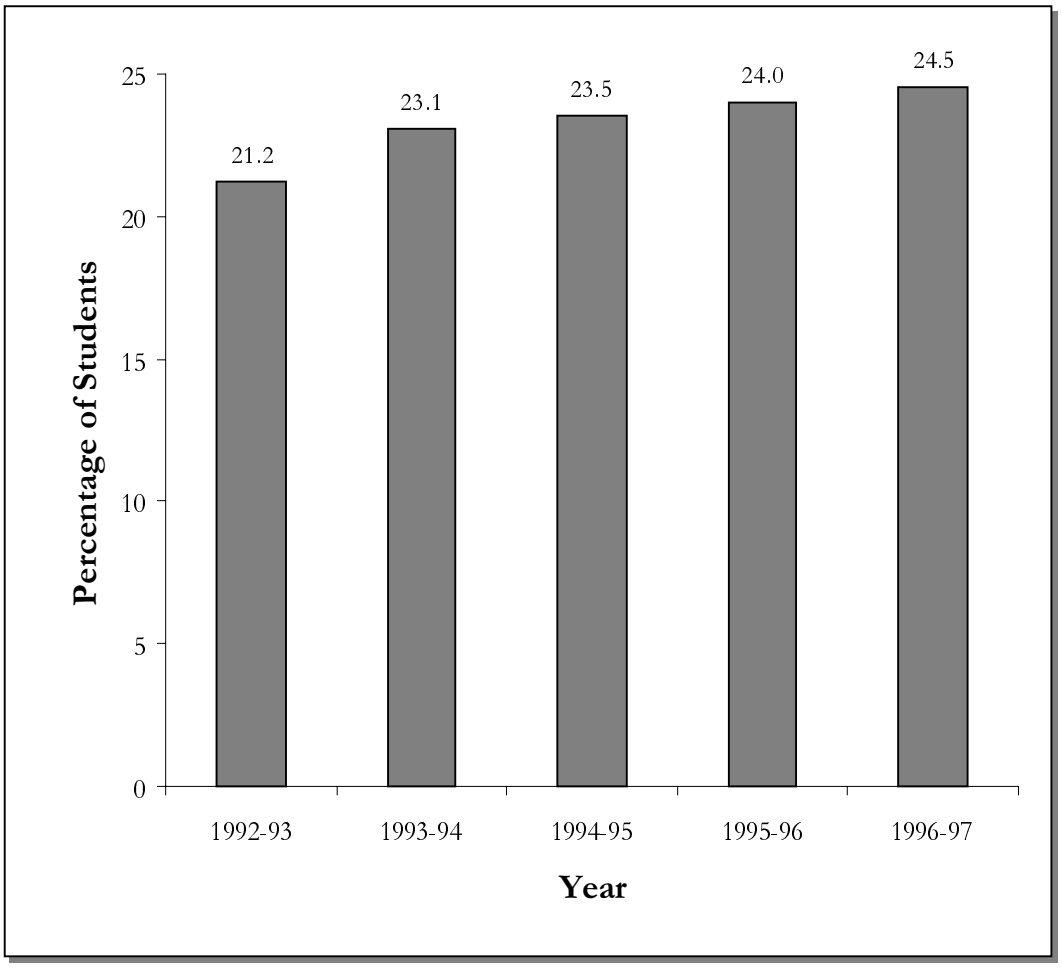
As policy makers stress student accountability and adopt high academic standards, including more stringent graduation requirements, it is critical that they consider the effects of these changes on the high school completion of students with disabilities. In *Brookhart v. Illinois State Board of Education,* the court ruled that students with disabilities can be held to the same graduation requirements as nondisabled students, but schools must guarantee students with disabilities the opportunity to learn the required material. If students with disabilities are held to high standards, States must provide an opportunity for them to learn the content on which their graduation status rests (Policy Information Clearinghouse, 1997). Furthermore, as States increase the focus on academic requirements for graduation, students with disabilities may have fewer vocational courses available to them and fewer opportunities to acquire valuable vocational skills. Students with disabilities are less likely to drop out of school and are more likely to be competitively employed after high school if they receive adequate vocational education classes in high schools (Policy Information Clearinghouse, 1997). This module presents information on the percentage of students with disabilities who completed high school in 1996-97 and explores the relationship between State high school graduation requirements and graduation rates for students with disabilities.

High School Completion: The National Perspective

In 1996-97, 133,808 students ages 17 and older with disabilities graduated with a standard high school diploma. This represents 24.5 percent of all students with disabilities ages 17 and older and 44.2 percent of those students exiting the educational system. As shown in figure IV-1, the percentage of students with disabilities who complete high school with a standard diploma has increased gradually over the past several years, from 21.2 percent in 1992-93 to 24.5 percent in 1996-97.

Graduation rates vary by disability and by State. States with the highest percentage of students with disabilities graduating from high school include Minnesota (38.2 percent), Connecticut (36.5 percent), and Nebraska (36.5 percent). States with the lowest percentage of students with disabilities graduating from high school include South Carolina, Delaware, Louisiana, Puerto Rico, and Mississippi, which reported 10.8, 10.1, 9.1, 7.0, and 6.8 percent, respectively.

Figure IV-1
Percentage of Students Ages 17 and Older with Disabilities Graduating with a Diploma: 1992-93 to 1996-97



Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Students with certain disabilities were more likely than others to graduate from high school with a diploma. Thirty-five percent of students with speech and language impairments, 30 percent of students with traumatic brain injury, and 30 percent of students with visual impairments graduated with a diploma in 1996-97. Percentages of students receiving diplomas were lowest for students with autism (7.5 percent) and multiple disabilities (9 percent) (see table IV-3).

Table IV-3
Number and Percentage of Students Ages 17 and Older Receiving a Diploma: 1996-97[a/]

Disability	Number	Percentage
Specific learning disabilities	91,112	29.4
Speech or language impairments	3,815	34.6
Mental retardation	14,327	13.43
Emotional disturbance	12,807	21.4
Multiple disabilities	1,640	8.94
Hearing impairments	2,615	28.5
Orthopedic impairments	1,853	23.7
Other health impairments	3,558	25.7
Visual impairments	1,107	30.0
Autism	302	7.5
Deaf-blindness	41	14.7
Traumatic brain injury	625	30.0
All disabilities	133,802	24.5

a/ The percentages in this table were calculated by dividing (1) the number of students ages 17 and older in each disability category who received a diploma by (2) the total number of students with disabilities ages 17 and older in each disability category.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

State Graduation Requirements and Graduation Rates

Thurlow, Ysseldyke, and Anderson (1995) documented State graduation requirements for students with disabilities. They found that high school graduation requirements varied considerably from State to State. In 1994-95, approximately 17 States required students to pass a high school exit examination or minimum competency test, while the others had no such requirement. Most States required students to earn a specified number of class credits in particular curricular areas to receive a high school diploma. However, the number of class credits each State required differed widely. For example, Colorado left all credit requirements to local school district discretion, while Utah required students to earn 15 specific course credits and 9 elective course credits (Thurlow et al., 1995). It is also important to remember that local school districts may require additional courses beyond those specified by the State.

Table IV-4
Percentage of Students Ages 17 and Older with Disabilities Graduating with a Diploma, by State Credit Requirements: 1994-95

Unit Required for Graduation:	0-15 Carnegie Units	16-20+ Carnegie Units	21+ Carnegie Units
Mental Retardation	12.5	14.4	13.5
Specific Learning Disabilities	27.0	29.0	28.9
Speech or Language Impairments	42.9	32.0	23.3
Emotional Disturbance	20.8	21.2	20.3
Other Disabilities	14.6	16.8	20.7
All Disabilities	22.8	24.0	23.8

Sources: Thurlow et al. (1995). *High school graduation requirements. What's happening for students with disabilities?* Minneapolis: National Center on Educational Outcomes; U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Many States require students with disabilities to meet the same graduation requirements as nondisabled students in order to receive a standard diploma. Other States award a standard diploma to students with disabilities who meet the objectives of their individualized education program (IEP) regardless of whether they meet other graduation requirements. Still others award a modified diploma or certificate of completion to students who complete their IEP but do not meet standard diploma requirements (Thurlow et al., 1995). Consequently, even when graduation data are collected in a consistent manner, it is difficult to interpret comparisons of graduation rates across States.

Presumably, differences in graduation requirements affect graduation rates for students with disabilities. One might expect graduation rates to decrease as course requirements increase. This, in fact, is not the case. As a group, States requiring 0 to 15 credits awarded diplomas to 23 percent of students with disabilities. In those States requiring 16 to 20 units, and in those requiring over 21 credits, 24 percent of students with disabilities graduated. Graduation rates were fairly consistent across States with different credit requirements; this pattern also holds within several of the large disability categories (see table IV-4). However, students with speech and language impairments were more likely to graduate with a diploma if they resided in a State with fewer credit requirements. The opposite was true for students with lower incidence disabilities combined (including hearing impairments, multiple disabilities, autism, orthopedic impairments, other health impairments, visual impairments, deaf-blindness, and traumatic brain injury (Thurlow et al., 1995).[1]

[1] Only standard diploma recipients were included in the graduation rates, and analysis of graduation requirements was limited to standard diplomas.

Table IV-5

Percentage of Students Ages 17 and Older with Disabilities Graduating with a Diploma, by State Graduation Test Requirements: 1994-95

	States with an Exit Exam Requirement	States without an Exit Exam Requirement
Mental Retardation	9.4	15.4
Emotional Disturbance	19.0	21.8
Specific Learning Disabilities	27.3	29.5
Speech or Language Impairments	24.8	37.5
Other Disabilities	15.6	17.3
All Disabilities	21.4	24.5

Sources: Thurlow et al. (1995). *High school graduation requirements. What's happening for students with disabilities?* Minneapolis: National Center on Educational Outcomes; U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

High school exit examinations also appear to be associated with graduation rates. As a group, States that require exit examinations awarded diplomas to 21 percent of students with disabilities compared to 24 percent of students in States without such examinations. The graduation rates for students in certain disability categories were also higher in States without high school exit tests. The greatest discrepancy between graduation rates in States with and without high school exit tests was for students with speech and language impairments. Graduation rates were 25 percent versus 38 percent, respectively (see table IV-5).

As mentioned previously, States vary in the extent to which general graduation requirements apply to students with disabilities. For example, a State may generally require a certain number of credits and successful performance on a high school exit examination in order to graduate, but those requirements may not apply to students with disabilities. In some States, students with disabilities need only to complete the goals set forth in their IEP to receive a standard high school diploma. In other States, all general diploma requirements apply to students with disabilities.

The relationship between State graduation rates and graduation requirements for these students reflects these differing requirements. States that require students with disabilities to complete specified credits or IEP objectives graduate more than 25 percent of students with disabilities compared to 21 percent of students with disabilities in States that require students with disabilities to pass a high school exit examination, regardless of other requirements. States that allow local school districts to determine graduation requirements for students with disabilities graduate over 30 percent of students with disabilities. The lower graduation rate in States with exit examination

Table IV-6

Percentage of Students Ages 17 and Older with Disabilities Graduating with a Diploma, by Type of State Graduation Requirements: 1994-95

To receive a diploma, States require students with disabilities to:	Earn Credits Only	Complete an IEP Only	Pass an Exit Exam (with or without credit requirement)	Other
Mental Retardation	17.4	18.8	8.7	21.2
Specific Learning Disabilities	30.8	29.2	26.7	32.7
Speech or Language Impairments	31.9	23.9	24.9	85.4
Emotional Disturbance	21.0	22.8	19.4	23.1
Other Disabilities	21.3	17.0	15.9	23.0
All Disabilities	25.9	25.2	21.1	31.2

Sources: Thurlow et al. (1995). *High school graduation requirements. What's happening for students with disabilities?* Minneapolis: National Center on Educational Outcomes; U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

requirements was consistent across most disability categories (see table IV-6) (Thurlow et al., 1995).

The results from a multivariate model presented in table IV-6 suggest that, when controlling for credit requirements, requirements related to IEP completion, and other graduation requirements, students with disabilities are significantly less likely to graduate if they are also required to pass a high school exit examination. This was consistent across disability categories, but differences in the odds ratios[2] were greatest for students with mental retardation and speech and language impairments, suggesting that graduation examinations are a particular barrier to graduation for these youths.

High school credit requirements were not associated with reductions in graduation rates once the model controlled for other differences in graduation policy. The odds ratio for credits required for graduation was close to one for each disability group meaning the probability of graduation did not change very much based on different credit requirements (Westat, 1998).

[2] The odds ratio shows, for each level of the independent variable (graduation requirements), the increased probability of graduation relative to other levels of that variable.

Table IV-7
Logistic Regression Results: Graduation Requirements and Graduation for Students Ages 17 and Older with Disabilities

	Parameter Estimate (x)	S.E. (x)	P-value (x)	Odds Ratio
Model Intercept	-1.0484	0.0113	0.0001	.
Exit Exam Required	-0.3777	0.0090	0.0001	0.685
IEP Completion Required	-0.1255	0.0073	0.0001	0.882
Undefined Requirements	0.2453	0.0128	0.0001	1.178
Credits	0.0057	0.0008	0.0001	1.006

Source: Westat. (1998). *An exploration of the relationship between high school graduation requirements and graduation rates for students with disabilities.* Rockville, MD: Author.

Of the States that did not require students with disabilities to pass an exit examination, some required students to complete the objectives of their IEP, some required specific credits for graduation, and others allowed local education agencies to set graduation requirements. Students were less likely to graduate if they resided in States that required completion of IEP objectives than if they resided in States that required only the completion of class credits. Students with disabilities in States that allowed local education agencies to set graduation requirements were significantly more likely to graduate than those in States with credit requirements. This pattern was also consistent across disabilities (see table IV-7).

Summary

In 1996-97, 24.5 percent of all students ages 17 and older with disabilities graduated from high school with a diploma. This was a slight increase from 1995-96. States clearly differ in their graduation requirements for students with disabilities, and these differences appear to affect the percentage of students graduating with a diploma. In particular, States with high school exit examinations, as a group, graduate somewhat fewer students with disabilities than States without such an examination. Differences in graduation rates between States with and without exit examinations are most notable for students with speech and language impairments. States adopting or revising graduation requirements should be cognizant of the effects these requirements have on the graduation rates of students with disabilities.

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STATE IMPROVEMENT AND MONITORING

The Individuals with Disabilities Education Act (IDEA) directs the Department of Education to assess the impact and effectiveness of State and local efforts to provide a free appropriate public education to children and youth with disabilities. The Office of Special Education Programs (OSEP), a component of the Office of Special Education and Rehabilitative Services (OSERS), assists State education agencies (SEAs) and local education agencies (LEAs) in implementing Federal special education mandates by making grants according to congressional appropriations and providing technical assistance, policy support, and monitoring oversight.

OSEP works in partnership with States, school districts, school administrators and teachers, institutions of higher education, students with disabilities and their families, advocacy groups, and other stakeholders to ensure positive educational results for students with disabilities. OSEP uses research, dissemination, demonstration, systems change, and other technical assistance strategies to provide State and local education agencies with tools to assist them in improving teaching and learning.

OSEP has been working with States, parents, and other advocates to shape its accountability work in a way that drives and supports improved results for children and youth with disabilities without sacrificing any effectiveness in ensuring that the individual rights of those children and their families are protected. To ensure compliance that supports strong results for people with disabilities, OSEP's process includes the following:

- providing technical assistance to States on an ongoing basis regarding legal requirements and best practice strategies for ensuring compliance in a manner that ensures continuous progress;

- reviewing each State's statutes and regulations and other policy and technical assistance documents and documentation of the State's exercise of its general supervision responsibilities, including monitoring and complaint resolution;

- conducting site visits and other activities to ensure *implementation* of policies and procedures that are consistent with the requirements of IDEA and that support reform and strong results;

- ensuring correction of noncompliance in a manner that supports improved results and reform; and

- maintaining ongoing communication with States, national and State organizations, parents and advocates, and other constituents.

Based in large part on Congress' findings, as set forth in the IDEA Amendments of 1997, and the results of the National Longitudinal Transition Study,[1] OSEP has found that the requirements with the strongest links to improved educational results for students with disabilities include those addressing:

- involvement and progress of students with disabilities in the full range of curricula and programs available to nondisabled children (and the supports, services, and modifications that children with disabilities need to learn effectively in those curricula and programs, as determined through the development of an individualized education program (IEP)), including general curricula and vocational education and work-experience programs;

- the participation of children with disabilities in state- and districtwide assessments of student achievement;

- the provision of transition services to enable students with disabilities to move effectively from school to postschool independence and achievement;

- educating children with disabilities with nondisabled children to the maximum extent appropriate; and

- parent, student, and regular education personnel participation in the development and implementation of educational programs for children with disabilities.

Indeed, based on more than 20 years of research and experience since the 1975 enactment of IDEA's predecessor, P.L. 94-142, Congress, in the IDEA Amendments of 1997, greatly strengthened IDEA's emphasis on all of these critical components of effective education for students with disabilities.

Because each State has general supervisory responsibility for all educational programs for its children with disabilities, OSEP focuses its monitoring activities on each State's systems for ensuring that all public agencies comply with the requirements of Part B,

[1] The National Longitudinal Transition Study identified several factors as strong predictors of postschool success in living independently, obtaining employment, and earning higher wages for youth with disabilities, including high school completion, participation in regular education with appropriate supplementary aids and services, and access to secondary vocational education, including work experience.

including those emphasized above, in providing services to students with disabilities. These systems include the State's procedures for monitoring public agencies to determine compliance with Part B requirements as they apply to students with disabilities--including students placed by public agencies in private schools or facilities--and ensuring that public agencies correct any deficiencies; the State's complaint management and due process hearing systems; and its procedures for ensuring that special education programs administered by State agencies other than the SEA meet State standards and Part B requirements.

In working with States to ensure compliance and improved results for students with disabilities, OSEP emphasizes partnerships and technical assistance, together with a strong accountability system. OSEP works with States, Regional Resource Centers, and others to identify systemic strengths and weaknesses and to develop strategies for systemic reform and improvement. OSEP also provides and brokers technical assistance to States on an ongoing basis regarding legal requirements and best practice strategies for ensuring compliance in a manner that ensures continuous progress in educational results for students with disabilities. OSEP uses these strategies for State improvement in conjunction with a multifaceted compliance review process that includes review and approval of State plans, onsite compliance reviews, procedures to ensure the effective and timely implementation of corrective action plans, and discretionary review of final State decisions on Part B complaints.

With the majority of the requirements of the IDEA Amendments of 1997 becoming effective with the President's signature on June 4, 1997, OSEP focused its monitoring efforts during the first half of the 1997-98 school year on working with a broad spectrum of stakeholders to ensure timely implementation of the new requirements in a manner which would support improved results for students and educational reform. Between August 1997 and January 1998, OSEP staff participated in implementation planning meetings in 49 States, Puerto Rico, the Virgin Islands, and the Bureau of Indian Affairs. These meetings included a broad array of stakeholders, including parents and representatives of advocacy groups, special and general education teachers and administrators, personnel from institutions of higher education, and representatives of the SEA and other State agencies. (See table IV-8 for the schedule of these visits.) OSEP staff also met in Hawaii with representatives from Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands; these representatives returned to their respective entities and in turn conducted implementation meetings with a wide spectrum of stakeholders to develop an implementation plan.

These implementation meetings resulted in a plan for each State that presents a comprehensive approach to the implementation of, and compliance with, the IDEA Amendments of 1997 and focuses on State systems for addressing the requirements of the amendments. Each plan reflects the unique needs and resources of the State and the administrative structure of State and local agencies. The plans integrate the State's

proposals for making statutory and regulatory changes, conducting comprehensive training and technical assistance, monitoring compliance, and establishing LEA eligibility for Part B funding. In addition, many States focused on aligning their IDEA Amendments of 1997 implementation plan with their State's standards-based reform and accountability initiatives. During the 1997-98 school year, OSEP also conducted monitoring reviews of the implementation of Part C (previously Part H) of IDEA in Mississippi, California, and Illinois.

The success of the implementation planning process described above underscores the importance of building on the perspectives and resources of all stakeholders in designing and implementing an accountability system that would drive improved results for children and youth with disabilities. OSEP is only one partner with responsibility for results-based accountability, and in order to maximize the impact of all partners, it is important to understand the role of those partners and to focus on the requirements with the strongest links to improved results.

In February 1998, OSEP hosted a working meeting with representatives from diverse stakeholder groups, including State directors of special education, Parent Training and Information Centers, Regional Resource Centers, and parent and student advocacy groups. OSEP staff asked the participating stakeholders to help develop a vision for compliance with results-oriented requirements and to develop monitoring strategies to determine the level at which the requirements have been implemented. Finally, OSEP staff asked the participants to propose a monitoring system that would incorporate these results-oriented monitoring strategies. The input from this very productive stakeholder meeting was used in the design of OSEP's Continuous Improvement Monitoring Process, which is built around a number of critical themes:

- ***Continuity.*** An effective accountability system must be continuous rather than episodic, be clearly linked to systemic change, and integrate self-assessment and continuous feedback and response.

- ***Partnership with stakeholders.*** OSEP should be a partner with parents, students, State and local educational agencies, and other Federal agencies, in a collaborative process in which stakeholders are part of the entire process, including setting of goals and benchmarks; the collection and analysis of self-assessment data; the identification of critical issues and solutions to problems; and the development, implementation, and oversight of improvement strategies to ensure compliance and improved results for children and youth with disabilities.

- ***State accountability.*** States will assume accountability for measuring and reporting progress, identifying weakness, and identifying and implementing strategies for improvement.

- ***Self-assessment.*** Each State will work with stakeholders to design and implement an ongoing self-assessment process that is focused on improving results for children and youth with disabilities and that facilitates continuous feedback and use of information to support ongoing improvement. OSEP will periodically visit programs in each State to verify the self-assessment.

- ***Data driven.*** The continuous improvement monitoring process in each State will be driven by data that focus on improved results for children and youth with disabilities. On an ongoing basis, each State will collect and use data that are aligned with the State's performance goals and indicators. OSEP will review these data regularly. OSEP and the States will also compare data across States and school districts to identify needs and strategies for improvement. Some of the available data which will be critical to the self-assessment and validation process include graduation and dropout rates, performance data for students with disabilities taking state- and districtwide assessments, suspension and expulsion rates for children and youth with disabilities, and information on identification and placement of students from racial/ethnic minority backgrounds.

- ***Public process.*** It is important that the self-assessment and monitoring process be public. Information from self-assessments, monitoring reports, and correction/improvement plans should be widely disseminated.

- ***Technical assistance.*** Because the monitoring process focuses on continuous improvement, technical assistance is a critical component of the process. Therefore, OSEP will make technical assistance a priority of its onsite work in each State. States will be encouraged to include a technical assistance plan as part of their correction/improvement plan and to use the Regional Resource Centers and NECTAS to provide and broker technical assistance throughout the improvement process. The identification and dissemination of promising practices will be a key component of the technical assistance process.

OSEP customizes its continuous improvement monitoring process to meet the individual needs of each State. In States where there is evidence of substantial compliance with IDEA requirements, OSEP's efforts focus on the identification and implementation of promising practices. OSEP works with States that are not demonstrating compliance to develop a plan for corrective actions. States that fail to correct identified deficiencies may be subject to enforcement actions such as special conditions on grant awards, a compliance agreement, or withholding of funds.

The continuous improvement monitoring cycle consists of the following phases:

- ***Self-assessment.*** The State works with a steering committee of stakeholders, representing diverse perspectives, to develop and implement a self-assessment to determine how successful the State has been in achieving compliance and in improving results for children and youth with disabilities and their families.

- ***Validation planning.*** The steering committee works with OSEP staff to plan strategies for validating the self-assessment results, including, if appropriate, onsite collection of data. The validation planning stage includes meetings to obtain focused public input, review of the self-assessment, and the development of a monitoring plan, which may include both offsite and onsite strategies.

- ***Validation data collection.*** OSEP collects validation data, presents those data to the steering committee in a structured exit conference, and works with the steering committee to plan the reporting and public awareness processes. All 1998-99 reviews will include data collection at both the State and local levels.

- ***Improvement planning.*** Based on the self-assessment and validation results, the steering committee develops an improvement plan that addresses both compliance and improvement of results for children and youth with disabilities and that includes timelines, benchmarks, and verification of improvement. OSEP encourages States to include their Regional Resource Center and/or NECTAS in the development of the improvement plan, in order to effectively include technical assistance in the planning and implementation of the improvement plan.

- ***Implementation of improvement strategies.*** The State implements and evaluates the effectiveness of the improvement plan.

- ***Verification and consequences.*** Based on documentation received from the State and the steering committee, OSEP verifies the actions' effectiveness in implementing the improvement plan. Where the State has been effective in achieving verifiable improvement, positive consequences may include public recognition. If a State does not implement the improvement plan or if implementation is not effective, OSEP may need to impose sanctions. These may include OSEP's prescription of corrective actions, a compliance agreement, or other enforcement actions.

- ***Review and revision of self-assessment.*** Based on the results of the previous improvement planning cycle, the SEA, in partnership with the steering committee, reviews, and, as appropriate, revises the self-assessment.

During the 1998-99 school year, OSEP focused its continuous improvement monitoring process on the following cluster areas:

PART B	PART C
Free Appropriate Public Education in the Least Restrictive Environment	Child Find and Public Awareness
Parental Involvement	Early Childhood Transition
Secondary Transition	Early Intervention Services in the Natural Environment
General Supervision	Family Centered Services
	General Supervision

For each of these cluster areas, OSEP has identified one or more components that OSEP uses (and that steering committees may choose to use) as a basis for reviewing the State's performance through examination of State and local indicators.

The self-assessment and monitoring process incorporates use of the cluster areas through the following steps:

- Identifying indicators for measuring progress in the implementation of IDEA;
- Identifying potential data sources and gathering data pertinent to the indicators;
- Analyzing the data to determine the positive and negative differences between the indicators as stated and their status at the time of evaluation; and
- Identifying promising practices and developing improvement and maintenance strategies.

The schedule for the 1998-99 continuous improvement monitoring visits is shown in table IV-9.

Table IV-8
Schedule of the IDEA Amendments of 1997 Implementation Planning Visits

Montana (August 1997)	Minnesota (October 1997)	California (December 1997)
Kansas (September 1997)	Pennsylvania (October 1997)	Louisiana (December 1997)
Kentucky (September 1997)	Maine (October 1997)	Massachusetts (December 1997)
Michigan (September 1997)	New Hampshire (October 1997)	Missouri (December 1997)
North Dakota (September 1997)	Alabama (November 1997)	Maryland (December 1997)
Oregon (September 1997)	New Mexico (November 1997)	New York (December 1997)
Wisconsin (September 1997)	Ohio (November 1997)	New Jersey (December 1997)
Hawaii (September 1997)	Colorado (November 1997)	Oklahoma (December 1997)
West Virginia (October 1997)	North Carolina (November 1997)	Virginia (January 1998)
Illinois (October 1997)	Delaware (November 1997)	Mississippi (January 1998)
Indiana (October 1997)	Wyoming (November 1997)	Connecticut (January 1998)
Alaska (October 1997)	Washington (November 1997)	Puerto Rico (January 1998)
Vermont (October 1997)	Tennessee (December 1997)	Rhode Island (January 1998)
Arkansas (October 1997)	Nevada (December 1997)	Georgia (January 1998)
Iowa (October 1997)	Virgin Islands (December 1997)	Arizona (January 1998)
South Carolina (October 1997)	South Dakota (December 1997)	Florida (January 1998)
Nebraska (October 1997)	Idaho (December 1997)	Bureau of Indian Affairs (January 1998)
Utah (October 1997)		

Source: U.S. Department of Education, Office of Special Education Programs, Division of Monitoring and State Improvement Planning.

Table IV-9
Schedule of 1998-99 Continuous Improvement Monitoring Visits

North Dakota August/September 1998	Utah October/December 1998	New York February/April 1999
Nebraska August/October 1998	Arizona October 1998/January 1999	Montana March/April 1999
Washington August/October 1998	Wisconsin November 1998/February 1999	South Dakota March/May 1999
New Mexico October/December 1998	Massachusetts November 1998/February 1999	Bureau of Indian Affairs (Data collected during North Dakota, New Mexico, and South Dakota visits)

Source: U.S. Department of Education, Office of Special Education Programs, Division of Monitoring and State Improvement Planning.

PROGRESS IN IMPLEMENTING THE TRANSITION REQUIREMENTS OF IDEA : PROMISING STRATEGIES AND FUTURE DIRECTIONS[1]

Introduction

The IDEA Amendments of 1997 expanded upon IDEA's previous transition requirements. The amendments require that the individualized education program (IEP) include, "for each student with a disability beginning at age 14 (or younger, if determined appropriate by the IEP team), and updated annually, a statement of the transition service needs of the student under the applicable components of the student's IEP that focuses on the student's courses of study (such as participation in advanced-placement courses or a vocational education program)" (20 U.S.C. 1414(d)(1)(A)(vii)(I); 34 CFR 300.347(b)(1)). In addition, the IEP must include "for each student beginning at age 16 (or younger, if determined appropriate by the IEP team), a statement of needed transition services for the student, including, if appropriate, a statement of the interagency responsibilities or any needed linkages" (20 U.S.C. 1414(d)(1)(A)(vii)(II); 34 CFR 300.347(b)(2)). These transition statements are designed to provide instruction, related services, and community experiences that lead to positive postschool results in postsecondary education and training, employment, adult services, independent living, and community participation. IDEA regulations require that the public agency must invite a student with a disability of any age to attend his or her IEP meeting if the purpose of the meeting will be consideration of transition services needs or needed transition services. In addition, the public agency must invite a representative of any other agency that is likely to be responsible for providing or paying for transition services (34 CFR 300.344(b)). IDEA also requires that transition services be "a coordinated set of activities" that are "designed within an outcome-oriented process that promotes movement from school to postschool activities" and that are based "on the individual student's needs, taking into account the student's preferences and interests" (20 U.S.C. 1401(30); 34 CFR 300.29).

Inclusion of transition planning and services in IDEA occurred in the context of at least a decade of attention to the need to develop transition policies, programs, and services for youth with disabilities that would allow them to make successful transitions from school to adult life (DeStefano, 1989; Everson, 1988; Hasazi, Gordon, & Roe, 1985;

[1] This module reports on work conducted by Lizanne DeStefano, University of Illinois, and Susan Hasazi and Katharine Furney, University of Vermont, on the implementation of the transition requirements of IDEA at the State and local levels from 1991 through 1999. This work was funded, in part, by the Office of Special Education Programs (OSEP) and the National Institute on Disability and Rehabilitation Research (NIDRR).

McDonnell & Hardman, 1985; Rusch & Phelps, 1987; Wagner, D'Amico, Marder, Newman, & Blackorby, 1992; Will, 1983). The literature on these and other early experiences with transition provided forewarning, however, that the complexity of the transition process required substantial changes in practice at the individual and systems levels that would make it difficult to ensure nationwide implementation of IDEA's transition requirements (Everson & McNulty, 1992).

At the individual level, these changes include using the transition planning process and related instruction as vehicles for fostering self-determination and self-advocacy skills among students with disabilities (Field & Hoffman, 1996; Martin, Marshall, & Maxon, 1993; Smith-Horn & Singer, 1996; Szymanski, 1994; Van Reusen & Bos, 1994; Wall & Datillo, 1995; Ward, 1996; Ward & Kohler, 1996; Wehmeyer, 1996; Wehmeyer & Ward, 1995), incorporating diverse family and cultural perspectives into transition planning (Boone, 1992; Harry, 1992; Lynch & Stein, 1982; MacGugen, 1991; Sontag & Schacht, 1994; Turnbull & Turnbull, 1996), and using person-centered planning processes in IEP/transition planning in order to create a more responsive and family-centered meeting context (Forest & Pearpoint, 1992; Marrone, Hoff, & Helm, 1997; O'Brien, Forest, Snow, & Hasbury, 1989; Salembier & Furney, 1994; Turnbull, Blue-Banning et al., 1996).

At the systems level, the goal of ensuring a successful transition from school to adult life for students with disabilities may require major changes in schools, adult services, and communities (DeStefano & Wermuth, 1992). Such changes include an increased capacity on the part of schools to provide appropriate services and curriculum options for students with disabilities, expansion of collaborative planning and service delivery efforts among schools and human service agencies, and the development and expansion of community networks and options for youth and adults with disabilities (Brown, Halpern, Hasazi, & Wehman, 1987; Everson & McNulty, 1992; Nisbet, Covert, & Schuh, 1992).

Finally, the more general literature on policy implementation suggests that the implementation of *any* policy is a challenging prospect. The current literature regards policy implementation not as an event but as a slow, incremental, and multifaceted process that must take into account local context and values (Argyris & Schon, 1996; Deal & Peterson, 1994; Elmore & McLaughlin, 1988; Fullan, 1991; Sabatier & Jenkins-Smith, 1993; Stone, 1997); encourage the development of local capacity and will (Elmore, 1996; McLaughlin, 1987; Spillane & Thompson, 1996); and enable local implementers to take ownership for implementing, evaluating, revising, and incorporating changes into daily practice (Fullan, 1991).

Despite a strong mandate, growing awareness of transition issues, and related promising practices, a number of challenges appear to have resulted in uneven implementation of

IDEA's transition requirements across States and localities (DeStefano & Wermuth, 1992; Everson & McNulty, 1992; Fullan, 1991; Szymanski, 1994). At the individual level, there remains a need for education and adult service professionals to expand their efforts to promote self-determination skills among students (Martin & Marshall, 1996; Szymanski, 1994; Ward, 1996; Wehmeyer, 1996) and to facilitate increased student and parent involvement in transition planning (Gallivan-Fenlon, 1994; Lichtenstein, 1993; Lichtenstein & Michaelides, 1993; Salembier & Furney, 1997). At the systems level, State and local education, vocational rehabilitation, and human service agencies have been challenged to re-examine their policies and recreate organizational structures to promote interagency collaboration in planning and service delivery and to develop and expand community networks for youth and adults with disabilities (DeStefano & Wermuth, 1992; Everson & McNulty, 1992; Nisbet et al., 1992). In addition, throughout the implementation process, policy makers, leaders, and practitioners are finding it necessary to deal with challenges often associated with change.

Although IDEA's mandate for transition planning presents a host of challenges that have been addressed with varying degrees of success in State departments, schools, and communities across the United States, some States and localities have in fact made substantial progress in their efforts to implement the IDEA requirement. Since 1992, a series of three studies have been conducted to identify States and localities where implementation of the Federal transition initiative has been successful[2] and to explore the contextual characteristics and change strategies that have helped translate policy into practice. This module highlights the findings of two of these studies and preliminary findings of the third study.

State Implementation Study [3]

The first study, conducted from 1992 to 1995, explored State-level implementation of Federal transition policies. Administrators, policy makers, and stakeholders in three States considered by nationally recognized experts in transition to be leaders in implementation of transition policies and practices were interviewed during in-depth site visits to each State. The interviews were analyzed using qualitative and cross-case analysis, resulting in the identification of seven common themes related to successful implementation of transition policies at the State level (Furney, Hasazi, & DeStefano, 1997). These themes will be discussed later in this module.

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[2] In these studies, success is defined as substantial progress in implementing the transition requirements of IDEA as judged by a national panel of experts. For a more complete description of this process, see Furney, Hasazi, & DeStefano (1997) and Hasazi, Furney, & DeStefano (1998).

[3] For a complete report on the findings of this study, see Furney, Hasazi, & DeStefano (1997).

State and Local Implementation Study[4]

The local implementation study which began in 1995 and continues through 1999, was designed to extend and expand the findings of the State implementation study. The study will describe the implementation of policies, practices, and procedures associated with transition planning at the local level and will identify factors that support or inhibit implementation. In order to gain an understanding of the contextual and evolutionary nature of implementation, 10 sites located across the country were purposefully selected to represent varying degrees of progress in their efforts to implement the transition services requirements of IDEA. Five sites were identified as "models" because they had demonstrated a high degree of success[5] in implementing transition policies and related promising practices, while five were identified as "representative" sites in which initial implementation efforts had occurred but were at times inhibited by a variety of challenges typically associated with change. This module focuses on findings from the model sites.

Policy Forum[6]

A policy forum was held in September 1997 as part of the effort to understand the impact of context and policy characteristics on implementation and outcomes. The goals of the forum were to (1) identify promising practices related to transition that may have implications for policy development, (2) identify key issues influencing implementation of Federal policies related to transition at the State and local levels, (3) identify mechanisms and/or policy instruments that have the potential to facilitate implementation at the State and local levels, and (4) identify a set of policy recommendations in the area of transition and secondary education. Participants represented knowledgeable and effective policy makers, administrators, direct service providers, parents, and advocates at the local, State, and Federal levels. They also represented the general education, special education, rehabilitation, and school-to-work fields. Participants included parents and family members, local and State directors of special education, State transition systems change grant directors, local case managers, transition specialists, State and local directors of rehabilitation services, a local school superintendent, and representatives of OSEP, the Rehabilitation Services Administration (RSA), and the National School-to-Work initiative. Seven issues and accompanying policy recommendations were identified through the forum process.

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[4] For a complete report on the findings of this study, see Hasazi, Furney, & DeStefano (1998).

[5] For purposes of this study, success was defined as complete implementation of transition policies and service provision as perceived by key stakeholders in the district and validated by the research team.

[6] For a complete report on the findings of this study, see DeStefano, Heck, & Hasazi (1998).

Findings

The findings and implications reported in this section were derived from the three studies described above. While the contexts at the State and local levels differed, seven common themes emerged that appeared to enhance implementation efforts across both levels. The remainder of this section will describe promising practices and policies associated with each of the seven emerging themes (see table IV-10, for a summary).

Theme 1: Creating an Environment Conducive To Implementation of Transition Policies and Practices

One of the strongest recurring themes was the presence of shared values and beliefs that contributed to the evolution and expansion of policies and practices related to transition. These values and beliefs affected the ways that people perceived the nature and purpose of their communities and, in turn, the ways that they viewed transition planning and services in the larger educational and societal context.

Nearly all the interviewees in successful State and local programs believed that people with disabilities were the responsibility of the local communities in which they resided. Often, this belief was described as a need for community members to "take care of and support one another." In these sites, transition planning was emerging as a valued process for students both with and without disabilities and linked to various reform efforts such as school-to-work and standards-based instruction. Participants viewed the transition planning process, through articulating students' goals and aspirations, as important for all students in order to provide the appropriate educational and career development experiences necessary to help each student achieve his or her personal goals. Many considered transition an important theme that should be considered not only from age 14 onward; but as part of the educational experience from kindergarten through the 12th grade.

Another widely held value was the critical nature of student and parent involvement and leadership in the transition process. The model sites implemented person-centered approaches to planning, and students were encouraged to assume greater leadership roles in the process. Prior to IEP meetings, parents were encouraged to help their children articulate their aspirations for the future to prepare them for discussions during the meetings.

In addition, in successful sites, transition personnel believed that collaboration among individuals, schools, and social service agencies was essential to effective transition planning. At both the individual and systems levels, collaborative approaches were thought to be essential to developing trust, communication, and accountability in the

planning process to ensure a cohesive, coordinated approach to the design and development of transition supports and services. Finally, many study participants found that the degree of success their State experienced in implementing transition policies was related at least in part to the ability of policy makers and leaders to navigate what was described as the "paradox of local control." On the positive side, they noted that local control fostered empowerment, creativity, and the development of responsive and innovative local programs. On the negative side, policy makers and administrators who wished to ensure that changes were made in alignment with policy directives were at times frustrated by communities and service providers that exerted their desire to do things in their own way. The realities of local control created a need for policy makers and leaders to draft policies and develop strategies for implementation that were attentive to local context and that promoted responsibility and empowerment at the community and regional levels.

Theme 2: Using a Direct Policy Approach To Create Changes Related to Transition

In general, Federal and State policy measures were considered helpful in promoting and supporting systems change, although neither was regarded as powerful enough individually to be regarded as the primary cause of systems changes related to transition. Each of the States and local sites included in the studies had been involved in some way with transition planning and services before the enactment of the Education of the Handicapped Act (EHA) Amendments of 1990 and thus had a relatively strong historical context for implementation of the Federal mandate.

At the same time, it was believed that the Federal legislation played an important role in building on previous efforts to implement transition policies and practices. Many study participants commented that the enactment of the EHA Amendments of 1990 reinforced their positions as early leaders in the transition movement, providing more "clout" to their attempts to implement transition policies more consistently. The legislation served to highlight and raise awareness of transition issues among parents, students, educators, and adult service providers and gave policy makers and administrators a strong rationale for the continued need to support a variety of efforts to improve transition planning and services. These efforts included enhanced professional development opportunities and the development of structures at the State and local levels to promote both interagency collaboration and greater involvement of parents and students in governance issues.

Theme 3: Sharing Leadership

Across both State and local sites, both "top-down" and "bottom-up" forms of leadership were critical to the evolution of transition policies, practices, and services.

Personnel identified a range of key implementers in the transition movement who existed at all levels of government and throughout communities and organizations that contributed to the transition initiative in many ways. Importantly, leadership was regarded as something that occurred at both the State and local levels, and advocacy was perceived to be a critical aspect of leadership.

State-level leaders and local advocates had established an interdependent relationship in which both groups acknowledged their individual contributions to the change process as well as the positive outcomes of working and leading together. Nearly all involved parties identified key leaders in their States who held State-level administrative roles that allowed them to promote the development of transition planning and services. These leaders included State directors of special education, administrators in the adult services system, university professors, and administrators of parent advocacy organizations. Although the activities they engaged in varied somewhat across the State, they generally included developing and supporting Federal and State policies, promoting interagency awareness and collaboration, building a research base that furthered State and national agendas for transition, encouraging follow-up and follow-along systems for tracking students' postschool outcomes, and creating and supporting innovative school and community programs. These people were credited with leading in a collaborative and visionary way: they were known for being able to articulate values and practices that supported transition and for being "accessible," "creative," and "responsive to local needs."

Professionals and parents at the local level described how local and regional administrators had provided leadership critical to the implementation of Federal transition policies and related promising practices. These local and regional leaders, who included superintendents, principals, special education administrators, directors of adult service agencies, parent advocates, and coordinators of transition services, were credited with helping to establish a vision for transition and a structure to support implementation. They had helped to promote initial awareness of transition policies and practices and had worked to ensure that educators, service providers, employers, parents, and other community members were provided with ample opportunities and resources to learn about and implement innovative practices and services. Central office administrators and regional adult services administrators were credited with having convinced their governing agencies of the need to provide funding for local personnel to provide transition-related services and for ensuring that newly established positions were incorporated into long-term budgets and strategic plans. For example, superintendents and special education administrators in many local sites had been involved in creating "transition coordinator" positions, while an administrator in vocational rehabilitation in one site had been successful in funding "job placement specialist" positions in each of the district's high schools. Finally, it was noted that administrators in education and adult services had helped to foster a sense of leadership and initiative among teachers and service providers. With assurance and support from

their administrators, these individuals advocated for new programs and services, developed and implemented new curricula, canvassed their communities to raise awareness of transition issues and create partnerships with members of the business community, and worked on a daily basis to ensure that the needs of students and parents were being met. Implementation of transition policies and practices thus occurred in both a "top-down" and "bottom-up" fashion; as a result it was effective and far-reaching.

Theme 4: Engaging in Substantive Collaboration Around Governance and Practice

An important strategy used to facilitate implementation of the State and Federal transition policies was the formation of collaborative structures that were specifically designed to promote interagency collaboration and build local and statewide capacity for transition.

The local sites were replete with examples of sustained, systemic interagency collaboration, including the establishment of key positions funded jointly by education and adult service agencies (e.g., transition coordinators and job placement specialists co-funded through education and vocational rehabilitation), agreements articulating policies and procedures that regard students' transition from school to adult service agencies and/or postsecondary education, monthly interagency planning meetings, cross-agency training opportunities, and the use of a variety of practices associated with collaboration and team-building. Across the sites, the professionals and parents described how student-centered approaches and the sense of trust present among educators, adult service providers, professionals in postsecondary education institutions, employers, and other community members created a context in which shared decision making flourished.

Examples of positive student outcomes associated with successful interagency collaboration included high percentages of students participating in employment and other community programs during high school, high rates of students participating in co-funded career assessment and development opportunities, increasing rates of concurrent enrollment in high school and community college, increasing numbers of students with disabilities enrolling in postsecondary education and training, and increasing numbers of students with disabilities being referred to and served by various adult service agencies following high school. Despite these positive trends, there were still significant challenges related to expanding in-school and postschool opportunities for students with emotional and behavioral problems or severe cognitive and physical disabilities.

At the State level, various approaches were used to support collaboration among State agencies. Some States established interagency coordinating counsels, which included administrators from education, rehabilitation, human services, and economic development, as well as consumers and family members. A similar structure was often replicated at the regional or local levels. These coordinating groups developed policies to guide joint funding for programs and personnel, designed and funded professional development opportunities, sponsored model demonstration projects, and designed and implemented evaluation studies.

Theme 5: Building Capacity for Long-lasting Change

Educators and human services professionals clearly articulated a common set of values and beliefs that guided how they thought about students with disabilities, how they took action to help students achieve their goals, and how they worked to make their schools and communities places that were responsive to the needs of students and families. A central underlying belief was a sense of caring for students and a related commitment to support them in engaging in meaningful experiences during and after high school. In the context of transition, the commitment to care for students was demonstrated by concerted attempts to keep the planning process focused on students' goals, interests, and needs. Meetings were structured to promote student and parent participation and to ensure that their voices were central to the planning process and to evaluation of student outcomes. A critical component of promoting student participation was attention to enhancing students' ability to determine their future and advocate for themselves. To this end, a majority of the students received specific instruction in self-determination and self-advocacy skills and/or participated in preplanning meetings to help them organize their ideas for upcoming transition planning meetings. Many teachers in the model sites were skilled in the use of person-centered planning processes that enhance student and parent participation in the IEP/transition planning process, and an increasing number were implementing curricula designed to teach students how to lead their own transition planning meetings and the development of the transition section of the IEP.

Capacity-building activities were viewed as critical to the processes of initiating and continuing systems change efforts related to transition. Strategies used to develop capacity included interprofessional inservice and preservice development opportunities for educators and adult service providers; summer institutes; conferences for students, parents, and educators; dissemination of written and audiovisual resources and materials related to transition planning; and technical assistance provided through education, human services, and federally funded transition systems-change projects. Some capacity-building activities focused on strengthening the individual planning process and developing students' skills in self-advocacy, whereas others focused on promoting more systemic change across agencies.

Finally, due to a perceived lack of opportunities for students exiting high school to participate in higher education and vocational technical preparation, concerned local sites were attempting to develop articulated agreements with community colleges and technical centers to allow students to enroll in selected coursework prior to graduation from high school. It was hoped that these efforts would encourage more students to pursue postsecondary education and provide an opportunity for faculty and staff in these organizations to gain positive experiences teaching and advising youth with disabilities. This was viewed as a long-term effort of great potential value for students and their families.

Theme 6: Linking Transition to Other Restructuring Efforts

Education reform was typically viewed by study participants as an integrated process that included a focus on successful school-to-adult life transition for students both with and without disabilities. There was little discussion of "general education reform" versus "special education reform"; rather, potential reforms were developed and implemented with careful attention to their potential impact on *all* students. At the local level, most of the sites had constructed a vision for education reform which connected transition to initiatives such as scheduling larger blocks of time for instruction, interdisciplinary curricula, applied learning, career development, and the implementation of State and local standards and assessment measures.

Closely related to the use of integrated approaches to education reform was emerging evidence that the special education transition initiatives were being linked to local implementation of the School-to-Work Opportunities Act (STWOA), a Federal cross-agency initiative designed to improve employment and training opportunities for all students. While the model sites were in different stages with respect to the levels of integration they had achieved between education reform and the STWOA, study participants at each site agreed that such a connection was necessary and potentially beneficial to students both with and without disabilities. As such, persons associated with both initiatives participated on many of the same advisory boards and transition-related committees. In some cases, high school personnel who provide employment and applied learning opportunities to students were co-funded with resources from special education, vocational rehabilitation, and the STWOA. A majority of transition personnel at both the State and local levels believed that the partnerships forming between schools and businesses through implementation of STWOA initiatives had the potential to promote expanded postschool opportunities and better outcomes for all students, including those with disabilities.

Theme 7: Using Results of Research and Evaluation To Enhance Policy and Practice

Participants acknowledged that research and evaluation are important in expanding the knowledge base related to transition and improving existing practices and services. The majority of such efforts had been conducted in collaboration with faculty members from institutions of higher education. Many study participants described the importance of follow-up studies on postschool outcomes of students with disabilities that had begun in the early 1980s. The studies painted a somewhat grim picture of the postschool lives of students with disabilities who exited from special education programs, but they served a positive function in highlighting the need to improve the opportunities and supports available to students making the transition from school to adult life. Many of the study participants believed that these follow-up data had been used both as part of the rationale for funding Federal model demonstration and systems change projects related to supported employment and transition and to promote the development of Federal and State policies on transition.

Most stakeholders at the State and local levels articulated the need to continue conducting transition-related research and evaluation efforts. They were particularly interested in developing statewide measures of the postschool outcomes and satisfaction of former high school students both with and without disabilities and collecting data on the anticipated postschool needs of students with disabilities. Both measures were perceived as critical in providing data with which to evaluate and improve current programs as well as to inform future policies and practices in high schools, adult services, and postsecondary education and training institutions.

Implications for Policy and Practice

In summary, there were a number of promising practices and policies at the State and local levels that appeared to promote effective implementation of IDEA's transition services requirements. In order to encourage the development and implementation of effective practices and policies related to transition, State and local districts might consider the following:

- ***Link transition initiatives to related restructuring initiatives.*** The ability to sustain and expand effective, coordinated supports and services related to transition may be dependent on the degree to which transition as a concept is woven into other visions of the future, including general education reform efforts and the Federal school-to-work initiative. Without such links, transition risks being categorized as a special education issue and left out of or placed at cross-purposes with attempts to reform the general high school

curriculum. This linkage will require enhanced coordinated efforts in policy initiation and implementation at the Federal, State, and local levels.

- ***Expand participation of parents and students in policy development, governance, transition planning, and evaluation.*** Parents and students have become increasingly involved in the individual transition planning process and IEP development to ensure that special education services and supports reflect their aspirations and perceived needs. Similarly, students and parents are assuming expanded leadership roles in policy initiation and implementation efforts. It seems important, at this juncture, to create additional formal opportunities for both parents and students to evaluate individualized transition services and supports from their individual perspectives, both in terms of perceived outcomes and satisfaction. These measures would provide valuable information to guide program improvement efforts on the part of schools and community agencies involved in the transition process.

- ***Support the development of substantive approaches to interagency collaboration.*** The presence of sustained interagency collaboration clearly emerged as a defining characteristic of effective transition programs. In this regard, it appears important for schools, adult service agencies, and communities to continually evaluate the degree to which interagency collaboration occurs and is effective and to make improvements as necessary. Interagency approaches should be supported at the State and Federal levels through incentives and flexible funding options and by eliminating policies that inhibit the development of collaborative practices. As schools and communities expand their collaborative approaches to serving students with disabilities and their families, opportunities to conduct and disseminate the results of related outcomes-based research should be increased.

- ***Include research and evaluation activities at all levels of implementation in order to inform planning, policy, and program improvement.*** Research and evaluation activities are critical to understanding and improving practice. The establishment and continuation of transition policies, services, collaborative teams, and capacity-building activities must be informed by research and evaluation efforts that document what practices work well and what areas are in need of improvement. Specifically, these research efforts might take the form of follow-up studies of former students with and without disabilities, and studies of anticipated needs of students, parents, schools, and adult service agencies. Finally, research and evaluation activities should support sustained technical assistance and professional development to help schools and communities engage in reflective dialogue regarding continuing efforts to improve services and supports.

- ***Expand secondary/transition options for specific populations of students.*** Study participants called for expanded high school opportunities for specific populations of students with disabilities. In particular, the studies identified needs related to expanding opportunities for self-advocacy and self-determination skills among students with severe cognitive and physical disabilities, creating new and expanded options for youth with emotional and behavioral disabilities, and ensuring that both groups of students have access to quality applied learning experiences in the community in order to clarify personal aspirations and build career development skills.

- ***Expand postsecondary options for students with disabilities.*** The lack of opportunities for postsecondary education and training was identified as a major concern.

Table IV-10
Themes, Practices, and Policies Associated with Successful Implementation of the Transition Requirements of IDEA at State and Local Levels

Theme	*Promising Practices and Policies*
Theme 1 Creating an environment conducive to the implementation of transition policies and practices	• Shared values and beliefs regarding transition as a priority at all levels of the system • Considering transition as a pre-K through 16 issue • Promoting schools' responsibility for all students • Caring leadership that recognizes the importance of students and family input and involvement • Spirit of collaboration among individuals, schools, and social service agencies • Recognized importance of local context
Theme 2 Using a direct policy approach to create changes related to transition	• Federal policy preceded by a history of State or local mandates, demonstration projects, or transition activities • Federal policy validated existing State and local policies and practices and shaped new ones especially in the areas of transition planning, interagency collaboration, and professional development • Various policy instruments used to leverage change at the State level
Theme 3 Sharing leadership	• Effective and sustained leadership • Leaders known for promoting collaborative approaches • Advocates active in policy development • Leaders and advocates interdependent
Theme 4 Engaging in substantive collaboration around governance and practice	• Structures in place to promote collaboration at various levels within the system, i.e., State, regional, local • Interagency teams empowered to address individual and systemic issues • Broad participation, including parents, students, educators, employers, and service providers • Collaborative approaches to problem solving and decision making used • Roles and responsibilities redefined to enhance collaboration
Theme 5 Building capacity for long-lasting change	• Use of self-directed, individual planning processes that encouraged student self-determination • Emphasis on increasing high school and postschool options for all students • Intense and varied professional development activities, including inter-professional training, training involving students and parents, train the trainer approach, etc. • Activities characterized by being collaborative, linked to values • Capacity building supported by on-going technical assistance from a variety of sources

Table IV-10 (cont'd)

Theme	*Promising Practices and Policies*
Theme 6 Linking transition to other restructuring efforts	• Transition initiative linked to general education reform, school to work initiatives, and other change efforts
Theme 7 Using the results of research and evaluation to inform policy development and program improvement	• Universities involved in research, demonstration, and evaluation • Evaluation efforts conducted or planned, i.e., follow-up studies, anticipated needs surveys • Results of research and evaluation used for policy development and program improvement

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NAEP

In establishing programmatic goals under the Government Performance and Results Act (GPRA), the Office of Special Education Programs (OSEP) committed itself to the following goal, among others: that children with disabilities will meet challenging standards and be prepared for employment and independent living. To assess the extent to which students with disabilities meet challenging content standards, districts and States typically administer standardized tests designed to measure student performance relative to those standards. Historically, many students with disabilities have been excluded from such assessments. To address this omission, in the Individuals with Disabilities Education Act Amendments of 1997 (IDEA), Congress required that children with disabilities be included in general state- and districtwide assessment programs, with appropriate accommodations where necessary. By July 2000, State or local education agencies are required to conduct alternate assessments for those children who cannot participate in state- and districtwide assessments.

Few studies have been completed on the performance of students with disabilities on standardized tests, and some that have been done are quite old. They show consistently that students with disabilities perform poorly compared with their nondisabled peers. Munger and Loyd (1991) examined the performance of students with and without disabilities on the Iowa Test of Basic Skills (ITBS) under timed and untimed conditions. On the Language Usage and Expression Test, students with disabilities had mean scores of 4.5, timed, and 4.3, untimed. Students without disabilities had mean scores of 6.3, timed, and 6.4, untimed. On the Mathematics Concepts Test, scores for students with disabilities averaged 4.5, timed, and 4.6, untimed, while scores for students without disabilities averaged 6.4, timed, and 6.5, untimed. Differences in mean scores between students with and without disabilities were statistically significant.

In Mineral County, West Virginia, scores on the Stanford Achievement Test were analyzed with and without students with disabilities; students with disabilities comprised 11 percent of the sample. When the scores for students with disabilities were included, percentile ranks for grades 5, 6, and 7 were 54th, 58th, and 54th, respectively. When scores for students with disabilities were excluded, percentiles were 60th, 62nd, and 61st for grades 5, 6, and 7, respectively (Burke & Lombardi, 1998). Differences were not tested for significance.

Tal, Siegel, and Maraun (1994) conducted a study comparing the reading comprehension scores of typically achieving students with scores for students with comprehension deficiencies or reading disabilities. On those questions that measured prior knowledge, the typically achieving students answered an average of 86.15 percent of the items correctly. Students with comprehension deficits and reading disabilities averaged 68.83 percent correct and 59.49 percent correct, respectively. On questions that measured

ability to infer, typical achievers averaged 83.25, while students with comprehension deficiencies and reading disabilities averaged 59.26 and 48.32, respectively. Finally, on the measure of locating detail, typically achieving students averaged 85.38, while students with comprehension deficiencies and reading disabilities averaged 66.63 and 53.68, respectively.

McFarland (1997) conducted a study that compared the performance of students with and without learning disabilities on a standardized science assessment, revealing some significant differences in performance. Overall, nondisabled students outperformed students with learning disabilities on six of the eight subtests, particularly on the vocabulary subtest. Interestingly, no statistical significance was found between student groups on two subtests: measurement and balance.

The National Assessment of Educational Progress

The National Assessment of Educational Progress (NAEP) is the only nationally representative and continuing assessment that measures what students know and are able to do in different subject areas. It is administered every year to a sample of students in grades 4, 8, and 12. Assessments in mathematics, reading, science, writing, history, civics, and geography are administered on a rotating basis, two or three subjects per year.

Since 1990, the NAEP has included an identifiable sample of students with disabilities, but participation rates for students with disabilities have been low.[1] In 1992, participation rates ranged from 20 to 44 percent depending on the grade and subject. In 1994, participation rates ranged from 36 percent to 50 percent. At that time, students with disabilities "could be excluded only if they were mainstreamed in academic subjects less than 50 percent of the time and/or judged to be incapable of participating meaningfully in the assessment" (U.S. Department of Education, 1997a, p. 68).

The National Center for Education Statistics (NCES) revised the criteria for participation and field tested new test accommodations. To maintain valid trend results in mathematics, some schools used materials and administration procedures consistent with the 1990 and 1992 assessments, and others used revised materials and procedures. This allowed NCES to study the effects of the revised procedures without invalidating trend data. The revised criteria for participation indicate that "students with an IEP were to be included in the NAEP assessment except in the following cases: (1) the student's IEP team determined that the student could not participate, or (2) the student's cognitive functioning was so severely impaired that she or he could not participate, or (3) the student's IEP required that the student had to be tested with an

[1] Students with disabilities are defined as those with an individualized education program (IEP).

accommodation or adaptation and that the student could not demonstrate his or her knowledge without that accommodation." (U.S. Department of Education, 1997a, p. 68).

Three discrete samples of schools participated in the 1996 NAEP mathematics assessment. The first set of schools included students with disabilities eligible for participation under the pre-1996 eligibility criteria. The second set of schools included students with disabilities eligible under the revised eligibility criteria but did not allow accommodations on the assessment. The third set of schools included students with disabilities eligible under the revised criteria and allowed accommodations, when necessary. For the 1996 science assessment, only two samples of schools participated. They both used the revised eligibility criteria and differed only in whether accommodations were permitted. Schools were randomly assigned to each sample. Because of the way the data were collected and weighted, the results for the different subsamples cannot be combined and, as a result, are presented separately.

NCES reached a number of conclusions regarding the revised test procedures. First, in mathematics, "the introduction of revised inclusion criteria, without provisions of accommodations, had, at most, a limited effect on the percentage of students with disabilities . . . who were assessed in NAEP . . . ." "Second, the provision of accommodations and adaptations clearly increased participation rates for students with disabilities . . . at grades 4 and 8." "When accommodations or adaptations were available, more than 70 percent of students with disabilities were assessed at each of these two grade levels." "These percentages were substantially higher than in past assessments." "Providing accommodations at grade 12 had little effect on participation of students with disabilities (p. 65)." In science, ". . . the use of the revised inclusion criteria, without the provision of accommodations, had little effect on the . . . percentage of students with disabilities . . . assessed." "The effects of providing accommodations [in science] were more limited in scope than was observed in the mathematics assessment" (U.S. Department of Education, 1997b, p. 58), although participation rates for students with disabilities did improve.

Table IV-11 summarizes the percentage of students with disabilities who participated in the NAEP mathematics and science assessments, by grade and subsample. In mathematics, schools using traditional eligibility criteria included 48 to 58 percent of students with disabilities. Under the revised criteria, schools included similar percentages of students with disabilities. However, in schools that allowed test accommodations, a larger proportion of students with disabilities participated, 54 to 72 percent. In science, participation rates were also higher in schools that permitted test accommodations. In all, 3,835 students with disabilities in grades 4, 8, or 12 participated in one of the

Table IV-11
Percentage of Students with Disabilities Included in NAEP: 1996

	Mathematics		
	Schools Using Traditional Eligibility Criteria	Schools Using Revised Eligibility Criteria	Schools Using Revised Eligibility Criteria and Permitting Accommodations
Grade 4	58	47	72
Grade 8	55	58	71
Grade 12	48	51	54
	Science		
Grade 4		48	70
Grade 8		61	67
Grade 12		48	56

Source: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Mathematics Assessment and 1996 Science Assessment (1997a and 1997b).

Note: Mathematics results include public schools only; science results include public and private schools.

Table IV-12
Mean Mathematics Scale Score Results by IEP Status and Subsample: 1996

		Schools Using Traditional Eligibility Criteria		Schools Using Revised Eligibility Criteria		Schools Using Revised Eligibility Criteria and Permitting Accommodations	
		With IEP	Without IEP	With IEP	Without IEP	With IEP	Without IEP
Grade 4	mean	**197.5**	**225.7**	**199.3**	**226.4**	**205.5**	**224.5**
	s.e.	3.0	1.4	3.1	1.2	2.5	1.2
Grade 8	mean	**235.0**	**275.0**	**231.3**	**272.7**	**234.0**	**274.9**
	s.e.	3.3	1.5	3.0	1.3	2.4	1.1
Grade 12	mean	**270.9**	**306.0**	**270.5**	**303.6**	**256.8**	**303.4**
	s.e.	4.2	1.5	4.4	1.1	2.5	1.1

Note: NAEP math scales were developed independently for each grade assessed; therefore, results are not comparable across grades. Scale scores for all grades range from 0 to 500. Bold denotes significant differences across columns. The standard error of the mean (s.e.) shows the amount of sampling error in the estimate.

assessments; performance data for these students are the basis for the majority of this module.[2] Sample data have been weighted to generate national estimates.

NAEP Results in Mathematics

The NAEP 1996 assessment measured the mathematics skills and knowledge of 4th, 8th, and 12th graders in the U.S. on a scale of 0 to 500. Across all three grades, these students with disabilities performed lower than students without disabilities, and that gap was wider among 8th and 12th graders than among 4th graders.[3] For example, in schools using traditional eligibility criteria, 4th graders with disabilities had a mean mathematics score of 197.5, compared to 225.7 for students without disabilities. Performance for students with disabilities varied very little across subsamples (see table IV-12). Across grades and subsamples, students with disabilities scored between the 9th and 18th percentile for students without disabilities, depending on the grade and subsample.

Sample Math Items

4th *Ms. Hernandez formed teams of eight students each from the 34 students in her class. She formed as many teams as possible, and the students left over were substitutes. How many students were substitutes?*

8th *A car odometer registered 41,256.9 miles when a highway sign warned of a detour 1,200 feet ahead. What will the odometer read when the car reaches the detour?*

12th *Luis mixed 6 oz. of cherry syrup with 53 oz. of H_2O to make a cherry-flavored drink. Martin mixed 5 oz. of the same cherry syrup with 42 oz. of H_2O. Who made the drink with stronger cherry flavor? Give mathematical evidence to justify your answer.*

Across grades and subsamples, NAEP mathematics scores for white students with disabilities exceeded those for minority students with disabilities (see table IV-13). Sample sizes were insufficient to permit separate analysis of scores for black, Asian, Native American, and Hispanic students. It is possible that the range of student performance varies as much across minority groups as between minority and white students. However, the extent of the differences between white and minority students is sufficiently large to raise concerns about the equity of resources available for serving students with disabilities. The NCES (U.S. Department of Education, 1997a) found that, for students with and without disabilities, white and Asian Pacific Islander 4th and 12th graders and white 8th graders score higher on the 1996 mathematics assessment than their black or Hispanic peers.

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2 It is unclear which disabilities were represented among these students. Given that the total number of students with disabilities who participated in the 1996 NAEP was just 3,835, the number of participating students with a particular disability would have been very small, and sample sizes would not have allowed for analysis by disability type. It is important to consider, however, that performance expectations for students with disabilities might vary significantly by disability.

3 Significant differences were determined using $\alpha = .01$.

Table IV-13
Mean Mathematics Scale Score Results for Students with an IEP, by Race/Ethnicity and Subsample: 1996

		Schools Using Traditional Eligibility Criteria		Schools Using Revised Eligibility Criteria		Schools Using Revised Eligibility Criteria and Permitting Accommodations	
		White	Black, Asian, Native American, or Hispanic	White	Black, Asian, Native American, or Hispanic	White	Black, Asian, Native American, or Hispanic
Grade 4	mean	**201.2**	**183.2**	**204.1**	**184.0**	**210.8**	**193.8**
	s.e.	3.4	5.1	3.7	4.6	2.8	3.1
Grade 8	mean	**245.2**	**212.1**	**237.8**	**209.7**	**243.1**	**211.0**
	s.e.	3.8	4.8	3.7	5.1	2.8	3.6
Grade 12	mean	**279.4**	**248.7**	**278.4**	**241.9**	**262.0**	**241.6**
	s.e.	4.1	6.9	5.3	5.1	3.0	4.0

Note: NAEP mathematics scales were developed independently for each grade assessed; therefore, results are not comparable across grades. Scale scores for all grades range from 0 to 500.

Table IV-14
Mean Mathematics Scale Score Results for Students with an IEP, by Sex: 1996

		Schools Using Traditional Eligibility Criteria		Schools Using Revised Eligibility Criteria		Schools Using Revised Eligibility Criteria and Permitting Accommodations	
		Male	Female	Male	Female	Male	Female
Grade 4	mean	199.8	193.6	201.4	192.9	207.9	200.0
	s.e.	3.5	3.9	3.6	5.5	2.8	4.0
Grade 8	mean	235.5	234.9	**236.5**	**222.4**	236.7	228.8
	s.e.	4.1	5.4	3.6	3.8	3.1	3.7
Grade 12	mean	272.3	268.1	275.5	259.5	259.3	252.2
	s.e.	4.6	5.7	5.7	4.7	3.2	4.3

Note: NAEP mathematics scales were developed independently for each grade assessed; therefore, results are not comparable across grades. Scale scores for all grades range from 0 to 500. Bold denotes significant differences across columns.

Mean math scale scores for males and females with disabilities were similar; that is, in most cases, they were not significantly different. The only significant difference occurred among 8th graders in schools using revised eligibility criteria. In that case, males with disabilities outperformed females with disabilities, 237 to 222 (see table IV-14). For students with and without disabilities, NCES found significant differences in math scores for males and females in 4th grade with males outperforming females (U.S. Department of Education, 1997a).

NAEP Results in Science

As with the mathematics scores, across all three grades, students with disabilities performed significantly lower in science than students without disabilities, with a wider disparity in performance between students with and without disabilities in 8th and 12th grade than in 4th grade (see table IV-15). In schools using revised eligibility criteria that did not permit accommodations, 4th graders with disabilities had an average science score of 123.4 out of a possible 300. In those same schools, 4th graders without disabilities had an average score of 151.6. Students with disabilities, on average, performed between the 16th and 25th percentile of students without disabilities, depending on the grade and subsample.

Sample Science Items

4th *Explain why many stars look smaller than the sun even though they are really bigger than the sun.*

8th *A group of students took potato salad made with mayonnaise to a picnic on a very hot day. Explain how eating the potato salad could cause food poisoning.*

12th *The petroleum fields on the North Slope of Alaska are a major energy source. What does the presence of these fields indicate about the climate and ecology of the North Slope millions of years ago?*

As in the mathematics assessment, mean scale scores in science were similar for males and females with disabilities. In schools using revised eligibility criteria, 4th grade males outscored 4th grade females, 127 to 116. In schools using revised eligibility criteria and permitting accommodations, 12th grade males outscored 12th grade females, 118 to 98. No other differences were significant (see table IV-16). NCES analyses of scores for students with and without disabilities showed that, in 4th and 8th grades, scores for males and females were not significantly different. In 12th grade, males outperformed females (U.S. Department of Education, 1997b).

As in mathematics, white students with disabilities scored considerably higher than minority students with disabilities on the 1996 science assessment (see table IV-17). This was also true in NCES analyses on scores for students with and without disabilities (U.S. Department of Education, 1997b). This pattern held across grades and subsamples. Sample sizes were insufficient to permit separate analyses of scores for black, Asian, Native American, and Hispanic students. Again, as in the mathematics performance, the

Table IV-15
Mean Science Scale Score Results by IEP Status: 1996

		Schools Using Revised Eligibility Criteria		Schools Using Revised Eligibility Criteria and Permitting Accommodations	
		With IEP	Without IEP	With IEP	Without IEP
Grade 4	mean	**123.4**	**151.6**	**129.6**	**152.0**
	s.e.	2.3	0.8	2.6	1.3
Grade 8	mean	**120.9**	**151.9**	**115.1**	**152.2**
	s.e.	2.8	0.9	2.7	0.9
Grade 12	mean	**114.8**	**151.1**	**110.5**	**151.2**
	s.e.	2.8	0.9	3.0	0.9

Note: NAEP science scales were developed independently for each grade assessed; therefore, results are not comparable across grades. Scale scores for all grades range from 0 to 300. Bold denotes significant differences across columns.

magnitude of the differences raises concerns about differences in family, community, and school resources.

Accommodations Used on NAEP

Students with disabilities often have difficulty conveying what they know on group-administered pencil and paper tests. Often this is due to poor test-taking skills. Strategy deficits include use of prior knowledge, how students deduce an answer, attention to the test, and strategy selection needed to appropriately answer questions (Scruggs, 1986).

As emphasis on standardized assessments increases, the demand for testing accommodations also continues to grow. Olson and Goldstein (1997) categorized test accommodations into four groups: (1) accommodations related to timing, such as extended time or breaks during test sessions; (2) accommodations in the assessment environment, such as small group setting; (3) modifications in response format, including responses marked directly in the test booklet or use of a word processor; and (4) modifications in presentation format, such as directions read aloud or Braille or large-print testing materials.

The 1996 NAEP was the first in which students with disabilities were permitted to use test accommodations, including Braille or large-print versions of the test booklet, extended time, small group administration, one-on-one administration, or other accommodations. Students were allowed more than one accommodation, and, in fact, some accommodations were assumed to go together. For example, extended time is

Table IV-16
Mean Science Scale Score Results for Students with IEPs, by Sex: 1996

		Schools Using Revised Eligibility Criteria		Schools Using Revised Eligibility Criteria and Permitting Accommodations	
		Male	Female	Male	Female
Grade 4	mean	**126.8**	**116.4**	132.8	123.2
	s.e.	2.3	3.7	3.1	4.3
Grade 8	mean	123.1	116.9	116.5	111.8
	s.e.	3.0	4.0	3.3	2.9
Grade 12	mean	117.1	109.0	**117.5**	**98.2**
	s.e.	3.5	6.2	3.5	4.1

Note: NAEP science scales were developed independently for each grade assessed; therefore, results are not comparable across grades. Scale scores for all grades range from 0 to 300. Bold denotes significant differences across columns.

Table IV-17
Mean Science Scale Score Results for Students with IEPs, by Race/Ethnicity: 1996

		Schools Using Revised Eligibility Criteria		Schools Using Revised Eligibility Criteria and Permitting Accommodations	
		White	Black, Asian, Native American, or Hispanic	White	Black, Asian, Native American, or Hispanic
Grade 4	mean	**130.6**	**100.6**	**137.3**	**106.2**
	s.e.	2.4	5.3	2.9	3.4
Grade 8	mean	**129.8**	**100.1**	**122.8**	**94.3**
	s.e.	3.3	3.5	3.1	3.7
Grade 12	mean	**121.9**	**94.9**	**118.4**	**90.7**
	s.e.	3.7	4.8	3.8	4.8

Note: NAEP science scales were developed independently for each grade assessed; therefore, results are not comparable across grades. Scale scores for all grades range from 0 to 300. Bold denotes significant differences across columns.

assumed for students tested in one-on-one administrations or using Braille/large-print booklets. Students were coded as receiving extended time only if they were assessed in the regular test session.

Despite these assumptions, in all subgroups, the most common accommodation was small group administration, in which students with disabilities took the assessment in a setting with fewer students in the room (see table IV-18). Among fourth graders with disabilities taking the science assessment, over 20 percent received small group administration. In general, accommodations were more common for 4th graders than for 8th and 12th graders.

Data from the 1996 NAEP suggest that the availability of test accommodations enhances the participation rate for students with disabilities. The NAEP design permits a comparison of performance for students who did and did not use test accommodations.

However, the resulting data are difficult to interpret. As shown in table IV-19, at grade 4, students with disabilities who used test accommodations had higher mean scores in mathematics and science than students who did not use accommodations. However, this was not the case at grades 8 and 12, where mean scores for students using accommodation were equal to or lesser than mean scores for students who did not use accommodations. It is possible that the students who used test accommodations had more severe disabilities than students who did not. If this is the case, the accommodations apparently were not adequate to fully compensate for the effects of the students' disabilities. Further investigation is required to understand the differences in performance of students who did and did not use accommodations.

Table IV-18
Number and Percentage of Students with Disabilities Using Various Test Accommodations: 1996 NAEP

	Mathematics					
	Grade 4		Grade 8		Grade 12	
	Number	Percent	Number	Percent	Number	Percent
Braille/Large Print	33,658	5.1	25,720	4.4	8,483	3.7
Extended Time	16,289	2.4	6,166	1.1	5,317	2.3
Small Group Administration	72,538	10.9	37,383	6.4	12,003	5.2
1-on-1 Administration	32,401	4.9	15,741	2.7	6,451	2.8
Other	572	0.1	3,703	6.6	1,258	0.5
	Science					
	Grade 4		Grade 8		Grade 12	
	Number	Percent	Number	Percent	Number	Percent
Braille/Large Print	31,309	6.4	16,218	4.0	9,380	5.3
Extended Time	21,772	4.8	7,133	1.8	2,012	1.1
Small Group Administration	97,364	21.6	57,732	14.3	10,192	5.8
1-on-1 Administration	7,669	1.9	3,041	0.7	5,128	2.9
Other	2,448	0.5	498	0.1	706	0.4

Note: Percentages are based on the total number of students with an IEP at the specified grade level who participated in the assessment. Students may have used more than one accommodation.

Table IV-19
Mean Performance of Students with Disabilities on the 1996 NAEP Assessment, by Use of Accommodations

			With Accommodations	Without Accommodations
Grade 4	Math	mean	211.6	200.3
		s.e.	3.6	3.2
	Science	mean	**136.5**	**124.6**
		s.e.	2.9	3.1
Grade 8	Math	mean	234.2	234.0
		s.e.	4.7	3.0
	Science	mean	114.5	115.5
		s.e.	3.7	3.4
Grade 12	Math	mean	**247.6**	**260.6**
		s.e.	4.3	3.0
	Science	mean	111.4	110.1
		s.e.	4.1	4.2

Note: NAEP scales were developed independently for each grade assessed; therefore, results are not comparable across grades. Only students in schools using revised eligibility criteria and permitting accommodations were included in this table. Bold denotes significant differences across columns.

Summary and Conclusions

The IDEA Amendments of 1997 require that students with disabilities be included in general state- and districtwide assessment programs, with appropriate accommodations, where necessary. Because NAEP is the only nationally representative and continuing assessment that measures what students know and are able to do in different subject areas, it is critically important that it include students with disabilities. NAEP performance scores provide parents, educators, administrators, advocates, and policy makers with important data on the academic achievement of students with disabilities.

Data from the 1996 NAEP suggest that students with disabilities are not performing well in science and mathematics compared to their nondisabled peers. While test accommodations enhance the percentage of students with disabilities participating in the assessment, performance of students with disabilities continued to lag behind the performance of students without disabilities, even for students using test accommodations. Furthermore, the NAEP results suggest that students with disabilities from racial/ethnic minority groups scored substantially lower than white students with disabilities across grades and subjects. This raises concerns about inequity in the home, community, and school resources available to educate students with disabilities.

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