Archived Information

I. CONTEXT/ENVIRONMENT

Parent Involvement in Educating Children with Disabilities: Theory and Practice

Providing Access to the General Education Curriculum for Students with Disabilities

Developing a Highly Trained Teacher Workforce

PARENT INVOLVEMENT IN EDUCATING CHILDREN WITH DISABILITIES: THEORY AND PRACTICE

Increasing the involvement of parents¹ in the education of their children is a national goal for policy makers in both general and special education. One of the National Education Goals states that, "By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children" (National Education Goals Panel, 1994). In the Individuals with Disabilities Education Act Amendments of 1997 (IDEA), Congress emphasized the rights of parents to participate in decisions about their children's education based on the belief that "strengthening the role of parents and ensuring that families of such children have meaningful opportunities to participate in the education of their children at school and at home" can improve the education of children with disabilities (Section 601(c)(5)(B)).

IDEA delineates several levels of parental rights regarding involvement in special education programs for students ages 3 through 21: consent, notification, participation in educational decisions about their children, and participation in policy making. For example, before conducting an initial evaluation to decide if a child qualifies for special education services, local education agencies (LEAs) must obtain parental consent for the evaluation. LEAs must notify a child's parents of evaluation procedures that the district proposes to conduct. LEAs must give parents an opportunity to participate in the development of their child's individualized education program (IEP); parents must also be involved in decisions about the child's educational placement. When there is a disagreement about identification, evaluation, or placement of their child, parents (or the LEA) may request a due process hearing. As an example of parent involvement in policy making, IDEA requires that each State establish an advisory panel for providing policy guidance with respect to special education and related services for children with disabilities, and the panel must include parents of children with disabilities.

The Part C program for infants and toddlers has an especially strong emphasis on family-centered service delivery, recognizing the need to provide services for all members of the family, not just the child with a disability, to promote child development. IDEA requires that each infant or toddler with a disability and his or her family receive a multidisciplinary assessment of the child's unique strengths and needs and the services appropriate to meet those needs; a family-directed assessment of the resources, priorities, and concerns of the family; supports and services

¹ Although the contents of this module are relevant to both parents and legal guardians of children with disabilities, for the sake of brevity we will use the term "parents" throughout the module.

necessary to enhance the family's capacity to meet the infant or toddler's developmental needs; and a written individualized family service plan.

Despite legislative intent, parent involvement may not always reach desired levels, and at times, educators and parents may perceive the interests of the child differently, leading to conflict. What factors affect the decision of some parents to become involved in their children's education and others to avoid involvement? What types of parent involvement are most beneficial for students with disabilities? Hoover-Dempsey and Sandler (1995) developed a five-level model to describe the parent involvement process (see table I-1). The five levels are: the decision to become involved in the child's education, the decision to choose particular types of involvement, the mechanisms through which involvement affects child-centered outcomes, the factors mediating the benefits of involvement, and the outcomes of involvement as they relate to the child.

This module summarizes literature on parent involvement in educating children with disabilities. It uses Hoover-Dempsey and Sandler's model of the parent involvement process as an organizing structure, reviewing research within each of the five levels described. While the module focuses on parent involvement in educating children with disabilities, literature from general education has also been incorporated for comparison. Parent involvement for school-aged children with disabilities is the module's primary emphasis, although some information on involvement in early intervention is included. The module concludes with a list of recommendations drawn from the review of literature.

Influences on a Parent's Basic Involvement Decision

How involved are parents in their children's education? The first step in the parent involvement process is the general decision of parents to become involved in their child's schooling. This decision may be either explicit or implicit. That is, some parents may make a deliberate decision to become involved, while others may simply respond to external pressures for involvement without consciously considering their decision. Furthermore, parents may, at any point, decide to withdraw their participation.

Data from the 1996 National Household Education Survey indicate that 89 percent of families participated in some school-based activity related to the education of their preschoolers with disabilities such as volunteering at school or meeting with teachers. The decision to participate in school-based activities was even more common for parents of children ages 6 through 11 with disabilities; 96 percent reported such involvement. These rates were very similar to those for parents of

Table I-1 Model of the Parent Involvement Process

Level 5: Child/student outcomes

Skills and knowledge

Personal sense of efficacy for doing well in school

Level 4: Tempering/mediating variables

Parent's use of developmentally appropriate involvement strategies Fit between parents' involvement actions and school expectations

Level 3: Mechanisms through which parent involvement influences child outcomes

Modeling

Reinforcement

Instruction

Level 2: Parent's choice of involvement forms, influenced by

Specific domains of parent's skills and knowledge

Mix of demands on total parent time and energy (family, employment)

Specific invitations and demands for involvement from child and school

Level 1: Parent's basic involvement decision, influenced by

Parent's construction of the parent role

Parent's sense of efficacy for helping her/his children succeed in school

General invitations and demand for involvement from child and school

Source: Hoover-Dempsey, K.V., & Sandler, H.M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record*, 95, 310-331.

nondisabled children (Westat, 1998). But how do parents become involved in their children's education?

Hoover-Dempsey and Sandler (1995) theorize that the decision for parents to become involved in their children's education is influenced by a number of factors, including their view of the parent role with regard to involvement in education, their sense of efficacy in helping their children succeed in school, and general invitations and demands for involvement from either their child or the school. For example, some parents may see involvement in schooling as central to their role, while others may believe education is best left to school personnel. The former are more likely to take an active part in their children's education.

Special education offers many specific opportunities for parent involvement, including participation in initial and subsequent evaluations and annual IEP meetings. In fact, some studies document differences in the level and types of involvement between parents of students with and without disabilities, although this is inconsistent across studies. One study found that mothers of children with disabilities, regardless of the severity of the disability, were "offered more

opportunities to be involved [in schooling], were more satisfied with their involvement, and felt more able to influence their child's education" than mothers of children without disabilities (Salisbury & Evans, 1988, p. 268).

Research suggests that school personnel's behavior may also influence parent participation. This may be viewed as one form of what Hoover-Dempsey and Sandler refer to as demands for involvement. Many local programs have demonstrated success in increasing the percentage of parents involved in the education of their children with disabilities. For example, factors found to enhance parent involvement included establishing ongoing relationships among parents and school personnel, providing professional development to familiarize service providers with the techniques for and importance of involving families, teaching families about their rights under IDEA, and using specific strategies to encourage active parent involvement (Cheney, Manning, & Upham, 1997; Salembier & Furney, 1997; Turnbull & Turnbull, 1990). For example, after participating in a year-long program of family support groups and educational support teams, parents of middle school students with emotional disturbance scored significantly higher on all three subscales of the Family Empowerment Scale: attitudes, knowledge, and behaviors (Cheney et al., 1997).

The behavior of school personnel may also inhibit parent involvement. Salembier and Furney (1997) reported the following factors as inhibiting parent participation: school personnel who did not appear to listen to parents, failed to attend meetings, left meetings early, lacked relevant information, failed to request parent input, did not express a clear purpose for the meeting, or used overly technical language. School personnel's behavior may be a particularly important influence on the involvement of racial/ethnic minority parents. Kalyanpur and Rao (1991) found that some educators exhibited disrespect for minority parents' views, focused on racial/ethnic minority children's deficits, and disregarded cultural differences that characterized parenting styles. Harry, Allen, and McLaughlin (1995) reported diminishing levels of involvement over time for African American parents with children in early intervention programs. While these parents were initially satisfied with preschool programs, they became increasingly concerned about stigma, classroom environment, and curricular issues.

Influences on a Parent's Choice of Involvement Forms

There are many different ways parents may participate in their children's education once they make the decision to become involved. In the broadest terms, parent involvement activities may be divided between home-based activities, such as helping children with their homework, reading to young children, discussing school events,

Table I-2

Types of Parent Involvement in Early Intervention Program

Type of Involvement	Number	Percentage
Help make decisions about my child's program	505	89
Transport my child to treatment	471	83
Do some of the therapy for my child	433	76
Advocate for my rights and my child's rights	420	75
Help give information and support to other parents	403	71
Coordinate my child's services	397	71
Observe my child during therapy	366	65
Attend program planning meetings about my child	211	38
Serve as volunteer, aide, or assistant in my child's program	175	32
Help with fundraising for agencies	149	26
Serve on advisory or policy-making board for an agency	37	7

Source: Sontag, J.C., & Schacht, R. (1994). An ethnic comparison of parent participation and information needs in early intervention. *Exceptional Children*, 60, 422-433.

or talking with teachers by telephone, and school-based activities such as chaperoning a field trip, volunteering at school, or attending parent-teacher association (PTA) meetings.

Before discussing influences on parent's choices of involvement activities, it is helpful to consider research findings on the extent to which parents of children with disabilities participate in various education-related functions. In one study, as shown in table I-2, three-fourths of parents or more were involved in decisions about their children's early intervention program, transported their children to treatment, did some therapy for their children, and advocated for their children's rights. More than half of all parents gave information and support to other parents, coordinated their children's services, and observed their children during therapy. Less common forms of parent involvement included attending program planning meetings, volunteering, fundraising, and serving on policy-making bodies (Sontag & Schacht, 1994).

In a similar study, Plunge and Kratochwill (1995) reported that parents of children with disabilities in preschool through fourth grade also exhibited high rates of participation. More than 85 percent of parents were actively involved in the IEP meeting; that is, they understood the purpose of the meeting, told school personnel about their child's strengths and needs, listened to school personnel recommendations, told school personnel what they wanted their children to learn, and signed the IEP. More than 70 percent of parents indicated that they often talked

with the teacher about their child's progress in class, received information about how to teach their child at home, and received information about their legal rights. Fewer parents volunteered in class (42 percent), had a home visit (30 percent), attended parent meetings (22 percent), or helped evaluate the school's special education services (19 percent). And, in a study of African American parents' involvement in educating their children with disabilities, Harry and colleagues (1995) reported high levels of participation in home-based activities, including supervising homework and addressing behavioral issues identified by the teacher.

Some evidence suggests that parents of children with and without disabilities differ somewhat in the types of involvement activities they engage in. Families of children ages 3 through 5 with disabilities were more likely than families of children without disabilities to attend a general school meeting or attend a meeting with a teacher. They were less likely to attend class events, volunteer at school, or attend PTO or PTA meetings. Families of children ages 6 through 11 with disabilities were more likely to attend meetings with their children's teacher but less likely than families of children without disabilities to attend class events, volunteer at school, attend back-to-school nights, or attend PTO or PTA meetings (see table I-3). These differences may be explained by parent participation in meetings to determine initial or ongoing special education eligibility or in annual IEP meetings, which are special education activities parents are specifically encouraged to attend. Families of children with disabilities, however, were less likely than other families to participate in general school functions such as back-to-school nights and PTA meetings (Westat, 1998).

In general, these studies indicate that large percentages of parents of children with disabilities are at least somewhat involved in their children's education. In the past, some researchers have raised concerns, however, about the depths of parent involvement, classifying participation as primarily passive (Lynch & Stein, 1982; Turnbull, 1983). Fiedler (1986) identified seven levels of parent involvement, from least to most active. They include: attendance and approval of teacher priorities, sharing information, suggesting goals, negotiating goals, collaboratively analyzing and monitoring implementation, joint programming, and independent programming. In a study done in the 1980s, 71 percent of parents reported that they were involved in the development of their children's IEP. However, only 48 percent of parents reported making any suggestion at the IEP meeting (Lynch & Stein, 1982). In a similar study, 25 percent of parents of children with learning disabilities did not recall the IEP document, and few of those who remembered it could recall its contents (McKinney & Hocutt, 1982). Although these studies are quite old, and parent involvement may be qualitatively different from what it was 15 years ago, these findings do raise the question about the depth of parent involvement. Recent research has not addressed this issue.

Table I-3
Percentage of Children Whose Adult Family Members Participated in
Different School Activities

	Children Ages 3-5		Children Ages 6-11	
Activity	With Disabilities	Without Disabilities	With Disabilities	Without Disabilities
Attended a General School Meeting	77.1	73.5	79.5	83.6
Attended a Meeting with the Teacher	81.4	64.8	90.3	85.8
Attended a Class Event	44.4	59.8	64.3	74.3
Volunteered at School	39.9	48.7	38.6	50.4
Attended Back-to-School Night	66.4	65.9	68.3	76.3
Attended PTA/PTO Meeting	49.1	58.0	46.4	58.2

Source: Westat. (1998). Report on findings of significant issues and trends. Rockville, MD: Author.

Hoover-Dempsey and Sandler (1995) delineate several factors that affect parents' decision of how to participate. These include the specific domains of parents' skills and knowledge, other demands placed on parent time and energy, and specific invitations and demands for involvement from their child or school. For example, for parents who work full-time during the day, volunteering at school may not be an option. Instead, they may choose to be involved through activities that do not conflict with their work schedules. In fact, of several types of involvement, parents were, in general, most likely to participate in back-to-school night or general school meetings (Westat, 1998).

It is widely believed that children's age and competence affect the level of parent involvement perhaps because, based on Hoover-Dempsey and Sandler's theory, parents' sense of efficacy in helping their children succeed in school diminishes as invitations and demands for involvement decline (Lareau, 1989; Mink & Nihira, 1986; Salisbury & Evans, 1988; Stevenson & Baker, 1987; Yanok & Derubertis, 1989). In fact, one study found that mothers of children without disabilities participated in fewer school-related activities as their children aged, but mothers of children with disabilities maintained a high level of participation as their children grew older. However, the nature of the mother's involvement did shift as children aged: Mothers primarily participated in the IEP process when their children were younger but adopted an advocacy role as children grew older (Salisbury & Evans, 1988).

In a study of parent involvement in early intervention programs, Gavidia-Payne and Stoneman (1997) reported that maternal and paternal perceptions of family

functioning (problem solving, communication, roles, affective involvement, and general functioning), marital adjustment (consensus, satisfaction, cohesion, and affection), financial security, level of education, and use of coping strategies (e.g., social supports, religion) were positively associated with participation in early intervention programs. Mothers who reported experiencing lower levels of stress also exhibited higher levels of participation.

In a study of parents of children ages 7 and 8 with developmental delays, informational resources (experience with child-related professions, level of education, familiarity with school activities, and amount of activity focused on how to help their child), beliefs about schooling (definitions of educational activities and beliefs about the responsibilities of schools), and a composite measure of resources (time, social supports, and informational resources) were related to both home-based and school-based parent involvement. The perceived characteristics of the school (convenience of meeting times, value of participation activities, and perception that parent's input was sought and valued) were also related to home-based and school-based involvement. Parent attitudes about school (confidence/comfort participating at school, confidence in helping their children do well in school, importance of school achievement) were correlated only with school-based participation, and child status (IQ and impact on the family due to behavioral, medical, or communication problems) was related only to home-based levels of participation (Coots, 1998).

Mechanisms Through Which Parent Involvement Influences Child Outcomes

Hoover-Dempsey and Sandler (1995) identified three mechanisms at work as parents participate in their children's education. They point out that parent involvement is best characterized as an enabling and enhancing variable in school performance rather than a necessary or sufficient condition for success. First, parents may model appropriate behavior or values. Parent behavior may communicate to children that schooling is important (e.g., parents ask questions about the school day, review homework, attend school meetings). Modeling theory predicts that children will imitate adult behaviors held in high regard; that regard is demonstrated through attention to school issues. Second, parents may reinforce instruction introduced at school. By rewarding behaviors needed for school success, parents enhance the likelihood that their children will replicate those behaviors. Third, parents may provide direct instruction to enhance their children's knowledge and skills. For example, when parents provide positive, at-home academic experiences for their children, neither disengaging from challenging work nor completing the work for them, children may learn to approach difficult tasks more willingly (Switzer, 1990).

For families raising children with disabilities, the additional support provided at home may be particularly important. Research suggests that parent reinforcement of desired behaviors originally taught in school helps children with disabilities generalize and maintain those behaviors in other environments (Cordisco & Laus, 1993).

In a study of the effectiveness of parent involvement in the homework performance of students with disabilities and students at-risk of school failure, Callahan, Rademacher, and Hildreth (1998) trained parents to implement a home-based program of self-management and reinforcement. Parents and students were taught components of a self-management program, including (1) self-monitoring (students monitored and recorded homework start and end times, total time spent, and whether assignments were completed at the designated time and location), (2) selfrecording (students recorded the number of correct math problems), (3) selfreinforcement (students determined and recorded the number of points earned for accuracy in their self-monitoring by matching their results with the results of their parents), and (4) self-instruction and goal setting (students evaluated their homework performance and decided whether to complete a supplemental form of the same assignment). Parents and students jointly selected a variety of rewards for points earned in self-monitoring. During the intervention, both homework completion and homework quality increased significantly. Furthermore, the amount and quality of parent involvement was paramount to program effectiveness.

Extensive research supports the efficacy of parents as providers of direct instruction. Mullin, Oulton, and James (1995) found that mothers who had been trained in social learning theory reported substantial reduction in their children's problem behavior. Parents were taught to identify and clearly define their children's problem behaviors based on antecedents and consequences. Following the training, parents reported decreases in the number and intensity of such behaviors. Robbins and Dunlap (1992) documented several successful programs in which parents learned to teach functional skills to their young children with autism. Involvement in family-focused intervention programs has also been shown to increase family members' self-efficacy and perceived self-control (Trivette, Dunst, Boyd, & Hamby, 1995).

In a study of young children with severe behavior problems, McNeil, Eyberg, Eisenstadt, Newcomb, and Funderburk (1991) found that improvements in some types of behavior generalized to school settings following home-based parent-child interaction therapy, contradicting two earlier studies. Parents were taught specific communication and behavior management skills to encourage appropriate behavior and discourage inappropriate behavior. The successful intervention in a home-based setting generalized to school settings for certain conduct and oppositional behaviors such as teasing, hitting, and breaking school rules. Generalization to school settings was not achieved in behaviors tied to hyperactivity/inattention or peer relationships; examples of such behaviors were not provided.

The transition from secondary school to adult life can be extremely challenging for students with disabilities and their families. When the case management, educational, and related services provided through IDEA are no longer available, families frequently face an expanded role in supporting young adults with disabilities. One way to support families in this transition is to teach them effective strategies for instructing and communicating with their children or their nondisabled siblings (Brotherson, Berdine, & Sartini, 1993). In a qualitative study of family involvement in the transition of students with disabilities from secondary school to postsecondary roles, family members were extremely important as informal role models for career and lifestyle choices. However, few students described a formal process of transition planning that involved parents or school personnel (Morningstar, Turnbull, & Turnbull, 1996).

Tempering and Mediating Variables

Not all parent involvement activities lead to improved student outcomes. Rather, different types of involvement, if well implemented, yield different, important results for students, teachers, and parents (Epstein & Hollifield, 1996). A number of factors may temper or mediate the potential benefits of parent involvement. For example, to be effective in enhancing educational outcomes, parent involvement must be developmentally appropriate. Furthermore, a good fit between parents' type and level of involvement and the expectations of school staff may contribute to positive school outcomes. If, however, families and school personnel are working at cross purposes, parents' involvement in their children's education may be less effective.

Because learning disabilities are often difficult to detect, prior to their identification, families may exhibit intolerance with children's behavior. Even after learning disabilities are identified, deficits in children's academic and behavioral skills and unsatisfactory school experiences may contribute to increased levels of parental stress (Dyson, 1996). An inadequate understanding of their children's learning disability may lead parents to believe their children's failure is due to lack of ability, stubbornness, willfulness, or lack of effort (Chapman & Moersma, as cited in Walther-Thomas et al., 1991; Meier, as cited in Walther-Thomas et al., 1991; Siegel, as cited in Walther-Thomas et al., 1991). Consequently, parents may develop inappropriate expectations or overprotective or indulgent behaviors that could have a negative impact on the child's success.

If schools and families have inconsistent expectations for parent involvement, children may be placed in the position of negotiating different sets of demands at different times of the day. The poorer the fit between school and parent expectations for involvement, the more time, energy, and skill required of the children, limiting the positive benefits of parent involvement (Hoover-Dempsey & Sandler, 1995).

Child and Student Outcomes

A strong consensus has emerged that parent involvement in children's education typically benefits learning and school performance even after students' abilities and socioeconomic status are taken into account. This finding is supported by numerous studies (Chavkin, 1993; Eccles & Harold, 1993; Epstein, 1989, 1991, 1996; Henderson, 1987; Hess & Halloway, 1984; Hobbs et al., 1984; U.S. Department of Education, 1994). A recent study specifically documented the positive relationship between the father's involvement and school success. Children were more likely to get "As," to participate in extracurricular activities, to enjoy school, and to be less likely to repeat a grade if their fathers were involved in their schooling. This was true even after controlling for the mother's involvement, parents' education, household income, and race/ethnicity (National Center for Education Statistics, 1998).

Hoover-Dempsey and Sandler (1995) describe two primary benefits that may result from parents' involvement in their children's education. First, children may acquire skills and knowledge beyond those attainable through school experiences alone. Second, children may develop an enhanced sense of efficacy for doing well in school. A third benefit of parental involvement may also exist. Parents who understand their children's rights and participate in securing those rights may have greater success than unprepared, uninformed, or uninvolved parents in securing an appropriate education for their children (Herr, 1983). This may be particularly important for students with disabilities.

In a study of children with learning disabilities, at-risk children, and typically performing children, Ames (1992) found that, for children with learning disabilities, parental support or involvement had significant, positive effects on the children's concept of their own academic ability. For all three groups of students, parents' attention to teachers' communications had a strong positive effect on parents' perceptions of their children's motivation. Another study also supports the relationship between parent involvement and enhanced efficacy for their children. Children whose parents participated in their education tended to view learning and school with more positive attitudes and developed regular patterns for studying and completing homework (Mundschenk & Foley, 1994).

Summary and Recommendations Drawn From the Literature

This module synthesizes literature on parent involvement in educating their children with disabilities using Hoover-Dempsey and Sandler's (1995) model of the parent involvement process. The model includes five levels--the basic involvement decision, the form of involvement, mechanisms for influencing children's outcomes, tempering or mediating variables, and child-centered outcomes. Research indicates

that the overwhelming majority of parents of children with disabilities are involved in their children's education through meetings with teachers, volunteering at school, helping with homework, or other school- and home-based activities. Educators may enhance levels of parent involvement by establishing on-going relationships with parents, teaching parents about their rights under IDEA, and using specific strategies to promote involvement. Family-related factors, such as children's age, parents' competence, and parents' access to resources may also influence levels and types of parent involvement. By providing direct instruction, reinforcing behaviors taught at school, and improving homework performance, parents may improve children's skills and knowledge and may enhance children's sense of self-efficacy for doing well in school.

To support parent involvement, the U.S. Department of Education, Office of Special Education Programs funds 76 Parent Training and Information Centers and 10 Community Parent Resource Centers to provide training and information to parents of infants, toddlers, children, and youth with disabilities and to the individuals working with these parents. The programs provide assistance and support to thousands of parents and families every year. Their goal is to empower parents to become effective advocates for their children with disabilities. In 1998, Congress appropriated over \$18.5 million for these efforts.

In addition to the Parent Training and Information Centers and Community Parent Resource Centers, OSEP funds a number of model demonstration projects and research institutes in the parent involvement field. One example is the Beyond the Barriers project at the University of New Hampshire Institute on Disability. This project explores new models of community-initiated and family-centered approaches to meeting the needs of young children with disabilities. Another example of OSEP's investment in this area is Partners Plus, a model demonstration project in Williamsburg, Virginia. This project involves families in the design, implementation and evaluation of respite care services and will serve children with disabilities from ages birth through 8.

The research summarized in this module documents the benefits of parent involvement. However, not all parents participate in their children's education. Some participate only at a superficial level, and barriers that impede successful parent-school partnerships continue to exist. Many researchers and educators (Finders & Lewis, 1994; Harry, 1992; Sontag & Schacht, 1994; Turnbull & Turnbull, 1996; U.S. Department of Education, 1994; Ypsilanti Public Schools, 1998) have offered recommendations and developed programs to help schools and teachers address these barriers.

• Improve communication among parents, teachers, and administrators.

Researchers, advocates, parents, and educators make a number of accommodations to enhance the extent and quality of interaction between school personnel and parents of students with disabilities. In order to maximize their level of involvement, parents may require more information on the types of services that are available for their children, their rights as parents, and school personnel's expectations for parent involvement. Family resource centers and parent training institutes may provide parents with information about special education, community resources, parenting classes, and the like. Family resource centers housed in school buildings may also provide parents with a positive, nonthreatening school experience (U.S. Department of Education, 1994). The Technical Assistance Alliance for Parent Centers' webpage is another valuable resource for parents. The Alliance's page provides information on legislative issues, a newsletter for parents, a list of Parent Training and Information Centers and Community Resource Centers in the United States with links to their websites, a database of useful information for parents, and other useful links and resources. By providing such information to parents, school personnel may alter parents' perceptions of their role with regard to their children's education.

As described in Hoover-Dempsey and Sandler's model (1997), extending invitations to parents may also be critical for securing participation. Parents reportedly want more information about opportunities for participation (Finders & Lewis, 1994; Sontag & Schacht, 1994). For example, in Ypsilanti, Michigan, the school district instituted National African American Parent Involvement Day. Each year, parents are invited to attend school with their children on the second Monday in February (Ypsilanti Public Schools, 1998).

A critical aspect of school-family communication is cultural sensitivity. Minority families report dissatisfaction with educators' ability to appreciate and understand cultural differences (Harry, 1992; Sontag & Schacht, 1994). Through appropriate, ongoing, and intensive professional development, teachers may learn about local cultures, recognize their own cultural stereotypes, and understand how cultural traditions and beliefs affect interactions between parents and school personnel (Sileo & Prater, 1998; Turnbull & Turnbull, 1996). Through the Alliance, discussed above, school personnel may access materials for parents in languages other than English. Employing teachers from the same racial/ethnic background as the school's parents and children may also enhance communication.

• Tap parents' expertise.

Parent participation and outcomes for children with disabilities may be enhanced if teachers accept and acknowledge parents' familiarity with their children's strengths and needs. The view of school personnel as the sole source of knowledge of children's characteristics and instructional needs diminishes the role that parents can play and inhibits school-family communication, which is necessary for providing appropriate services. School personnel who encourage dialogues with parents provide a forum for expressing opinions and concerns (Harry, 1992; Sontag & Schacht, 1994).

Vermont has adopted a collaborative model designed to enhance collaboration between parents and school personnel in the development of IEPs. IEP meetings are driven by three questions. "What do we know about this child?" "What are we going to do to help this child receive an appropriate education?" "How will we know if we are succeeding?" This approach is intended to involve families more completely in the IEP process by using open-ended questions and avoiding jargon (Hock & Boltax, 1995)

Parents possess knowledge and skills that are valuable to the education of their children and their children's classmates, as well as to service providers. In addition to knowledge related to their own children's strengths and needs, parents often possess valuable expertise in specific occupational skills, cultural norms and beliefs, languages other than English, and hobbies. Such expertise can be incorporated into the curriculum or tapped to enhance access to the curriculum (Finders & Lewis, 1994).

• Involve families in community-based intervention/instruction.

By inviting parents to participate in their children's education through home-based intervention or instruction that is consistent with classroom instruction, educators may empower parents and improve acquisition and generalization of student skills.

Several States have adopted programs like Family Math and Family Science to encourage parents to participate in their children's homework. Programs that allow parents and their children to work collaboratively on a project may extend the children's learning experiences and help parents to model skills and instruct their children (U.S. Department of Education, 1994).

In part, these recommendations reflect a changing conception of the roles and relationships between parents of children with disabilities and school personnel. Traditional concepts of school-based parent involvement are being replaced by family-school partnerships, which suggest individuals of equal standing working together to achieve common goals.

References

- Ames, C. (1992). Home and school cooperation in social and motivational development. (ERIC Document Reproduction Service No. ED 411 629)
- Brotherson, M.J., Berdine, W.H., & Sartini, V. (1993). Transition to adult services: Support for ongoing parent participation. Remedial and Special Education, 14, 44-51.
- Callahan, K., Rademacher, J.A., & Hildreth, B.L. (1998). The effect of parent participation in strategies to improve the homework performance of students who are at risk. *Remedial and Special Education*, 19, 131-141.
- Chavkin, N.F. (1993). Families and schools in a pluralist society. Albany: State University of New York Press.
- Cheney, D., Manning, B., & Upham, D. (1997). Project DESTINY. Teaching Exceptional Children, 30, 24-29.
- Coots, J.J. (1998). Family resources and parent participation in schooling activities for their children with developmental delays. *The Journal of Special Education*, 31, 498-520.
- Cordisco, L.K., & Laus, M.K. (1993). Individualized training in behavioral strategies for parents of preschool children with disabilities. *Teaching Exceptional Children*, 25, 43-46.
- Dyson, L.L. (1996). The experiences of families of children with learning disabilities: Parental stress, family functioning, and sibling self-concept. *Journal of Learning Disabilities*, 29, 280-286.
- Eccles, J.S., & Harold, R.D. (1993). Parent-school involvement during the early adolescent years. *Teachers College Record*, 94, 568-587.
- Epstein, J.L. (1996). Perspectives and previews on research and policy for school, family, and community partnerships. In A. Booth & J.F. Dunn (Eds.), *Family-school links: How do they affect educational outcomes* (pp. 209-246). Mahwah, NJ: Lawrence Erlbaum Associates.
- Epstein, J.L. (1991). Effects on student achievement of teachers' practices of parent involvement. In S.B. Silvern (Ed.), *Advances in reading/language research: Vol. 5.*Literacy through family, community, and school interaction (pp. 261-276). Greenwich, CT: JAI Press.

- Epstein, J.L. (1989). Family structures and student motivation: A developmental perspective. In C. Ames & R. Ames (Eds.), Research on motivation in education: Vol. 3. Goals and cognitions (pp. 259-295). New York: Academic Press.
- Epstein, J.L., & Hollifield, J.H. (1996). Title I and school-family-community partnerships: Using research to realize the potential. *Journal of Education for Students Placed At Risk*, 1, 263-278.
- Fiedler, C.R. (1986). Enhancing parent-school personnel partnerships. Focus on Autistic Behavior, 1, 1-8.
- Finders, M., & Lewis, C. (1994). Why some parents don't come to school. *Educational Leadership*, *51*, 50-53.
- Gavidia-Payne, S., & Stoneman, Z. (1997). Family predictors of maternal and paternal involvement in programs for young children with disabilities. *Child Development*, 68, 701-717.
- Harry, B. (1992). Restructuring the participation of African-American parents in special education. *Exceptional Children*, 59, 123-131.
- Harry, B., Allen, N., & McLaughlin, M. (1995). Communication versus compliance: African-American parents' involvement in special education. *Exceptional Children*, 61, 364-377.
- Henderson, A. (1987). The evidence continues to grow: Parent involvement improves achievement. Columbia, MD: National Committee for Citizens in Education.
- Herr, S.S. (1983). Rights and advocacy for retarded people. Lexington, MA: D.C. Heath.
- Hess, R.D., & Halloway, S.D. (1984). Family and school as educational institutions. In R.D. Parke (Ed.), Review of child development research: Vol. 7. The family (pp. 179-222). Chicago: University of Chicago Press.
- Hobbs, N., Dokecki, P.R., Hoover-Dempsey, K.V., Moroney, R.M., Shayne, M.W., & Weeks, K.A. (1984). Strengthening families: Strategies for child care and parent education. San Francisco: Jossey-Bass.
- Hock, M., & Boltax, R. (1995). *Improved collaboration, less paperwork: Vermont's new family-centered IEP process.* (ERIC Document Reproduction Service No. ED 387 877)
- Hoover-Dempsey, K.V., & Sandler, H.M. (1997). Why do parents become involved in their children's education? *Review of Education Research*, 67, 3-42.

- Hoover-Dempsey, K.V., & Sandler, H.M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record*, *95*, 310-331.
- Kalyanpur, M., & Rao, S. (1991). Empowering low-income black families of handicapped children. *American Journal of Orthopsychiatry, 61*, 523-532.
- Lareau, A.P. (1989). Home advantage: Social class and parental intervention in elementary education. New York: The Falmer Press.
- Lynch, E.W., & Stein, R. (1982). Perspectives on parent participation in special education. *Exceptional Education Quarterly*, 3, 56-63.
- McKinney, J.D., & Hocutt, A.M. (1982). Public school involvement of parents of learning-disabled children and average achievers. *Exceptional Education Quarterly*, 3, 64-73.
- McNeil, C.D., Eyberg, S., Eisenstadt, T.H., Newcomb, K., & Funderburk, B. (1991). Parent-child interaction therapy with behavior problem children: Generalization of treatment effects to the school setting. *Journal of Clinical Child Psychology*, 20, 140-151.
- Mink, I.T., & Nihira, K. (1986). Family life-styles and child behaviors: A study of direction of efforts. *Developmental Psychology*, 22, 610-616.
- Morningstar, M.E., Turnbull, A., & Turnbull, N.R. (1996). What do students with disabilities tell us about the importance of family involvement in the transition from school to adult life? *Exceptional Children*, 62, 249-260.
- Mullin, E., Oulton, K., & James, T. (1995). Skills and training with parents of physically disabled persons. *International Journal of Rehabilitation Research*, 18, 142-145.
- Mundschenk, N.A., & Foley, R.M. (1994). Collaborative relationships between school and home: Implications for service delivery. *Preventing School Failure*, 39, 16-20.
- National Center for Education Statistics. (1998). Students do better when their fathers are involved in school [On-line]. Available: http://nces.ed.gov/pubs98/98121.html
- National Education Goals Panel. (1994). *The national education goals report.* Washington, DC: U.S. Government Printing Office.
- Plunge, M.M., & Kratochwill, T.R. (1995). Parental knowledge, involvement, and satisfaction with their child's special education services. *Special Services in the Schools*, 10, 113-138.

- Robbins, F.R., & Dunlap, G. (1992). Effects of task difficulty on parent teaching skills and behavior problems of young children with autism. *American Journal on Mental Retardation*, 96, 631-643.
- Salembier, G., & Furney, K.S. (1997). Facilitating participation: Parents' perceptions of their involvement in the IEP/transition planning process. *Career Development for Exceptional Individuals*, 20, 29-41.
- Salisbury, C., & Evans, I.M. (1988). Comparison of parental involvement in regular and special education. *Journal of the Association for Persons with Severe Handicaps*, 13, 268-272.
- Sileo, T.W., & Prater, M.A. (1998). Preparing professionals for partnerships with parents of students with disabilities: Textbook considerations regarding cultural diversity. *Exceptional Children*, 64, 513-528.
- Sontag, J.C., & Schacht, R. (1994). An ethnic comparison of parent participation and information needs in early intervention. *Exceptional Children*, 60, 422-433.
- Stevenson, H.W., & Baker, D.P. (1987). The family-school relation and the child's school performance. *Child Development*, 58, 1348-1357.
- Switzer, L.S. (1990). Family factors associated with academic progress for children with learning disabilities. *Elementary School Guidance and Counseling*, 24, 200-206.
- Trivette, C.M., Dunst, C.J., Boyd, K., & Hamby, D.W. (1995). Family-oriented program models, helpgiving practices, and parental control appraisals. *Exceptional Children*, 62, 237-248.
- Turnbull, A.P. (1983). Parental participation in the IEP process. In J.A. Mulick & S.M. Pueschel (Eds.), *Parent-professional participation in developmental disabilities services: Foundations and prospects* (pp. 107-123). Cambridge, MA: The Ware Press.
- Turnbull, A.P., & Turnbull, H.R. (1996). Families, professionals, and exceptionality: A special partnership (3rd ed.). Upper Saddle River, New Jersey: Merrill.
- Turnbull, A.P., & Turnbull, H.R. (1990). Families, professionals, and exceptionality: A special partnership. Columbus, OH: Merrill.
- U.S. Department of Education. (1994). Strong families, strong school: Building community partnerships for learning. Washington, DC: Author.
- Walther-Thomas, C., Hazel, J.S., Schumaker, J.B., Vernon, S., & Deschler, D.D. (1991). In M. Fine (Ed.), *Collaboration with parents of exceptional children*. Brandon, VT: CPPC.

- Westat. (1998). Report on findings of significant issues and trends. Rockville, MD: Author.
- Yanok, J., & Derubertis, D. (1989). Comparative study of parental participation in regular and special education programs. *Exceptional Children*, 56, 195-199.
- Ypsilanti Public Schools. (1998). *National African American parent involvement day*. [Online]. Available: http://scnc.yps.k12.mi.us

PROVIDING ACCESS TO THE GENERAL EDUCATION CURRICULUM FOR STUDENTS WITH DISABILITIES

The passage of P.L. 94-142 in 1975 focused the attention of educators on policy and practice related to the access of students with disabilities to an education-an individually designed, free appropriate public education provided in the least restrictive environment. This focus on access has provided a generation of children with disabilities with the initial preparation needed for successful adult life in the community and workforce.

However, for a growing number of students with disabilities, special education today is not preparing them for increasingly rigorous graduation requirements and career skills that are based on problem solving, collaboration, and technology. Why is this? Special education has typically been viewed as an intervention of remediation. As students with disabilities demonstrate difficulty in academic skills, they are provided intensive instruction on the basic foundation skills which are considered to be prerequisites to higher level, abstract reasoning and problem-solving skills. While they receive remediation intervention, their peers without disabilities refine their foundation skills through application in more complex activities (Gersten, 1998).

The gap between students with and without disabilities continues to widen. Students in special education have lower school completion rates than their nondisabled peers; as adults, they are the largest unemployed group of Americans; they experience higher arrest rates; they are less likely to live independently in the community (Blackorby & Wagner, 1996). As we approach the 21st century, the challenge for educators is to provide students with disabilities meaningful access to instruction that is aligned with high-level standards and supported by special education interventions. This module presents Federal legislation related to providing access to the general education curriculum and discusses difficulties involved in doing so. The module also presents strategies for enhancing access to the general education curriculum for students with disabilities.

What Does It Mean To Access the General Education Curriculum?

Perhaps the first question to ask is: What is the general education curriculum? On first glance, the answer is clear: It is the curriculum designed to prepare students for adult life and, more specifically, for the high school diploma. Frequently, the general education curriculum contains both academic (e.g., literacy, science, math, social studies) and nonacademic (e.g., career/vocational, arts, healthful living, practical living skills, citizenship) domains; however, student performance is assessed

primarily in academics. As pressures mount for teachers to cover the content of the assessed curriculum, less attention and instructional time are devoted to the nonassessed areas. Thus, it is not uncommon for portions of the general education curriculum to receive limited attention--or to not be addressed at all (Warren, 1997). The result is a lack of consistency in how the general education curriculum is defined and taught.

Federal Legislation Relating To Providing Access to the General Education Curriculum

This lack of consistency is not limited to special education. In its 1983 report, A Nation at Risk, the National Commission on Excellence in Education called for the adoption of "more rigorous and measurable standards . . ." (p. 27) which will require ". . . more effective use of the existing school day" (p. 29). This bold recommendation has resulted in the current focus on standards-based education and more specifically on issues of equity: ensuring that all students have equal access to common standards, challenging assessments, and enhanced accountability for student performance (McDonnell, McLaughlin, & Morison, 1997). Such issues have been addressed in recent Federal legislation (e.g., the Elementary and Secondary Education Act, the Goals 2000: Educate America Act, the Improving America's Schools Act, and the School-to-Work Opportunities Act). Each of these laws contains provisions requiring the development of challenging common standards and the reporting of all students' performance on progress in meeting the standards. Together, these are intended to satisfy the national need to produce highly skilled graduates to maintain this country's place in a technological, sophisticated, global market place.

The Individuals with Disabilities Education Act (IDEA) Amendments of 1997 contain several provisions directed at providing students with disabilities greater access to the general education curriculum. This concept of access is addressed in several areas of the legislation via policy, planning, student instruction, and evaluation.

State Performance Goals

Each State wishing to receive IDEA Part B funds must identify goals for the performance of students with disabilities. To the maximum extent possible, State goals are to be consistent with other goals and standards for all children established by the State, including those established under other Federal programs.

State Improvement Plans

Developed through broad-based stakeholder input, the State Improvement Plan is to identify critical aspects of early intervention, general education, and special education programs that must be improved to meet the performance goals the State has identified for Part B. One of the indicators that must be considered is the performance (including performance on State assessment) and participation (including dropout and graduation rates) of students with disabilities.

Program Funding

Coordination between special education and other Federal resources (e.g., schoolwide Title I projects) is encouraged. Additionally, Part B special education funds and related services may be used in general education classrooms to support children with disabilities while providing nondisabled students with incidental benefits from these supports. Funds can be used to increase the skills of general educators to facilitate enhanced participation of students with disabilities in general education classrooms.

Individualized Education Programs

The general education curriculum is to be considered throughout the development and implementation of the individualized education program (IEP). Initial assessments and development of the student's Present Level of Performance are to reflect the student's ability to access instruction aligned with the general education curriculum and standards. General educators are to participate in IEP meetings and provide strategies for aligning IEP goals with standards. Aids and supports are to be provided to facilitate instruction in the general education environment. Parents are to receive regular reports on their child's progress in meeting the IEP goals.

Assessing Student Performance

All students with disabilities are to be included in State and district assessment systems. To the greatest extent possible, students with disabilities are to participate in the large-scale assessments that are aligned with the general education curriculum and standards. Individual accommodations are to be identified and implemented during instruction and assessment activities. Alternate assessments are to be administered to those students who cannot participate in state- and district-wide assessment programs.

Reporting Student Performance

The performance of students with disabilities is to be publicly reported in the same frequency and detail as the performance of nondisabled students. Such reporting is to reflect performance on large-scale assessments as well as alternate assessments.

Tensions Involved in Providing Access to the General Education Curriculum

Virtually every State has developed standards in at least one academic content area; however, there is no "standard" for the State standards (McDonnell et al., 1997). They differ in what they are called (e.g., goals, benchmarks, expectations, frameworks) as well as in subject areas and levels of specificity. While there are variations in levels of expectation for student demonstration of proficiency, there is an increasing trend to assess the student's ability to apply or demonstrate the use of skills in higher order thinking or problem-solving activities. As noted earlier, academic standards are typically included in large-scale assessments, while nonacademic standards are rarely included.

Another tension involves the balance between academic and vocational education. The National Longitudinal Transition Study (NLTS) suggests that students with disabilities who had paid employment experience in high school were more likely to stay in high school and graduate with an employment outcome. How will the increased emphasis on academics balance with effective vocational and other nonacademic educational strategies?

Special educators are rarely involved in the development of the general education curricular standards. Instead, they are typically called upon to identify instructional strategies or curriculum modifications (Goertz & Friedman, 1996). However, these adaptations are typically focused on groups of students and rarely on the specific needs of individual students in the class (Vaughn & Schumm, as cited in Orkwis & McLane, 1998). This means that general and special educators are forced to decide when to modify a standard, when to provide instructional accommodations, how and when to plan collaboratively, and how to find instructional time to cover the content (McLaughlin, Henderson, & Rhim, 1997). The need to develop curricular frameworks that are relevant to all students and to identify effective strategies that support access to the curriculum is common throughout elementary and secondary schools. Our challenge is to strike a balance between emphasizing the potential and performance of each individual student and ability to provide individual resources to facilitate full participation of all students (Benz & Kochhar, 1996). The concept of universal design is one strategy that offers promising solutions to this dilemma.

Universal Design of Curricular Frameworks

To increase access to the general education curriculum, needs of all students must be considered when curricula and standards are developed. This is known as universal design, which is based on the premise that curricula and standards are flexible in order to include students with a wide variety of cultural, linguistic, and learning styles--including students with disabilities (Orkwis & McLane, 1998). Ideally, effective universal design does not result in lowered expectations or watered-down instruction. Rather, it calls for multiple ways of expressing competency in regard to a given standard.

Universal design also results in blending of different types of standards. It allows students who are working toward mastery of the basic or foundation skills to apply their existing knowledge across multiple environments or to engage in complex applications. This requires teachers to integrate standards from multiple grade levels in order to facilitate access to a variety of educational opportunities. Such experiences will enhance the participation of students who typically are exempted from large-scale assessments that require collaborative and/or higher level analysis.

Because most districts or States already have curricula in place, the effectiveness and accessibility of those frameworks should be evaluated. It is important to consider a number of questions when evaluating the effectiveness of existing curricula:

- 1. Is a wide range of parents and other community members involved in the review of the curriculum?
- 2. What is the approved curriculum? Does it include examples of adaptations that may be used with students with disabilities, including those with significant disabilities?
- 3. Are instructional methods and materials used that are responsive to the needs of a heterogeneous student population? What types of instructional priorities and goals have been established to support the progress of all students in meeting the standards?
- 4. Are standards broad or do they reflect only academic outcomes?
- 5. Are performance standards appropriate for students with disabilities? Can they be demonstrated in a variety of ways? (Jorgensen, 1997)

While these are important considerations for curriculum developers at district and State levels, most general and special educators are not involved in curriculum

development on a regular basis. However, they are regularly involved in committees charged with the selection of curricula for implementation throughout a district or school. Three considerations can guide the selection of curricula:

- Does the curriculum provide multiple means of presentation of content? A universally designed curriculum will offer a variety of presentation modes, including text at multiple reading levels, auditory versions, and digital formats (allowing transformation from one presentation mode to another).
- Does the curriculum provide multiple and flexible means of student engagement or participation? Aligning instruction with student learning styles will facilitate understanding of the content. Aspects to consider include finding the right balance between supporting and challenging a student, basing instruction on familiar versus novel concepts, and expanding concepts to reflect a variety of developmental and cultural interests.
- Does the curriculum provide multiple means of student response? Students should be offered flexibility in their choice of response modes. Such flexibility should be based on their preferred communication mode and on technological supports needed (Orkwis & McLane, 1998).

A curriculum that addresses each of these three areas is considered to use the principles of universal design and will be accessible to virtually all students.

Strategies That Support Access to the Curriculum

Effective access to the general education curriculum requires more than common standards and universal design. It is also dependent on pedagogically skilled educators, instructional materials that are accessible to students, and effective instructional strategies.

Pedagogically Skilled Educators

All too often, students with disabilities receive their instruction in a given academic content area from special educators who have not been trained in that content area. If students are to have increased access, then all of their teachers must possess content expertise and pedagogically sound instructional skills. Preservice and professional development for general and special educators need to address content knowledge, universal design principles, and pedagogical skills to become proficient in

a given content area. Support for this is being provided by the OSEP-funded project INTASC (Interstate New Teacher Assessment and Support Consortium), which is developing standards for general and special educators to promote cohesiveness in licensure and preparation, clarifying distinctions in teacher responsibilities, and developing common policies for licensing for general and special educators.

In addition, some OSEP-funded State Improvement Grants (SIGs) seek ways to provide general and special educators with the competencies needed to effectively address the educational needs of all students.

Instructional Materials

Typically, instructional materials are aligned with curricular standards and intended for use by students with corresponding reading and comprehension skills. If a student lacks the requisite literacy skills, the instructional materials will be inaccessible and so too the curriculum. Once again, universal design is a critical factor in accessibility. Similarly, instructional materials should be available in a variety of formats. For example, video presentations need to be supplemented by video description and captioning if they are to be accessible to students with hearing impairments or to English-language learners.

However, alternative presentation modes may not be sufficient for students with cognitive impairments. For these students, multiple presentation modes should be supplemented with alternative (i.e., less abstract) descriptions, special instructions, or organizational tips for approaching an activity or problem.

Instructional Strategies

While universally designed curricula and instructional materials and knowledgeable educators are critical to the successful access of a curriculum, students with disabilities also require access to instruction that is individually referenced, intense, frequent, and explicit.

Individually Referenced Instruction

Effective instruction is premised on instructional decision making that is individually referenced. The IDEA Amendments of 1997 are clear in the intent for IEP goals to be aligned with the general education curriculum. At the same time, the amendments continue the commitment to individually referenced planning and instruction. The thoughtful identification and implementation of individually focused instructional

accommodations facilitate instruction that is both aligned with the general education curriculum and relevant to the individual student's needs.

Intense and Frequent Instruction

Students with disabilities require intense and frequent instruction of basic and higher level concepts. Although it may include one-on-one instruction, intense instruction refers to a broader set of features, including careful matching of instruction with student skill levels; frequent opportunities for student responses; instructional cues, prompts, and fading to facilitate correct responses; and detailed task-focused feedback.

Explicit Instruction

An increasing body of evidence supports the need for students with disabilities to be directly taught the processes and concepts that nondisabled children tend to learn naturally through experiences. Gersten (1998) has identified five principles of explicit instruction:

- 1. Providing students with an adequate range of examples to exemplify a concept or problem-solving strategy.
- 2. Providing models of proficient performance, including step-by-step strategies (as needed) or broad, generic questions and guidelines that focus attention and prompt deep processing.
- 3. Providing experiences where students explain how and why they make decisions.
- 4. Providing frequent feedback on quality of performance and support so that students persist in activities.
- 5. Providing adequate practice and activities that are interesting and engaging.

While a variety of approaches to explicit instruction exist, they all have a similar focus: directly teaching thinking and problem-solving strategies to students who have difficulty acquiring such skills in a seemingly natural manner. One of the most common strategies is the use of scaffolding, which entails the teacher's presentation of a series of frameworks (e.g., questions or outlines) that facilitate a student's study of the instructional content (Harris & Pressley, 1991, as cited in Gersten, 1998; MacArthur, Schwartz, Graham, Molloy, & Harris, as cited in Gersten, 1998). As

students become familiar with the frameworks, they are encouraged to adapt the specific components to support their review of the material.

Another example of explicit instruction is anchored instruction (Bottge & Hasselbring, 1993; Hollingsworth & Woodward, 1993). In this practice, students are taught key vocabulary, measurements, procedures, or concepts prior to the introduction of a problem-solving activity. As a result, their ability to participate in the analysis is enhanced through the initial instruction, which serves as an anchor for the more complex activities. Additional strategies that strengthen this approach include decreases in writing demands (e.g., completing sentences rather than writing short essays) and memory demands (e.g., following written procedures rather than relying on memory) (Mastropieri, Scruggs, & Chung, 1997).

Students appear to benefit from instruction in its component parts (e.g., phonological awareness, word recognition, written expression) when instruction is hierarchical with an initial focus on basic skills as a prerequisite for higher order, problem-solving applications. However, care must be taken to ensure that students are not placed in a long-term status of "not yet ready" for higher order activities. Instead, their educational experiences need to include a blend of experiences so they are able to demonstrate knowledge in multiple ways (Orkwis & McLane, 1998).

Summary

Federal education policy is clear in its intent for all students to be active participants in the general education curriculum. The IDEA Amendments of 1997 call for a broader focus in educational planning. The reference point for IEP development is now the student's participation in the general education curriculum and the supports needed to accomplish this goal.

Although this is unchartered territory, students can benefit from an emerging body of research that emphasizes the importance of universal design of curricula and instructional materials and of strategies that support access to the general education curriculum. Special educators must possess content knowledge necessary for delivering instruction; students need access to instruction that is individually referenced, intense, frequent, and explicit.

Enhancing access to the general education curriculum requires a new approach to collaboration between general and special education. Joint participation and leadership in curriculum and standards development, professional development, resource allocation, and instruction are critical factors in helping students with

disabilities access the general education curriculum and acquire skills that will better prepare them for life after school.

References

- Benz, M., & Kochhar, C. (1996). School-to-work opportunities for all students: A position statement of the Division on Career Development and Transition. *Career Development for Exceptional Individuals*, 19, 31-48.
- Blackorby, J., & Wagner, M. (1996). Longitudinal postschool outcomes of youth with disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children*, 62, 399-413.
- Bottge, B., & Hasselbring, T. (1993). A comparison of two approaches for teaching complex, authentic mathematical problems to adolescents in remedial math classes. *Exceptional Children*, *59*, 556-566.
- Gersten, R. (1998). Recent advances in instructional research for students with learning disabilities: An overview. *Learning Disabilities Research and Practice*, 13, 162-170.
- Goertz, M., & Friedman, D. (1996, March). State education reform and students with disabilities: A preliminary analysis (Year 1 Technical Report). Alexandria, VA: Center for Policy Research on the Impact of General and Special Education Reform, National Association of State Boards of Education.
- Hollingsworth, M., & Woodward, J. (1993). Integrated learning: Explicit strategies and their role in problem-solving instruction for students with learning disabilities. *Exceptional Children*, 59, 444-455.
- Jorgensen, C. (1997, July). Curriculum and its impact on inclusion and the achievement of students with disabilities. Issue Brief 2(2). Pittsburgh, PA: Consortium on Inclusive School Practices, Allegheny University of the Health Sciences.
- Mastropieri, M.A., Scruggs, T.E., & Chung, S. (1997, April). *Qualitative and quantitative outcomes associated with inclusive science teaching.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- McDonnell, L., McLaughlin, M., & Morison, P. (1997). Educating one and all: Students with disabilities and standards-based reform. Washington, DC: National Research Council.
- McLaughlin, M., Henderson, K., & Rhim, L. (1997, March). Reform for all? General and special education reforms in five local school districts. Paper presented at the annual meeting of the American Education Research Association Annual Meeting, Chicago, IL.

- National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform. Washington, DC: U.S. Department of Education.
- Orkwis, R., & McLane, K. (1998, Summer). A curriculum every student can use: Design principles for student access. Reston, VA: ERIC/OSEP Special Project, Council for Exceptional Children.
- Warren, S. (1997, April). Building school-based capacity to sustain change in special education practices. Paper presented at the annual meeting of the American Education Research Association, San Diego, CA.

DEVELOPING A HIGHLY TRAINED TEACHER WORKFORCE

Introduction

America's future depends now, as never before, on our ability to teach. If every citizen is to be prepared for a democratic society whose major product is knowledge, every teacher must know how to teach students in ways that help them reach high levels of intellectual and social competence. Every school must be organized to support powerful teaching and learning. Every school district must be able to find and keep good teachers. And every community must be focused on preparing students to become competent citizens and workers in a pluralistic, technological society (National Commission on Teaching & America's Future, 1996, p. 3).

This urgent call for effective teachers reflects lessons learned from more than a decade of education reform efforts that have left the preparation of teachers virtually unchanged. Although the professionalization of teaching was added to the reform agenda in the late 1980s (Carnegie Forum on Education and the Economy, 1986), initial attempts to improve the quality of teaching focused on structural and organizational components, using approaches such as increased salaries, career ladders, and merit pay (Hawley, 1988). Those failed attempts at improving teaching and learning led to the inevitable conclusion that improvements in the quality of America's schools would require changes to existing systems for recruiting, preparing, and supporting America's teachers (e.g., Association of Teacher Educators, 1991; Goodlad, 1994; National Commission on Teaching & America's Future, 1996; Pugach, Barnes, & Beckum, 1991; U.S. Department of Education, 1997). That conclusion was bolstered by mounting research evidence that indicated the critical link between teaching practice and student achievement (e.g., Cohen, McLaughlin, & Talbert, 1993; Elmore, Peterson, & McCarthey, 1996; Ferguson & Ladd, 1996). As noted by Terry Dozier, former National Teacher of the Year and Special Advisor to the Secretary of Education: "The highest standards in the world, the best facilities, and the strongest accountability measures will do little good if we do not have talented, dedicated, and well-prepared teachers in every classroom. . . . Our Nation's goals in education will not be achieved without the development of an excellent teacher workforce" (Dozier, 1997, p. 1).

The importance of workforce quality was given heightened priority by the release of data indicating that, overall, about a quarter of newly hired teachers lack the qualifications required for their jobs, with 75 percent of urban districts hiring teachers who lack proper credentials (National Commission on Teaching &

America's Future, 1996). Some evidence suggests that inadequate teacher preparation is even more common among special educators than in the general teacher workforce. Boe, Cook, Bobbitt, and Terhanian (1998) report, for example, that in 1990-91, about 10 percent of special education teachers were not fully certified in their primary teaching assignment, compared to 6 percent of general education teachers who were not fully certified. More recent data reported by States to the U.S. Department of Education's Office of Special Education Programs (OSEP) shows that for the 1995-96 school year, about 8.7 percent of special education teachers were not fully certified (U.S. Department of Education, 1998c).

These research findings, as well as national efforts to raise awareness of the importance of a highly trained workforce, most notably those of the National Commission on Teaching & America's Future¹, have mobilized a variety of programs and strategies at the Federal, State, and local levels for investing in the teaching profession. For example, the Department of Education's Office of Educational Research and Improvement (OERI) funds two research and development initiatives focused on teaching and policy—the National Center for the Study of Teaching and Policy, housed at the University of Washington with the collaboration of other major universities, and the National Partnership for Excellence and Accountability in Teaching at the University of Maryland, a collaboration among several major universities and professional associations that work in partnership to engage in efforts aimed at improving the quality of teaching.

As the ability to address teacher quality will rely on a commitment to implement reforms at both State and local levels, the National Commission on Teaching & America's Future is working in partnership with governors, State education departments, legislators, and business leaders in 12 States to design and implement improvement strategies that respond to local needs. Further, the National Council for Accreditation of Teacher Education, which sets standards for teacher education; the Interstate New Teacher Assessment and Support Consortium (INTASC), which addresses beginning teacher licensure issues; and the National Board for Professional Teaching Standards (NBPTS), which provides advanced certification to qualified veteran teachers, have joined to develop a coherent set of standards to guide preservice education of teachers, entry into the field, and continued professional development (National Commission on Teaching & America's Future, 1997).

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The National Commission on Teaching & America's Future is a bipartisan blue-ribbon panel of 26 public officials, business and community leaders, and educators. The commission was formed in 1994 to develop an agenda for improving the quality of America's teachers. It was funded originally through foundation grants, and it continues to be supported by a variety of foundations. More recently, OERI has supported some of the efforts of the commission.

In addition to these efforts, the Department of Education has made a strong commitment to support States and local school districts in efforts to improve the quality of the teacher workforce. This section of the report outlines the activities of the Department, with a particular focus on OSEP activities that are designed to address needs of personnel who work with students with disabilities.

Department of Education Professional Development Activities

"A talented and dedicated teacher in every classroom in America" is a major objective of the Department of Education (U.S. Department of Education, 1997). As set forth in the Department's *Strategic Plan for 1998-2002*, six core strategies are planned for meeting this objective:

- improving the quality and retention of new teachers;
- financial support and interagency coordination to implement professional development strategies that will increase the skills of current teachers;
- support of States' efforts to align licensing and certification requirements with content and performance standards;
- teacher recognition and accountability through efforts such as the NBPTS;
- research, development, evaluation, and dissemination of research-based strategies for improving teacher quality; and
- a biennial national report card on teacher quality.

A variety of existing Federal programs both directly and indirectly support these strategies, including the newly established Comprehensive School Reform Demonstration program, the Goals 2000: Educate America Act, the Elementary and Secondary Education Act (ESEA), the Individuals with Disabilities Education Act (IDEA), the Adult Education Act, the Higher Education Act, the Perkins Vocational and Applied Technical Education Act, and the School to Work Opportunities Act. Some of these programs are intended to benefit special populations of students (e.g., students with disabilities, students who are limited-English proficient). The use of Federal funds specifically to support professional development activities that improve the quality of the workforce must be consistent with the overall purposes and requirements of each program. Goals 2000 funds, for example, can be used to support professional development activities that familiarize teachers with State standards and support teacher knowledge and skills that are aligned to student expectations within the context of statewide standards. About 60 percent of Goals

2000 funds are used to support teacher preservice and professional development activities (U.S. Department of Education, 1998a).

Two Federal programs, Title II of ESEA and Part D of IDEA, are designed specifically to support the professional development of educators. The Dwight D. Eisenhower Professional Development Program (Title II of ESEA), with a fiscal year (FY) 1998 appropriation of \$335 million, is the largest source of Federal funding for such activities. This formula grant program provides funds to State education agencies (SEAs) and State agencies of higher education (SAHEs) to support highquality, sustained, and intensive professional development activities in core academic subjects, particularly math and science. The funds tend to support teacher improvement efforts at the district and school levels based on a comprehensive review of their professional development needs. Funds also assist institutions of higher education (IHEs) and others to develop their capacity to offer high-quality professional development activities. Local education agencies (LEAs) apply to the State for subgrants, with about 95 percent of all LEAs participating in the program. Colleges and universities submit grant applications to the SAHE. Three suggested uses of the Eisenhower funds include: (1) professional development in the effective use of technology as a classroom tool, (2) the formation of professional development networks that allow educators to exchange information on advances in content and pedagogy, and (3) peer training and mentoring programs for teachers and administrators. The annual performance reports for the grants require grantees to report on how Eisenhower funds are used to help meet the needs of diverse groups of students, including students with disabilities. Activities supported under Part D of IDEA to address the professional development of educators who work with students with disabilities are described in the following section, which discusses more broadly OSEP's efforts to address the need for a highly trained workforce.

OSEP Professional Development Activities

It is a priority for OSEP to assemble a highly trained workforce to provide services to students with disabilities. A major objective for the use of discretionary funds available under the IDEA Amendments of 1997 is to "ensure an adequate supply of highly qualified personnel" (U.S. Department of Education, 1998b). The five performance indicators of this objective as delineated by OSEP include:

• Supply of qualified personnel. OSEP intends to obtain these data from State reports to track whether an increasing number of States are meeting their identified needs for qualified personnel.

- Research-validated effective practices. Beginning with FY 1999, OSEP plans to review funded award and institutional practices to ensure that an increasing percentage of training programs will incorporate research-validated practices into program curricula. Grant selection criteria that promote the use of research-validated effective program content and pedagogy and an identification of research-validated effective practices are two strategies that will support this indicator.
- Personnel employed with certification. State-reported data for 1996-97 reveal that across all funded positions for special education teachers and related services personnel, 8.6 percent were not fully certified. The range across categories was quite wide, with a low of 1.2 percent for SEA supervisors and administrators to a high of 15.7 percent for interpreters. Other categories with a higher than average proportion of noncertified personnel include teachers for 3- through 5-year-olds (10.7 percent), teacher aides (14.1 percent), and recreation and therapeutic recreation specialists (10.2 percent) (U.S. Department of Education, 1998a). In the future, OSEP also will use data from the National Center for Education Statistics (NCES) Schools and Staffing Survey to track its goal of an increasing percentage of special education teachers and related services personnel with appropriate certification.
- Special education training for regular education teachers. Although, as noted above, the Department of Education provides a variety of funding streams to support professional development of teachers based on State and local needs, these programs do not necessarily support activities that would increase the capacity of regular education teachers to address the needs of students with disabilities. New requirements resulting from the IDEA Amendments of 1997 will require general educators to become increasingly skilled at meeting the needs of students with disabilities. These requirements include, for example, that general educators be included in individualized education program (IEP) meetings, that students with disabilities be provided access to the general education curriculum, and that students with disabilities participate in State and local assessment programs. OSEP intends to use data from the NCES Schools and Staffing Survey to determine if an increasing percentage of general education teachers and community service providers are receiving preservice and inservice training in special education and developmentally appropriate practices. OSEP will also support preparation programs for regular education personnel to work with students with disabilities.
- *Effective personnel*. As one measure of personnel quality, OSEP plans to conduct surveys of teachers, parents, and students regarding personnel knowledge and skills as well as self-efficacy surveys of personnel. These survey data will be used to determine if an increasing percentage of special

and regular education teachers and early intervention personnel have the knowledge and skills to improve educational results for children with disabilities.

Although these performance indicators are new to OSEP, the idea of supporting personnel preparation activities for educators who work with students with disabilities is not. Under Part D of IDEA, OSEP currently administers more than \$83 million in grants to help address State-identified needs for qualified personnel to work with students with disabilities. During FY 1997, these funds supported over 600 preservice and inservice training programs for special education, related services, early intervention, and leadership personnel. Grants were awarded across 14 priorities to IHEs, SEAs, and other nonprofit agencies. The personnel preparation priorities address a wide variety of areas, not just teacher preparation. The 14 priority areas include the preparation of personnel for careers in special education; preparation of related services personnel; preparation of personnel to serve infants, toddlers, and preschoolers; grants for preservice personnel training; preparation of educational interpreters; leadership personnel; special projects--multiple topics; special projects--national initiatives; preparation of personnel to serve children with low-incidence disabilities; preparation of personnel for careers in special education-emotional disturbance; early childhood model inservice training projects; preparation of minority personnel; SEA programs; and model standards for beginning teachers.

Addressing the priority area of preservice personnel training, for example, 48 new and 50 continuation grants were awarded to support the preservice preparation of personnel in three areas: special education teachers, related services personnel, and early intervention and preschool personnel. Under this priority, grantees can develop new programs or improve existing programs that will increase the capacity and quality of preservice programs in one, two, or all three of these areas. Prior to FY 1996, these preservice priorities were funded under separate competitions. Recently funded projects include, for example, a Northern Illinois University training program for master's level students who will become elementary teachers for students with emotional disturbance, an interdisciplinary graduate program at Allegheny University of the Health Sciences to prepare already licensed physical therapists and occupational therapists to demonstrate competencies that promote the full inclusion of students with disabilities in educational settings, and a project at California State University, Northridge, to promote the early completion of a new credential program for early childhood special education teachers who reflect the increasing cultural and linguistic diversity of the population to prepare them to support students with disabilities in the general education classroom.

Under a special projects priority that addresses multiple topics, 18 new and 45 continuation grants were awarded during FY 1997 to support initiatives designed to

develop and demonstrate new approaches for the preservice and inservice training of personnel for careers in special education and early intervention; to develop materials and approaches to prepare personnel; and to develop other projects of national significance for the preparation of personnel needed to serve infants, toddlers, children, and youth with disabilities. One of the projects funded under this priority is at the University of New Mexico at Albuquerque, where project staff are developing and evaluating a new personnel training model for regular educators, special educators, parents, and related services personnel in the process of individualizing educational programs for children with autism. The special project at the National Resource Center for Paraprofessionals in Education and Related Services at the City University of New York is developing, evaluating, and producing competency-based instructional materials to prepare paraeducators to work with children and youth with disabilities and other special needs that place them at risk for school failure. At the University of Illinois at Urbana-Champaign, a special projects grant is supporting the identification and organization or competencies needed by secondary-level teachers and rehabilitation personnel relevant to planning and delivering transition services for youth with disabilities. That project will also develop and evaluate a conceptual model of transition-related competencies and disseminate the model nationally.

During FY 1997, OSEP also funded two new special projects of national significance focused on improving the quality of the teacher workforce. At the University of Kansas in Lawrence, grant funds are being used to develop an academy linking teacher education to advances in research, particularly in the areas of improving reading instruction for students with learning disabilities, the use of technology to enhance educational results for students with disabilities, and the use of positive behavioral supports to teach children with disabilities who exhibit challenging behaviors. The goals of the project are to improve instruction by infusing research-based interventions into the teacher education curriculum and making these interventions available to practicing teachers. A second project funded under this priority is at the Council for Exceptional Children, where project staff are working with a national advisory board and other key stakeholders to address issues in the recruitment and preparation of personnel for teaching students who have low vision or are blind.

OSEP also awarded a 2-year personnel preparation grant to the Council of Chief State School Officers (CCSSO) to craft model State licensing standards for all beginning teachers (both general and special educators) to better reflect what teachers need to know and be able to do to teach students with disabilities. This project, coordinated by INTASC, will simultaneously develop and implement standards for general and special education teachers that promise to promote complementary preparation and licensure, clarify distinctions in responsibilities among general and special educators, and allow States to collectively agree upon a

common policy for licensing general and special education teachers. Currently, 31 SEAs and independent professional standards boards are working with CCSSO on this project.

As described in the following historical overview of the personnel preparation program, these types of activities have been funded for 40 years with relatively minor changes. A subsequent section of this module discusses major changes to the OSEP-supported professional development enterprise resulting from the IDEA Amendments of 1997, and some of OSEP's plans for the future in response to those changes.

Historical Overview of OSEP Personnel Preparation

Federal grant funds for the preparation of personnel to meet the needs of students with disabilities have been available since 1958 when P.L. 85-926, the Education of Mentally Retarded Children Act, authorized \$2,500 grants to IHEs for training leadership personnel in the program area of mental retardation (Kleinhammer-Tramill, Gallagher, & Earley, 1998). By 1970, funding had increased to \$29.7 million to support a highly categorical professional development program. "Funds for personnel preparation were earmarked by category, and universities submitted categorical grants to receive funding. . . ." (Kleinhammer-Tramill et al., 1998, p. 3). Just prior to enactment of P.L. 94-142 (the Education for All Handicapped Children Act) in 1976, however, personnel preparation funds were awarded as Program Assistance Grants (PAGs) or "block grants" to special education departments, which allowed IHEs to develop noncategorical training programs with a great deal of flexibility.

With the implementation of P.L. 94-142, a mandate to increase available services to previously unserved and underserved populations resulted in a need to focus on the preparation of teachers to meet the needs of specific student populations, such as students with low-incidence disabilities, students residing in rural areas, or students with emotional disturbance. Consequently, by 1980, funding streams were again awarded categorically. These programs provided less flexibility than the PAGs and encouraged the use of stipend support for students, resulting in few attempts to address program improvement, administration, or infrastructure, all of which would enhance the quality of professional development activities (Kleinhammer-Tramill et al., 1998).

This approach to Federal personnel preparation funding was relatively consistent until 1995, when priorities for the grant program resulted in a three-component application that combined funds for related services, early childhood, and training personnel for careers in special education into a single competition. Grants were

intended to support training of personnel for both low- and high-incidence disabilities. In making this change, OSEP intended to encourage interprofessional, multidisciplinary approaches to the education of students with disabilities. As detailed in the following section, the IDEA Amendments of 1997 made several major changes to OSEP's support of professional development activities.

Changes in Personnel Preparation Programs

With enactment of the IDEA Amendments of 1997 came both a renewed focus on and a shift in the approach to OSEP's support of professional development programs. In amending IDEA, Congress recognized that "an effective educational system now and in the future must promote comprehensive programs of professional development to ensure that the persons responsible for the education or transition of children with disabilities possess the skills and knowledge necessary to address the educational and related needs of those children." (§651(a)(6)(F))

The amendments combined the 14 discretionary projects previously supported under Part D of IDEA, including the personnel preparation grants to IHEs, into seven authorities under two subparts of Part D, National Activities to Improve Education of Children with Disabilities. Support for addressing professional development is now included under both Subpart 1, State Program Improvement Grants for Children with Disabilities, and Subpart 2, Coordinated Research, Personnel Preparation, Technical Assistance, Support and Dissemination of Part D. One of the major changes is that under Subpart 1, federally supported personnel training activities that historically have been the domain of IHEs now include SEAs. A competitive application process for the funds is based on a State Improvement Plan (SIP) for special education, which must be included in an application for a State Improvement Grant (SIG). Awards are based on State population, State need, and available resources (§655). The types of activities proposed by the State are also a funding consideration.

SIGs are intended to promote systemic reforms that will improve results for children with disabilities. They must be based on a four-pronged needs analysis that considers "those critical aspects of early intervention, general education, and special education programs (including professional development, based on an assessment of State and local needs) that must be improved to enable children with disabilities to meet the goals established by the State under section 612(a)(16)." (§653(b)(1)) The SIGs are to be implemented through a partnership that must include the SEA, LEAs, and other State agencies providing services to students with disabilities and include a variety of other stakeholders such as parents of children with disabilities, professional organizations, and IHEs.

A substantial proportion (50-75 percent) of the SIGs must be used to support preservice and inservice professional development activities based on identified needs of States as set forth in the SIP. The Comprehensive System of Personnel Development (CSPD) also required under IDEA must be implemented regardless of whether a SIG is awarded. As required previously, the CSPD is to be designed to ensure an adequate supply of qualified special education, regular education, related services, and early intervention personnel; the CSPD can meet the personnel development requirements of the SIG. In fact, "it may serve as the framework for the State's personnel development part of a SIG grant application" (U.S. Department of Education, 1998d).

Since the implementation of these grants with the IDEA Amendments of 1997, States have used SIG funds to:

- broker changes in IHE preservice and inservice offerings to ensure that special education instruction aligns with new State standards and educational reform efforts;
- broker changes in IHE preservice and inservice offerings to ensure that general and special education teachers learn to modify and accommodate instructional practices to meet the needs of all students;
- assist IHEs to expand their capacity to produce special education teachers and early intervention providers;
- implement career ladders whereby paraprofessionals pursue special education teacher certification;
- provide stipends, with payback clauses, on a preservice and inservice level to address personnel shortages in LEAs; and
- develop training systems based on distance learning principles to address personnel shortages.

As noted by Kleinhammer-Tramill et al. (1998), with these changes, there has been a significant shift in the distribution of funding and locus of control over professional development activities from IHEs to the States. Under the IDEA Amendments of 1997, Part D, Subpart 2, IHEs are still eligible to apply for personnel preparation grants similar to those that have been funded in prior years. Still, significant changes were made to this discretionary program. Personnel preparation grants to IHEs are currently authorized to meet the training needs of: (1) personnel to serve students with low-incidence disabilities, (2) leadership personnel, and (3) personnel to serve students with high-incidence disabilities. A fourth type of grant will address projects

of national significance, such as the use of technology to enhance educational results for students with disabilities or the establishment of personnel preparation standards. LEAs and other entities are also eligible to apply for these grants, in addition to IHEs, which now will be expected, based on OSEP priorities, to become active partners with other entities in the delivery of professional development services. In another major change, the IDEA Amendments of 1997 require that students receiving stipend support from a Part D personnel preparation grant must agree to a 2-year service commitment for every year for which assistance was received or repay all or part of the assistance.

Future Directions and Prior Results

The changes to the long-standing personnel preparation program as a result of the IDEA Amendments of 1997 represent a new understanding of the importance of how personnel are prepared to work with students with disabilities and acknowledge the important roles played by entities other than IHEs to ensure an adequate supply of quality teachers. In recognition of this shift, OSEP is in the process of expanding its planning and evaluation functions as they relate to personnel preparation. OSEP is establishing a comprehensive planning process for discretionary activities which will use a broad-based group of stakeholders to develop program agendas, including an agenda for professional development (Danielson, 1997). OSEP is also in the process of preparing descriptive historical documentation of its support of professional development activities which can help it shape that agenda. Finally, OSEP will fund a study on unmet needs for high-quality personnel to serve students with disabilities. It will address: (1) shortages in the number and quality of personnel serving students with disabilities, (2) variations in patterns of numerical shortages and quality in the work force, and (3) factors that influence identified variations.

These planned activities also represent a change in OSEP's approach to professional development activities. Despite the fact that Federal special education training grants have been available since 1958 as discussed above, little information has been collected on the success of the training programs in meeting the overall goals of increasing the quantity and quality of the special education workforce. In prior years, State-reported data on the supply and demand of special education personnel represented one of the only sources of information on personnel employed and needed to educate students with disabilities. In addition, IHEs that received a Part D training grant were also required to report the number of students "trained" under the grant. Neither data source provided an indication of the adequacy with which individuals were prepared or their quality in meeting the needs of students with disabilities.

Only one recent study has evaluated the success of an OSEP-funded personnel preparation endeavor. That study evaluated the use of professional development partnership (PDP) projects awarded to five sites as a strategy for reform of existing personnel preparation systems (O'Reilly, 1998). Major findings indicated that the partnerships were very successful in building personnel capacity and that specific types of partnerships (i.e., collaborations) showed great promise of systems change and sustainability of project impacts. Three elements necessary for successful partnerships were identified, including broad stakeholder involvement, a respected leader, and shared mission among partnership participants. The partnerships required under the IDEA Amendments of 1997 for implementation of the SIPs are very similar to the partnerships established by the five PDP projects.

Conclusions

The Department of Education has focused considerable effort and resources on improving the quality of our Nation's teacher workforce. These efforts are supported and have been encouraged by Congress and by researchers, policy makers, professional organizations, foundations, parents, students, and community members in recognition that better results for students depend on a better prepared teacher workforce. During public meetings leading up to reauthorization of IDEA, personnel development was a consistent high-priority concern of special education stakeholders. OSEP has been involved in promoting professional development of personnel who work with students with disabilities for the past four decades. In the future, OSEP will continue to support such activities with a slightly different focus that will result in greater involvement of States and local communities in professional development endeavors. This shift has resulted in part from the research-based knowledge that has developed from the Federal government's substantial investment into research on teachers and teaching (National Center for the Study of Teaching and Policy, 1998) that indicates the critical role of classroom practice in improving student achievement and in part from recognition that IHEs were not always meeting State's personnel needs.

The ability of the Department of Education and OSEP to meet their objectives of a highly trained teacher workforce for our schools will be seriously challenged by a number of conditions. First, an anticipated need to hire more than 2 million teachers over the next decade due to increasing retirements of an aging workforce and a concomitant enrollment surge will require a focus on policies that increase both the quality and *quantity* of classroom recruits (National Commission on Teaching & America's Future, 1997). Other challenges include an increasing diversity of the student population that is not reflected in the teacher workforce, a robust economy that attracts talented individuals into higher paying employment sectors, an increased emphasis on the use of technology in the provision of educational services, and high-stakes accountability systems which are placing heavier demands on teachers.

With most students with disabilities spending the majority of their school day in a regular classroom (U.S. Department of Education, 1997), issues of ensuring a quality workforce to meet the needs of students with disabilities are compounded. Despite recent efforts to increase the quality of the teacher workforce, general educators receive little or no preparation in addressing the needs of students with disabilities. OSEP-supported professional development activities are the only federally funded activities that specifically acknowledge this need and encourage grantees to address it.

As reflected in the Department of Education's strategies for developing a highly trained workforce, addressing these challenges will require changes in all stages of personnel preparation, including recruitment, preservice and inservice training, and induction of new teachers into schools. These challenges and the radical shifts in the support of professional development activities resulting from the IDEA Amendments of 1997 suggest that it will be more important than ever to evaluate the effectiveness and impact of Federal efforts to address professional development needs over the next few years.

References

- Association of Teacher Educators. (1991). Restructuring the education of teachers. Report of the Commission on the Education of Teachers into the 21st Century. Reston, VA: Author.
- Boe, E.E., Cook, L.H., Bobbitt, S.A., & Terhanian, G. (1998). The shortage of fully certified teachers in special and general education. *Teacher Education and Special Education*, 21, 1-21.
- Carnegie Forum on Education and the Economy. (1986). A nation prepared: Teachers for the 21st century. New York: Carnegie Corporation.
- Cohen, C.K., McLaughlin, M.W., & Talbert, J.T. (Eds.). (1993). *Teaching for understanding: Challenges for policy and practice*. San Francisco: Jossey-Bass.
- Danielson, L. (July 2, 1997). Letter to colleagues on discretionary programs of IDEA. Washington, DC: U.S. Department of Education, Office of Special Education Programs.
- Dozier, T. (1997). Statement by Terry Dozier, Special Advisor to the Secretary, U.S. Department of Education before the House Committee on Education and the Workforce Subcommittee on Postsecondary Education, Training, and Lifelong Learning. Washington, DC: Author.
- Elmore, R.F., Peterson, P.L., & McCarthey, S.J. (1996). Restructuring in the classroom: Teaching, learning & school organization. San Francisco: Jossey-Bass.
- Ferguson, R., & Ladd, H.F. (1996). How and why money matters: An analysis of Alabama schools. In H. Ladd (Ed.), *Holding schools accountable* (pp. 265-298). Washington, DC: Brookings Institute.
- Goodlad, J. (1994). Educational renewal: Better teachers, better schools. San Francisco: Jossey-Bass.
- Hawley, W. (1988). Missing pieces of the educational reform agenda: Or, why the first and second waves may miss the boat. *Educational Administration Quarterly*, 24, 416-437.
- Kleinhammer-Tramill, P.J., Gallagher, K.S., & Earley, P. (1998). Changes in part D of IDEA: An initial analysis of benchmark policy changes and their relationships to the 1997 reauthorization. Unpublished manuscript.
- National Center for the Study of Teaching and Policy. (1998). Federal research investment and the improvement of teaching, 1980-1997. University of Washington: Author.

- National Commission on Teaching & America's Future (1997). *Doing what matters most: Investing in quality teaching.* New York: Author.
- National Commission on Teaching & America's Future. (1996). What matters most: Teaching for America's future. New York: Author.
- O'Reilly, F. (1998). Working together: Partnerships and collaborations for systems change. An evaluation of professional development partnerships. Prepared for the Academy of Educational Development, Washington, DC.
- Pugach, M.C., Barnes, H.L., & Beckum, L.C. (1991). Changing the practice of teacher education: The role of the knowledge base. Washington, DC: Association of Colleges for Teacher Education.
- U.S. Department of Education. (1998a). FY 1999 annual plan, volume 2. Washington, DC: Author.
- U.S. Department of Education. (1998b). *Goals 2000: Reforming education to improve student achievement.* Washington, DC: Author.
- U.S. Department of Education, Office of Special Education Programs. (1998c). Data Analysis System. [Integrated software system]. Rockville, MD: Westat.
- U.S. Department of Education, Office of Special Education Programs. (1998d). OSEP memorandum 98-4: Guidance related to state program improvement grants to improve education for children with disabilities. Washington, DC: Author.
- U.S. Department of Education. (1997). The seven priorities of the U.S. Department of Education. Washington, DC: Author.