III. SCHOOL PROGRAMS AND SERVICES

Paraprofessionals in the Education Workforce

Educational Environments for Students with Disabilities

School Discipline and Students with Disabilities

Preparing Teachers To Serve Students with Visual Impairments

PARAPROFESSIONALS IN THE EDUCATION WORKFORCE[1]

Framing the Issues

Amendments contained in the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA) address issues connected with the growing reliance on paraprofessionals with greater emphasis on their instructional and learner support roles in the delivery of special education and related services for children and youths with disabilities. State education agencies (SEAs) must now provide leadership in the development of standards to ensure that *all* personnel, including paraprofessionals, are adequately and appropriately prepared. Standards developed in accordance with State law, regulations, or written policy allow *appropriately trained and supervised* paraprofessionals and assistants to assist in the provision of special education and related services.

The roles and responsibilities of paraprofessionals have evolved steadily since they were introduced into classrooms as teacher aides more than 40 years ago. "Paraprofessionals have become technicians who are more appropriately described as paraeducators, just as their counterparts in law and medicine are designated as paralegals and paramedics" (Pickett, 1989, p. 1).

Paraeducator, paraprofessional, teacher aide/assistant, education technician, transition trainer, job coach, home visitor--these are just a few of the titles that school districts and other education provider systems have assigned to employees who: (1) provide instructional and other direct services to children, youths, and/or their parents or caregivers and (2) are supervised by teachers or other certified/ licensed professionals who are responsible for diagnosing learner needs; planning, implementing, and evaluating programs to achieve learner needs; and assessing learner progress and program outcomes (adapted from Pickett, 1989).

The following scenarios describe situations that occur daily in classrooms nationwide. They highlight the evolving roles of both paraeducators and the teachers who supervise them.

---

[1] This module reports on work conducted by Anna Lou Pickett, National Resource Center for Paraprofessionals, Center for Advanced Study in Education, City University of New York. This work is funded by the Office of Special Education Programs (OSEP).

1. Greta, a first-year teacher, is working in an inclusive middle school science program. Susan, an instructional assistant with 20 years' experience in working with students with disabilities, and who is old enough to be Greta's mother, has been assigned to her classroom. Greta feels confident that she has the skills that she needs to plan for and teach the students. But because she was not prepared at either the undergraduate or the graduate level to plan for and direct the work of paraeducators, she is uncertain about how to integrate Susan into curriculum and other classroom activities. Susan is becoming increasingly unhappy because she feels that Greta does not appreciate the skills that she has developed over the past two decades.

2. For the first time in her 10-year career as a teacher, Meredith is working with a teacher assistant. She is pleased that Rosita has been added to the team because many of the students have limited English abilities. Meredith feels strongly that it is her responsibility as the teacher to take the lead in sharing information with parents. But she has noticed that many parents seem to feel more comfortable speaking with Rosita about their children than to her; she is also becoming aware that Rosita seems to encourage the parents to speak with her, and this concerns Meredith a great deal.

3. Henry is a paraeducator who was hired to facilitate the inclusion of students with disabilities into general education programs. He works with several teachers, each of whom has different expectations about what he should do in "their" classrooms. His duties vary from full responsibility for teaching "the special ed kids" in one class to, in another classroom, working with all the students who the teacher feels will benefit from personalized attention, escorting "his students" to yet another class, and, in the fourth classroom, sitting in the back of the classroom doing nothing. Henry is confused about his roles and responsibilities, and when he mentions this to the teachers, they too seem confused. Henry is also concerned that he lacks the training necessary to work effectively with such a varied group of students. He has asked other paraeducators about job descriptions and training opportunities and has been told that there are none. And he is uncertain about whom he should speak to about his concerns.

4. Frances is an administrator responsible for her school district's staff development. A survey of personnel indicated a strong need to enhance the capacity of teachers and paraeducators to work as effective teams. She requested training resources on this topic from her State department of education's comprehensive system of personnel development and discovered that there are no statewide guidelines for the employment, placement, and supervision of paraeducators. Neither are there standards

for competency-based training for paraeducators or for preparing teachers to work with them.

These case studies illustrate some of the issues examined in this module on paraprofessionals in the education workforce. The module is divided into three parts. Part I sets the stage with a brief review of the historical and contemporary factors that have led to increased paraeducator utilization in more demanding roles. Part II centers on critical policy questions and systemic issues requiring the attention of personnel in different jurisdictions with different responsibilities for ensuring the availability of an effectively supervised, highly skilled paraeducator workforce. Part III highlights promising practices and strategies for developing standards and systems to prepare teachers and paraeducators for their roles as members of program implementation teams.

Historical Perspective: A Legacy of Problems and Promise

Many of the current concerns about professional development practices and regulatory/administrative systems that have an impact on paraeducator performance, supervision, and preparation have their roots in policy decisions and events that took place four decades ago.

In the mid-1950s, a need to alleviate post-World War II shortages of licensed educators and the fledging efforts of parents of children with disabilities to develop alternatives to institutionalization stimulated interest in the employment of teacher aides. Two significant research projects were undertaken to assess the appropriateness and effectiveness of teacher aides as one way to enable teachers to spend more time in planning and implementing instructional activities. The first, sponsored by the Ford Foundation, took place in Bay City, Michigan. College educated, but unlicensed, teacher aides were recruited and trained to perform clerical, monitoring, and other routine classroom tasks. Acceptance was not automatic. Critics were concerned that teachers would be replaced with unqualified "cheap labor." In general, however, the reaction was cautiously optimistic, and the concept was adopted by other districts. At about the same time, Cruickshank and Herring (1957) documented the results of a project at Syracuse University designed to demonstrate the efficacy of teacher aides in special education. Although the results, like those in Bay City, were positive, it would be almost 10 years before the benefits of paraprofessionals would be more fully tested and realized (Fund for the Advancement of Education, 1961; Gartner, 1971, Kaplan, 1977).

The late 1960s and early 1970s wrought social and organizational changes that had a profound impact on America's schools. Through the efforts of educators and advocacy groups, Federal legislative actions established programs such as Title I and

Head Start to meet the needs of growing numbers of children and youth from economically and educationally disadvantaged family backgrounds. In 1975, parents and other advocates for the rights of children and youth with disabilities also achieved their goal of passing P.L. 94-142, the landmark Education for all Handicapped Children Act, which later became the Individuals with Disabilities Education Act (IDEA). Each of these legislative actions recognized the value of learner centered, personalized education and services for children and youth with diverse ability levels, learning styles, and other education needs (although only P.L. 94-142 mandated individualized education plans).

During this period, to provide teachers in both general and special education with the assistance they required in order to develop and provide learner-centered and individualized programs, the employment of paraprofessionals gained momentum, and significant changes began to occur in their roles and specialties. While they still performed routine monitoring, clerical, and housekeeping tasks, paraprofessionals also reviewed and reinforced lessons and assisted students with other learning activities initiated by teachers (Fafard, 1974; Gartner, 1971; Pickett, 1989). In urban centers in particular, paraprofessionals who shared the culture and traditions of children and youth of diverse backgrounds served as liaisons between schools and families as a way to counter an emerging lack of confidence between the two (Gartner & Riessman, 1974).

At the same time that paraprofessional utilization expanded, there was also a growing awareness of the need to find ways to reduce barriers that prevented people from ethnic, cultural, and language minorities from entering the professional ranks. Then as now, paraprofessionals were primarily women who were (re)entering the workforce and were also generally representative of the cultural, ethnic, and language minority groups in their communities (Pearl & Riessman, 1965). Throughout the 1960s and 1970s, Federal legislation, particularly the Economic Opportunities Act of 1964 and the Education Professions Development Act of 1967, played key roles in supporting and providing access to teacher education for paraprofessionals. One of the most effective and comprehensive personnel preparation initiatives was the Career Opportunities Program (COP).

In *From Aide to Teacher: The Story of the Career Opportunities Program*, Kaplan (1977) recorded the goals, models, and results of COP. Developed by the U.S. Office of Education, the mission of COP was to provide opportunities for "indigenous community residents, working as paraprofessionals in the nation's low-income urban and rural areas to advance within the education professions and ultimately to improve the learning of children and youth in these schools" (p. 2).

The COP design for teacher recruitment and preparation represented a sharp break from teacher education practices. COP grants went to school systems that set priorities to meet local needs. Partnerships with schools of education in the form of subcontracts were established. Local education agencies (LEAs) selected candidates from their paraprofessional workforce who they determined could best serve their students and identified the skills that would prepare them to be effective teachers. Institutions of higher education (IHEs) scheduled required courses to accommodate worker-student needs, tutored candidates for high school equivalency tests, conducted study groups to reinforce learning, and conducted classes off campus near students' homes.

The COP project lasted for 7 years. It proved to be a viable approach that enabled more than 20,000 nontraditional students from underrepresented groups to enter education professions. Indeed, many of the lessons learned through COP serve as a foundation for contemporary teacher preparation programs that recognize paraeducators as valuable recruitment resources (Haselkorn & Fideler, 1996).

While local school systems and higher education agencies were actively engaged in developing flexible degree programs for paraprofessionals, 10 State education agencies (SEAs) established credentialing and other regulatory procedures that set guidelines for paraprofessional employment and preparation. Some of these systems included criteria for training and career advancement; most did not. Rather than develop regulatory procedures, the vast majority of the States chose to establish non-binding administrative guidelines that outlined appropriate duties for paraprofessionals and in some rare cases delineated supervisory responsibility. To an even more limited extent, LEAs began to develop job descriptions and personnel practices that included career ladders and training programs for those whose career choice was to remain a paraprofessional (Pickett, 1994).

With the decline of Federal fiscal support and leadership for paraprofessional employment and education in the 1980s, interest in developing standards and programs for improving paraprofessional performance and providing opportunities for career development all but evaporated. In fact, "they became the forgotten members of education teams" (Pickett, 1994, p. 2), even though their roles and responsibilities continued to expand. As the years passed, policies and systems concerned with paraprofessional employment, roles, and preparation became more and more unstructured (Pickett, 1989; 1994; 1996). Moreover, with the exception of Nebraska, no SEAs or IHEs were addressing issues of paraeducator supervision and its impact on teacher roles and responsibilities (Vasa & Steckelberg, 1987; Vasa, Steckelberg, & Ulrich-Ronning, 1983). As a result in most States, standards for paraprofessional roles and responsibilities and professional development systems are almost nonexistent (Pickett, 1989; 1996).

The Present: Issues and Concerns

A review of recent literature reveals that several factors and trends have converged to rekindle interest among policy makers, SEA and LEA administrators, and personnel developers in paraeducator roles, supervision, and preparation. First and foremost are the mandates in IDEA and State legislative actions that stress the need for individualized instruction and support services for children and youth with developmental, learning, physical, and sensory disabilities. Second are the provisions in IDEA, the Elementary and Secondary Education Act of 1994, and the Goals 2000: Educate America Act of 1994 that target the need to ensure that all personnel are adequately prepared for their roles and responsibilities. As noted earlier, IDEA requires States to establish standards to ensure that paraprofessionals are appropriately trained and supervised. States must also incorporate these training standards into their Comprehensive Systems of Personnel Development (§635(a)). Other significant factors include:

- Continuing initiatives to restructure education systems and practices to more effectively serve children and youth with disabilities and other special needs in inclusive general education programs (Giangreco, Edelman, Luiselli, & McFarland, 1997; Mueller, 1997; Pickett, 1996; Safarik, 1997).

- Increasing numbers of English-language learners enrolled in school systems nationwide. Paraprofessionals can provide familiarity with differing cultures and languages (Haselkorn & Fideler, 1996; Macias & Kelly, 1996; McDonnell & Hill, 1993; National Center for Education Statistics, 1995; Pickett, 1995; Recruiting New Teachers, 1997).

- Continuing and growing shortages of teachers in all programmatic areas (American Association for Employment in Education, 1998; Genzuk, Lavendez, & Krashen, 1994; Haselkorn & Fideler, 1996; Recruiting New Teachers, 1997).

- Changing and expanding roles of teachers as classroom and program managers and leaders of program implementation teams (French, 1997; Vasa & Steckelberg, 1997).

How many paraprofessionals currently provide special education and related services to children with disabilities? Data on paraprofessionals are generally drawn from two sources. OSEP does not collect data on paraprofessionals as a separate category of service providers. Instead, States report the number of teachers, teacher aides, and related services personnel employed in their States. Paraprofessionals may be reported in either of the two latter categories. The number of teacher aides providing

services to children with disabilities has grown significantly in recent years; this growth likely reflects the increasing use of paraeducators in special education.

In 1996-97, the number of teacher aides reported to be providing services to children and youths ages 3 through 21 was 237,206. This figure, which does not include paraprofessionals who were reported in the category of related services personnel, may be compared with the 357,082 teachers who provided services to these children in 1996-97. In the Part C program, 3,307 paraprofessionals provided services to children ages birth through 2 in 1996-97. Those paraprofessionals made up nearly 11 percent of the workforce providing early intervention services to infants and toddlers with disabilities.

The results of a survey of chief state school officers conducted in 1996 by the National Resource Center for Paraprofessionals in Education and Related Services (NRCP) also provide data on the number of paraprofessionals in the special education workforce. Those results suggest that there are approximately 500,000 full-time equivalency paraeducator positions in general, special, compensatory, and English as a Second Language (ESL)/bilingual programs administered by our nation's schools (up from 400,000 reported in a similar 1990 survey). Of that number, a minimum of 280,000 work in inclusive general, resource, and self-contained special education classrooms and vocational/transitional and early childhood programs serving children and youths ages 3 through 21 with disabilities. Another 100,000-plus are assigned to ESL/bilingual, Title I, and other compensatory (remedial) programs. The remainder work primarily in elementary classrooms, libraries, computer labs, and other learning environments, including early intervention services (Pickett, 1996). Ongoing work of the NRCP and the investigations of several other researchers indicate that expanded employment of paraeducators will continue into the foreseeable future (Genzuk et al., 1994; Macias & Kelly, 1996; NCES, 1995; Recruiting New Teachers, 1997).

It is important to note that current data are incomplete and thus do not provide a completely accurate picture of paraeducator employment. There are several reasons for this:

- Of the SEAs that do gather information and maintain databases about paraeducator employment, their concerns usually center on identifying paraeducators employed in federally funded or State-mandated programs. Therefore, in many States, instructional paraeducators or related-services paraprofessional staff supported by local tax levy funds are not always included or are underreported in SEA figures.

- Records maintained by most SEAs do not always indicate the programmatic areas or grade levels to which paraeducators are assigned. Thus, it is not easy to know how they are deployed and how many work in: (1) preschool, elementary, middle/junior high schools, or secondary education; (2) Title I or other compensatory programs; (3) bilingual/ multilingual or ESL programs; (4) inclusive general education, or more traditional self-contained classrooms, or other special education programs and related services (such as vocational/transitional programs, occupational/physical therapy or speech/language pathology, and early childhood programs).

- And finally, data collected by SEAs rarely include information about paraeducator employment in Head Start and other early childhood education programs or early intervention home- and center-based programs administered by other agencies serving infants and toddlers with disabilities and other special needs that place them at risk.

This lack of accurate data adversely affects the capacity of SEAs and LEAs to plan and implement policies and systems to improve the quality of paraeducator performance and to develop comprehensive cost-effective education programs for their paraeducator workforce that recognize the similarities in the skills required by all paraeducators.

While each of the factors cited earlier has contributed to increased employment of paraeducators over the past decade, probably the most significant are the initiatives to reshape and redefine teacher roles. No matter whether they work in center- or home-based early childhood settings, in elementary, middle or high schools, or in general, compensatory, or special education programs, teacher roles and responsibilities in the instructional process are similar. Teachers are diagnosticians of learner needs, planners of age- and ability-appropriate lessons and instructional strategies, facilitators of learning, and assessors of learner performance. Starting with *Teachers for the 21st Century,* produced by the Carnegie Forum in Education and the Economy in 1986, efforts to reform education practices have added new dimensions to traditionally recognized teacher responsibilities. Increasingly, teachers participate in school-based governance and decision making. They help determine how best to allocate human and fiscal resources to meet learner needs, assist in aligning curriculum content to meet standards for learners established by SEAs, and, as members of individualized education and related services planning teams, collaborate with other school professionals, students, and parents to establish and implement learner goals and objectives. They frequently are also the primary liaisons between homes and schools (Carnegie Forum, 1986; Darling-Hammond, 1994; Darling-Hammond & McLaughlin, 1995; DeBoer, 1995; French & Pickett, 1997; Friend & Cook, 1996; Lieberman, 1995; Villa, Thousand, Nevin & Malgeri, 1996).

To help teachers effectively carry out these new responsibilities, policy makers have once again turned to paraeducators to support and expand the program management and administrative functions of teachers (Genzuk et al., 1994; Lyons, 1995; Miramontes, 1990; Mueller, 1997; Passaro, Pickett, Latham, & HongBo, 1994; Pickett, 1997; Stahl & Lorenz, 1995). As a result, teachers have also become leaders of program implementation teams with growing supervisory responsibility for paraeducators (French, 1997; French & Pickett, 1997; Pickett, 1994; Vasa & Steckelberg, 1987).

In today's schools, paraeducators still perform routine clerical and housekeeping tasks, prepare bulletin boards, duplicate instructional materials, and monitor playgrounds, study halls, and lunchrooms. There is, however, greater emphasis on their instructional and learner support roles. As members of program implementation teams under the supervision of teachers, they: (1) assist with maintaining supportive, safe, and healthy learning environments that facilitate inclusion for all children and youth; (2) observe, document, and report objective data about learners that enable teachers to plan, modify, and organize curriculum and learning activities for individuals and groups; (3) engage individuals and groups in learning experiences developed by teachers; and (4) assist with learner assessment activities (Giangreco et al., 1997; Lyons, 1995; Miramontes, 1990; Mueller, 1997; Passaro et al., 1994; Safarik, 1997; Skelton, 1997; Stahl & Lorenz, 1995).

Increased reliance on paraeducators with greater emphasis on their instructional and learner support roles has not resulted in the development of policies and systems to improve their performance, supervision, and preparation. In many States where they do exist, policies and infrastructures have not been assessed and revised since they were established in the 1970s. Thus, these systems do not reflect the dramatic changes that have occurred in both teacher and paraeducator roles as the primary members of program implementation teams. The most critical needs that require the attention of policy makers, administrators, personnel developers, SEAs, LEAs, and IHEs are summarized as follows:

- The majority of paraeducators in our nation's schools spend all or part of their time engaged in providing instructional and/or other direct services to learners and/or their parents (Giangreco et al., 1997; Lyons, 1995; Mueller, 1997; Passaro et al., 1994; Rubin & Long, 1994; Safarik, 1997; Stahl & Lorenz, 1995). Over the past decade, however, scant attention has been paid to: (1) defining paraeducator roles in newly emerging staffing arrangements; (2) formulating supervisory responsibility; (3) identifying similarities and differences in roles and responsibilities of paraeducators assigned to different programs; (4) determining the skills and knowledge paraeducators require to carry out new, more complex tasks; (5) establishing experience and education qualifications for entry-level and

more advanced paraeducator positions; and (6) setting standards for paraeducator performance (Pickett, 1996).

- Professional development/training for paraeducators, when it is available, is usually highly parochial and is rarely part of a statewide comprehensive system of professional/career development that includes: (1) competency-based, structured inservice programs and (2) access to flexible degree programs that enable paraeducators to achieve professional certification/ licensure while they continue to work (Pickett, 1996).

- At the present time, fewer than half (24) of the State departments of education, including the District of Columbia and the territories, have standards or guidelines for employment, roles and duties, placement, supervision, and preparation of paraeducators. Thirteen of these 24 States have credentialing mechanisms. These systems range from multilevel certification/permit systems that define roles, training, and career advancement criteria to one-dimensional systems that do not specify duties or training requirements. Despite the existence of standards and credentialing mechanisms in some States, it is likely that exceptions to standards occur frequently (Pickett, 1996).

- Contemporary education reform efforts increasingly stress the team and management responsibilities of teachers. These efforts have, however, overlooked the roles of teachers as leaders of instructional teams and supervisors of paraeducators. As a result, most teacher education programs have not developed curriculum content to prepare teachers to plan for, delegate or assign tasks, assess paraeducator skills and performance, and provide on-the-job training (French, 1997; French & Pickett, 1997).

- The need to recruit and train committed teachers is well documented. The need to attract more ethnic, cultural, and language-minority men and women into the field is particularly acute (American Association for Employment in Education, 1998; Genzuk et al., 1994; Haselkorn & Fideler, 1996; Macias & Kelly, 1996; Recruiting New Teachers, 1997). Although paraeducator personnel represent high percentages of the diverse ethnic, cultural, and language-minority populations in their communities, they are frequently overlooked as resources for recruitment into teacher education and other professional preparation programs (Genzuk et al., 1994; Haselkorn & Fideler, 1996).

The Future: Addressing the Issues and Establishing the Systems

For partnerships to work cooperatively and to find effective solutions to policy questions and systemic issues, States must have databases that identify who

paraeducators are, where they work, and what they do in different program areas or educational settings. Once this has been accomplished, the stakeholders will have access to information that they can use to:

- delineate appropriate duties and tasks for paraeducators and the nondelegatable responsibilities of school professionals;
- determine similarities and distinctions in the roles and duties of paraeducators assigned to different programs;
- identify a common core of skills for all paraeducators, a hierarchy of performance skills, and the knowledge base needed by paraeducators working in more advanced paraeducator positions;
- set standards for paraeducator training, professional development, and education and/or experience qualifications for employment;
- establish standards for paraeducator supervision and performance evaluation;
- make recommendations for developing and implementing comprehensive systems of staff development and career advancement for paraeducators; and
- identify the supervisory roles and responsibilities of teachers and other school professionals and establish standards for preparing them to assume their duties (Pickett, 1997, p. 15).

In addition to addressing these needs, there is a growing awareness among the various constituencies of the need for credentialing systems or other regulatory procedures to ensure that paraeducators have the skills necessary to meet the requirements of their roles. The need for paraeducator credentialing is not a new idea, but it is highly controversial. As noted earlier, only 13 States have criteria for hiring, training, and career advancement for paraeducators that they regard as credentialing systems. Other States have chosen to develop administrative guidelines rather than more formal, mandatory credentialing procedures--and the majority have not moved to adopt either system (Pickett, 1996).

Pickett (1986) identified four reasons for developing new credentialing systems for paraeducators or strengthening current ones:

1. Setting standards and mandating specified levels of training and performance would guarantee that paraeducators have the skills and knowledge required to perform their assigned duties.

2. Effective credentialing procedures would be based on realistic and viable opportunities for upward mobility on various levels of a paraeducator career ladder and would therefore serve as an incentive for retaining skilled paraeducators.

3. Credentialing would establish clear distinctions in the tasks associated with different certificate/licensure levels, matching responsibilities with training/education and competency.

4. Credentialing would serve as a method for providing formal recognition of the contributions paraeducators make to the delivery of instructional and related services.

Help in the Development of Policies for the Future

Education policy makers at the Federal, State, and local levels do not need to start from scratch in addressing the concerns raised in this report. At the present time, a few States are in the process of developing and testing strategies and systems for effectively preparing, supervising, and integrating paraeducators into education teams. While each State uses a different approach that is designed to meet its identified needs, States can serve as resources for policy makers in SEAs and LEAs and personnel developers in IHEs. Minnesota, Utah, Rhode Island, Iowa, and Washington are implementing new plans, and Colorado is in the formative stage of developing standards.

At the national level, the NRCP, through a special projects grant from the Office of Special Education Programs, is developing guidelines for paraeducator roles and responsibilities as well as model standards for their training and supervision. Assisted by a broadly representative task force, the NRCP will issue its recommendations in the fall of 1999 to provide policy makers, educators, personnel developers, unions, parents, and other stakeholders with resources on which they can build to establish policies and strengthen partnerships among those concerned with improving the performance and status of a skilled paraeducator workforce.

The goals of this national project are to:

1. develop parameters for scopes of teacher and paraeducator responsibilities in learning environments;

2. identify a common core of skills required by all paraeducators and a hierarchy of performance skills and knowledge base for paraeducators working at more advanced levels with children and youth who have more severe and profound disabilities and other challenging needs;

3. develop prototypes for articulated systems of training and professional development for paraeducators; and

4. develop components of a model credentialing system that recognizes distinctions in roles, skills, and knowledge required for different paraeducator positions.

The recommendations of the task force are being reviewed and validated by a wide range of representatives of provider and administrative agencies, professional organizations, IHEs, and other constituencies. While the project is indicative of the growing awareness in the education community of the need to enhance the status and improve the performance of paraprofessionals, its work builds upon a wealth of existing resources, particularly at the State and local levels.

Summary

Policy makers and administrators in SEAs, LEAs and IHEs are confronted with many issues and concerns in their efforts to improve the quality of the education workforce. Because paraeducators are integral members of program implementation teams, it is of critical importance that the issues that have an impact on paraeducator performance and career development not be overlooked. Policies and systems must be put into place to ensure that paraeducators have the skills and knowledge necessary to meet the needs of the children and youth they serve.

References

American Association for Employment in Education. (1998). *Teacher supply and demand in the United States--1997: A research report from AAEE*. Evanston: Author.

Carnegie Forum on Education and the Economy. (1986*). A nation prepared: Teachers for the 21st century*. New York: Carnegie Foundation.

Cruickshank, W., & Herring, N. (1957). *Assistants for teachers of exceptional children*. Syracuse: Syracuse University Press.

Darling-Hammond, L. (1994). *The current status of teaching and teacher development in the United States: Background paper prepared for the National Commission on Teaching in America.* New York: Teachers College, Columbia.

Darling-Hammond, L., & McLaughlin, M.W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, *76*, 597-604.

DeBoer, A. (1995). *Working together: The art of consulting and communicating.* Longmont, CO: Sopris West.

Fafard, M.B. (1974). *The utilization and training of paraprofessionals in special education*. New York: New Careers Training Laboratory, Queens College, City University of New York.

French, N.K. (1997). Management of paraeducators. In A.L. Pickett, & K. Gerlach (Eds.), *Supervising paraeducators in school settings. A team approach*. Austin: Pro-Ed.

French, N.K., & Pickett, A.L. (1997). Paraprofessionals in special education: Issues for teacher educators. *Teacher Education, Special Education, 20*, 61-73.

Friend, M., & Cook, L. (1996). *Interactions: Collaboration skills for school professionals.* White Plains, NY: Longman.

Fund for the Advancement of Education. (1961). *Decade of experiment: 1951-61*. New York: Ford Foundation.

Gartner, A. (1971). *Paraprofessionals and their performance*: *A survey of education, health and social services programs.* New York: Praeger.

Gartner, A., & Riessman, F. (1974). The paraprofessional movement in perspective. *Personnel & Guidance Journal, 53*, 253-256

Genzuk, M., Lavendez, M., & Krashen, S. (1994). Paraeducators: A source for remedying the shortages of teachers for limited English proficient students. *Journal of Educational Issues of Language Minority Students*, *14*, 211-222.

Giangreco, M.F., Edelman, S.W., Luiselli, T.E., & McFarland, S.Z. (1997). Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children, 64*, 7-18.

Haselkorn, D., & Fideler, L. (1996). *Breaking the class ceiling: Paraeducator pathways to teaching*. Belmont, MA: Recruiting New Teachers, Inc.

Kaplan, G.R. (1977). *From aide to teacher: The story of the career opportunities program*. Washington, DC: U.S. Government Printing Office.

Lieberman, A. (1995). *The work of restructuring schools*. New York: Teachers College Press.

Lyons, D. (1995*).Training for special education funded paraprofessionals: A report on the education and responsibility study*. Federal Way, WA: Washington Education Association.

Macias, R.F., & Kelly, C. (1996). *Summary report of the survey of the states' limited English proficient students and available educational programs and services, 1994-95*. Washington, DC: National Clearing House for Bilingual Education.

McDonnell, L., & Hill, P. (1993). *Newcomers in American schools: Meeting the needs of immigrant youth*. Santa Monica: RAND.

Miramontes, O.B. (1990). Organizing for effective paraprofessional services in special education: A multilingual/multiethnic instructional team mode. *Remedial and Special Education*, *12*, 29-36.

Mueller, P.H. (1997). *A study of the roles, training needs, and support needs of Vermont's paraeducators*. Unpublished dissertation. University of Vermont.

National Center for Education Statistics. (1995). *Projections of education statistics to 2005*. U.S. Department of Education, Office of Educational Research.

Passaro, P., Pickett, A.L., Latham, G., & HongBo, W. (1994). The training and support needs of paraprofessionals in rural special education settings. *Rural Special Education Quarterly, 13*, 3-9.

Pearl, A., & Riessman, F. (1965). *New careers for the poor: The non-professional in human services*. New York: Free Press.

Pickett, A.L. (1997). Supervising paraeducators in school settings: Framing the issues. In A.L. Pickett, & K. Gerlach, (Eds.), *Supervising paraeducators in school settings: A team approach*. Austin: Pro-Ed.

Pickett, A.L. (1996). *A state of the art report on paraeducators in education and related services*. New York: National Resource Center for Paraprofessionals in Education and Related Services, Center for Advanced Study in Education, The Graduate School & University Center, City University of New York.

Pickett, A.L. (1995). *A training program to prepare teachers to supervise and work effectively with paraprofessionals. 4th edition*. New York: National Resource Center for Paraprofessionals in Education and Related Services, Center for Advanced Study in Education, The Graduate School & University Center, City University of New York.

Pickett, A.L. (1994). *Paraprofessionals in the education workforce*. Washington, DC: National Education Association.

Pickett, A.L. (1994). Serving students with limited English: The need to prepare paraeducators to meet the challenge. *New Directions, 15*, 1-2.

Pickett, A.L. (1989). *Restructuring the schools: The role of paraprofessionals*. National Governors' Association, Center for Policy Research, Washington, DC.

Pickett, A.L. (1986). Certified partners: Four good reasons for certification of paraprofessionals. *American Educator, 10*, 31-34.

Recruiting New Teachers. (1997). *The urban teacher challenge*. Belmont, MA: Author.

Rubin, P., & Long, R.M. (1994, Spring). Who is teaching our children? Implications of the use of aides in Chapter 1. *ERS Spectrum*, 28-34, Education Research Service.

Safarik, L. (1997). Team roles in school settings. In A.L. Pickett, & K. Gerlach, (Eds.), *Supervising paraeducators in school settings: A team approach*. Austin: Pro-Ed.

Skelton, K.J. (1997). *Paraprofessionals in education*. Albany, NY: Delmar Publishers.

Stahl, B.J., & Lorenz, G. (1995). *Views on paraprofessionals*. St. Paul: Minnesota Department of Children and Family Learning.

Vasa, S., & Steckelberg, A.L., (1997). Paraeducators in school settings: Administrative issues. In A.L. Pickett, & K. Gerlach *(Eds.), Supervising paraeducators in school settings: A team approach*. Austin: Pro-Ed.

Vasa, S., Steckelberg, A.L., & Ulrich-Ronning, L. (1983*). Guide for the effective utilization of paraprofessionals in special education.* Lincoln, NE: Department of Special Education, University of Nebraska, Lincoln.

Vasa, S., & Steckelberg, A.L. (1987, November). *What teachers need to know about utilizing paraprofessionals: Higher education role.* Paper presented at the annual conference of National Council of States Inservice Education, San Diego, CA. (ERIC Document Reproduction Service No. ED 293 230)

Villa, R.A., Thousand, J.S., Nevin, A.I., & Malgeri, C. (1996). Instilling collaboration for inclusive school as a way of doing business in public schools. *Remedial and Special Education*, *17*, 169-181.

EDUCATIONAL ENVIRONMENTS FOR STUDENTS WITH DISABILITIES

The Individuals with Disabilities Education Act (IDEA) and its implementing regulations require that "to the maximum extent appropriate, children with disabilities . . . should be educated with children who are not disabled; and that . . . removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily" (34 CFR 300.550). The IDEA regulations further specify that a continuum of alternative placements must be available to meet the needs of children with disabilities for special education and related services (34 CFR 300.551). The question of what constitutes the least restrictive environment is perhaps the most contentious of all the issues related to educating students with disabilities. States and districts vary considerably in the percentage of students with disabilities served in different educational environments, raising concerns about financial, programmatic, or policy-related reasons for these differences.

This module summarizes literature on the outcomes of inclusive educational practices and presents national data on the extent to which students with disabilities receive services in general education classes and schools. It addresses a number of issues. How does inclusion in regular classes affect skill acquisition for students with disabilities? Are social outcomes for students with disabilities enhanced when they have more opportunities to interact with nondisabled peers? How does inclusion affect the performance of students without disabilities? What percentage of children with disabilities are served in different educational environments, and how do those percentages vary by age group and disability?

Outcomes of Inclusive Schooling Practices[1]

This section summarizes research that demonstrates the positive impact of inclusive schooling practices on students. The discussion highlights themes describing what has been empirically documented to date and what has been learned about how to maximize positive outcomes.

[1] The following sections were adapted from McGregor, G., & Vogelsberg, R.T. (1998). *Inclusive schooling practices: A synthesis of the literature that informs best practices about inclusive schooling.* Supported by OSEP grant #H086V40007.

Skill Acquisition for Students with Disabilities

Dunn (1968) and many others have stressed the availability of nondisabled students who can serve as role models and initiators of communication and social interaction as an important reason to place students with disabilities in general education classrooms. It is not surprising, therefore, that much of the initial research examining outcomes for students with disabilities placed in general education classrooms focused on these skill areas. The themes described below reflect evidence available to date.

A substantial number of studies have demonstrated that students with and without disabilities interact more frequently in integrated and inclusive settings than in self-contained environments (e.g., Brinker, 1985; Brinker & Thorpe, 1986; Fryxell & Kennedy, 1995). These results have been demonstrated for children in preschool (Guralnick & Groom, 1988; Hanline, 1993; Jenkins, Odom, & Speltz, 1989), elementary school (Cole & Meyer, 1991; Fryxell & Kennedy, 1995), and secondary settings (Kennedy, Shukla, & Fryxell, 1997; McDonnell, Hardman, Hightower, & Kiefer-O'Donnell, 1991). Despite the opportunities created by the presence of students without disabilities in general education settings, multiple demonstrations suggest that without adult intervention, students without disabilities tend to interact more frequently with other nondisabled students than with students with disabilities in social situations (e.g., Faught, Balleweg, Crow, & van den Pol, 1983; Odom & Strain, 1986; Sale & Carey, 1995). Fortunately, many strategies have been used successfully to encourage and maintain ongoing interaction between students with and without disabilities, including the use of communication aids and play organizers (Jolly, Test, & Spooner, 1993), teacher-mediated interaction (Strain & Odom, 1986), and peer-mediated assists (e.g., Brady et al., 1984; Sasso & Rude, 1987).

At least two studies suggest that the number of students with disabilities in the classroom has an impact on the level of social interaction that occurs between students with and without disabilities. In a study at the preschool level, Guralnick and Groom (1988) found that children with disabilities in playgroups with typically developing peers engaged in more peer-related social interaction than those who were in programs that grouped together children with disabilities. The authors emphasized the importance of having adequate numbers of typical peers in play groups, providing some empirical support for the principle of "natural proportions" (Brown et al., 1989). Similarly, McDonnell et al. (1991) found that the number of students with severe disabilities in a school was negatively associated with in-school and after-school integration. Students placed in their home school had significantly higher levels of interaction with typical peers than those enrolled in programs that tend to recruit larger numbers of students with disabilities.

Closely associated with opportunities for social interaction is growth in social competence and communication skills. Studies documenting parental reports of child development have consistently identified improvement in the area of social skills and communication as outcomes associated with participation in an educational program with typical peers (e.g., Bennett, DeLuca, & Bruns, 1997; Guralnick, Connor, & Hammond, 1995; Turnbull, Winton, Blacher, & Salkind, 1982). These gains have also been documented in studies that directly measure performance in these areas. In a 2-year comparison study of students with disabilities in both integrated and segregated settings, Cole and Meyer (1991) found that students in integrated educational placements demonstrated substantial progress on a measure of social competence, encompassing such specific communication and social skills as initiation, self-regulation, choice, and terminating contact. In contrast, comparison of students in segregated settings showed regression in these areas across the 2-year period. Performance gains in these areas have been noted in other placement comparison studies (e.g., Jenkins et al., 1989) as well as in noncomparison studies conducted in inclusive classroom settings (e.g., Hunt, Alwell, Farron-Davis, & Goetz, 1996; Hunt, Staub, Alwell, & Goetz, 1994; Jolly, Test, & Spooner, 1993; Kozleski & Jackson, 1993).

Academic Skill Acquisition for Students with Disabilities. A recent study investigated the level of academic engagement of students with severe disabilities included in the general education classroom for content-area classes by comparing the behavior of students with disabilities to a sample of peers without disabilities in the same settings (McDonnell, Thorson, McQuivey, & Kiefer-O'Donnell, 1997). Despite higher levels of inappropriate classroom behaviors among students with disabilities (e.g., aggression, lack of attention during instruction), there were no significant differences in academic engagement between the two groups of students. While no measures of skill acquisition were reported, these findings are consistent with parent reports that their children are learning material from the general education curriculum as a result of their inclusive placement (Ryndak, Downing, Morrison, & Williams, 1996).

Skill acquisition data in academic areas are more frequently reported in studies that involve the general classroom placement of students with mild disabilities. McDougall & Brady (1998) demonstrated increases in math fluency and engaged time for students with and without disabilities after the introduction of a multicomponent self-management intervention. On a larger scale, there are program models for which substantial performance gains for students with disabilities have been found (e.g., Wang & Birch, 1984) as well as those for which positive gains were evidenced in some, but not all, curricular areas (e.g., Affleck, Madge, Adams, & Lowenbraun, 1988), or for some, but not all, students with mild disabilities (e.g., Zigmond & Baker, 1990). Manset & Semmel (1997) conclude that gains for students *without* disabilities are the most consistent outcome of this body of research,

suggesting the potential benefits of blending the instructional expertise of general and special educators for the benefit of all students, while underscoring the need to pay greater attention to specific organizational and instructional practices in heterogeneous classrooms.

The traditional general education classroom, with an emphasis on whole group instruction, is increasingly being viewed as a barrier to the learning of not only students with disabilities but others in the general education classroom who have diverse learning styles. A substantial body of evidence points to instructional groupings that are advantageous for students both with and without disabilities. Wang & Birch (1984) describe the difference in student behavior in a traditionally structured classroom and a classroom designed to accommodate diverse learners (i.e., Adaptive Learning Environments Model (ALEM)). In the ALEM classroom, students were more actively engaged in exploratory and individual activities, spending less time in whole group and teacher-prescribed activities. The small group structuring associated with cooperative learning has been repeatedly demonstrated as academically (e.g., Lew, Mesch, Johnson, & Johnson, 1986; Madden & Slavin, 1983) and socially beneficial for heterogeneous groups of students (Johnson & Johnson, 1981; Johnson, Johnson, & Anderson, 1983; Johnson, Johnson, Tiffany, & Zaidman, 1983). Similarly, small group structures associated with peer tutoring are associated with benefits for students with and without disabilities in a variety of academic areas (e.g., Cohen, Kulik, & Kulik, 1982; Maheady, Sacca, & Harper, 1987; Mathur & Rutherford, 1991; Osguthorpe & Scruggs, 1986).

Several studies have examined the impact of small instructional groups on the skill acquisition of students with more severe disabilities in inclusive settings (Dugan et al., 1995; Hunt et al., 1994; Logan, Bakeman, & Keefe, 1997). Hunt and colleagues (1994) structured cooperative learning groups involving students with severe disabilities and their typical peers. Students with disabilities learned and generalized the skills targeted for them in this instructional context. Their typical peers performed as well as peers assigned to groups that did not have a student with a severe disability as a group member. In a comparison of whole group, one-to-one, individual work, and small group work, similarly positive findings are documented by Dugan et al. (1995). Logan and colleagues (1997) found whole group instruction to be the least favorable context for promoting task engagement of students with severe disabilities. Together, these studies provide some preliminary evidence that the type of instruction currently considered to represent good practice in general education is also, when appropriately structured, conducive to the learning of students with disabilities (Cosden & Haring, 1992).

Social Outcomes for Students with Disabilities. Another powerful rationale for inclusion is that students with disabilities will have the opportunity to develop relationships with peers that evolve into true friendships, carrying over into after

school hours. Research has examined friendship outcomes for students with disabilities based upon their educational environments. A direct comparison of the social interactions, social support behaviors, and friendship networks of students placed in general education classrooms with similar students served in self-contained classrooms clearly favored those in inclusive settings (Fryxell & Kennedy, 1995; Kennedy et al., 1997). Students in inclusive environments had more frequent interaction with their peers and larger, more durable networks of peers without disabilities. Furthermore, a positive relationship has been established between the proximity of a student's educational environment to his home and in-school and after-school involvement with peers (McDonnell et al., 1991). Students who were in integrated settings but placed in a cluster program had significantly lower levels of peer involvement than students with disabilities attending their "home" school. These findings again speak to the "best practice" guidelines delineated by Brown and colleagues relative to natural proportion and home school settings (Brown et al., 1989).

Other research about friendship in inclusive settings has been descriptive, providing insight into the types of relationships that develop between students with disabilities and their typical peers. Qualitative investigations describe friendships between students with and without disabilities that show the same variation in relationships and status that one sees in friendships between students without disabilities (Evans, Salisbury, Palombaro, Berryman, & Hollowood, 1992; Staub, Schwartz, Gallucci, & Peck, 1994). This research suggests that differences seen in relationships are influenced by factors not uniquely associated with disability status.

Using multiple methodologies and data sources gathered over a 3-year timeframe, Meyer and her colleagues (1998) also found substantial variations in the social relationships occurring between students with severe disabilities and their peers. They identified six distinct "frames" that characterize the relationships they saw. While some of the relationships observed illustrate undesirable social status, friendships encompassed by the descriptors "just another kid," "regular friends," and "best friends/friends forever" suggest more equitable and mutually rewarding relationships.

Finally, reports from parents of students who are part of general education classrooms indicate that these environments facilitate friendships outside of school (Bennett et al., 1997). Despite pessimistic assumptions held by some, severity of disability has not been found to preclude the formation of social relations and interactions with typical peers. However, the observations of Salisbury and Palombaro regarding successful social relations (1998) do merit attention.

> The potential for social isolation was there, but proactive strategies within a supportive classroom climate seemed sufficient to counterbalance the potentially negative consequences of challenging behaviors and limited expressive capabilities (p. 101).

In a qualitative study of five inclusive elementary schools, Janney and Snell (1996) identified strategies used to facilitate inclusion and interaction. They found that teachers made complex judgments in order to know when to encourage interaction and when to "back off." They used typical peers in various ways to assist and promote interaction. Classroom rules about helping changed. Finally, they modeled the message "just another student" in their talk and actions, implicitly conferring classroom membership status to the student with severe disabilities. In contrast to other methods of promoting friendship and support that focus exclusively on the "identified" students, these teachers used whole-classroom strategies based on cooperation and mutual assistance to create a setting in which all students could be supported.

Adults can also interfere with the development of relationships between students with and without disabilities in the regular classroom. Giangreco, Edelman, Luiselli, and MacFarland (1997) analyzed interactions between students and instructional assistants in 16 classrooms in 11 schools in four States over 2 school years. The finding that instructional assistants maintain *ongoing* physical proximity to students with severe disabilities that they support in the general education classroom has broad implications but is particularly relevant in the area of peer interaction. Observations and comments by staff suggest that, in some cases, the constant proximity of an adult inhibits interaction with peers. When instructional assistants had established good relationships with typical peers, the opposite effect was noted.

At least two approaches have been taken to promote interaction and friendship between students with and without disabilities. Early published reports describe special programs or interventions (e.g., Special Friends) to bring students together, based on the knowledge that contact with people with disabilities positively influences attitudes (Voeltz, 1982). The limitations of this periodic contact outside the ongoing structures and activities of the general education classroom are suggested by two studies. In an early analysis of student interaction in integrated preschools, Guralnick (1981) found that students with mild disabilities were more socially integrated than those with more significant differences. However, these students were members of the same class, while other students were integrated for only select activities. Hanline (1993) commented, "It may be that the shared experiences created by full inclusion provide the foundation for more social integration" (p. 33). Schnorr (1990) observed and talked with middle schoolers in an effort to understand their perception of a "part time" mainstreamed student. In the eyes of the typical students, these part-time students did not "belong" to the class

because they did not share in the school experiences that, for these children, defined what it meant to be in middle school. Students with disabilities found it difficult to "connect" with peers because they did not participate in extracurricular activities, lacked membership in subgroups and partnerships established outside the classroom, and lacked the time to form connections due to receiving special instruction during times when their peers typically socialized.

More recent efforts to promote friendship are embedded within the context of the ongoing school and classroom routine. These strategies attempt to encourage natural relationships between students and their peers in these shared settings. In a second investigation of the elusive concept of membership and belonging, Schnorr (1997) found that in middle and high school classes, student membership and belonging depend upon developing an affiliation with a subgroup of peers within the class. In her study of students with disabilities in four classes, she observed that some students were successful in connecting with a subgroup, while others were not.

Impact on Students without Disabilities

A frequent concern about the involvement of students with disabilities in general education classrooms is that their presence will be detrimental to other students in the class. Many early investigations of the impact of students with disabilities on the developmental progress of typical students were conducted in preschool programs involving students with varying degrees and types of disabilities. Studies consistently demonstrated that the development of typically developing children did not decelerate (e.g., Bricker, Bruder, & Bailey, 1982; Odom, Deklyer, & Jenkins, 1984) as a function of the diversity of children in the classroom. Among school-aged students, consistent results have been obtained (Sharpe, York, & Knight, 1994), although the research is sparse in this area. Measurement issues (i.e., the questionable sensitivity of standardized academic and behavioral measures typically used by schools) complicate this type of investigation.

Several studies have examined this issue from a different perspective, seeking to investigate concerns that students with disabilities require a disproportionate amount of teacher attention and therefore take away from the educational opportunities for other students. In the Johnson City School District, an investigation focused on the use of instructional time compared the teacher's use of time in classrooms with and without students with severe disabilities (Hollowood, Salisbury, Rainforth, & Palombaro, 1995). Results indicated no difference in engagement rates between classrooms, suggesting no negative impact on instructional opportunities. Similar findings are reported by McDonnell et al. (1997) in another direct comparison of classrooms with and without students with severe disabilities.

Examining this issue from yet another perspective, skill acquisition of typical students who are involved in small instructional groups containing a student with a severe disability has been examined by Dugan et al. (1995) and Hunt et al. (1994). In each case, the nondisabled students and the students with disabilities who were part of small cooperative groups demonstrated academic gains. In contrast, mixed results were obtained by O'Connor and Jenkins (1996) in a study focused on cooperative groups comprising typical students and students with mild disabilities in grades 3 through 6. While some groups were successful, others were not. Factors such as partner selection, teacher monitoring, and the establishment of a cooperative ethic appeared to influence the outcomes. Clearly, structure and support are essential to the success of these arrangements, and more research is needed to clarify critical organizational elements.

Finally, data from at least one study are available to respond to the concern that typical students will model inappropriate behavior exhibited by some students with disabilities. In a year-long observational study in an inclusive elementary classroom, Staub and colleagues (1994) did not find evidence to substantiate this fear.

Much of the research documenting positive outcomes for typically developing students has been survey research in which students themselves are the respondents (e.g., Helmstetter, Peck, & Giangreco, 1994; Kishi & Meyer, 1994; Peck, Donaldson, & Pezzoli, 1990). Benefits described by students revolve around several themes, including improvement in self-concept, growth in social cognition, and reduced fear of human differences (Peck et al., 1990). These results are corroborated in studies based on parental reports of child outcomes (e.g., Giangreco, Edelman, Cloninger, & Dennis, 1993; Miller et al., 1992). Furthermore, benefits associated with relationships with peers with disabilities have been found to persist far beyond the time that students are actively involved with each other (Kishi & Meyer, 1994).

The inclusion of students with disabilities in general education classrooms stimulates activities, opportunities, and experiences that might not otherwise occur within that classroom. In a review of various program models designed to support students with mild disabilities in regular classrooms, Manset and Semmel (1997) write that the most consistent positive result across program models is gains for nonidentified students. This suggests that some of the instructional strategies and organizational approaches typically introduced into the general education setting for the purpose of supporting identified students actually yield academic benefits for a far wider range of students.

Students with disabilities also create the opportunity to engage typical students in dialogues around issues that might otherwise go untouched within the scope and sequence of the curriculum. In the context of providing ongoing accommodations, issues about fairness and equity naturally arise. Qualitative investigations of

classrooms in which these issues were actively raised and discussed have been associated with the acquisition of sophisticated social cognition skills by students without disabilities. In one such study (Evans, Salisbury, Palombaro, & Goldberg, 1994), even students in kindergarten exhibited highly sophisticated concepts of fairness and could articulate principles of equal treatment. In this same school, teachers successfully taught elementary-aged students to use a collaborative problem-solving process to eliminate barriers to various issues related to the inclusion of students with disabilities (Salisbury, Evans, & Palombaro, 1997). Children successfully assumed the role of problem-solver, identifying solutions to address physical, social, academic, and staffing problems associated with students included in their classrooms. While these skills and values may have been learned through other experiences, they were a vital and recurring part of these classrooms as a result of the naturally occurring situations that arose in the course of supporting students with a wide range of skills within the general education setting.

A final observation relative to this theme relates to a finding by York & Tundidor (1995), generated in their discussions with typical students. Students reported a willingness to do far more than they were asked to do by adults in initial efforts to include students with disabilities in general education classes. The presence of these students creates opportunities for others to serve in roles or assume responsibilities that were previously not available. Clearly, some are willing to take advantage of these opportunities and may experience considerable personal growth as a result.

Educational Environment by Disability

Each year, States report to OSEP by age group and by disability the number of students served in a variety of educational environments, as defined in table III-1. The placement categories are designed to reflect the extent to which students with disabilities are served in schools and classes with their nondisabled peers. In 1996-97, 5,738,632 children ages 3 through 21 with disabilities received services in a variety of educational environments, from full-time general education classes to residential facilities (see table III-2). The largest percentage of students with disabilities (46 percent) received special education and related services outside the regular class for less than 21 percent of the school day. An additional 27 percent received services outside the regular class for 21 to 60 percent of the day, and 22 percent received special education and related services outside the regular class for more than 60 percent of the school day. More than 95 percent of students with disabilities were served in regular school buildings. Of the remaining students, 3 percent were served in public or private separate day schools, less than 1 percent were served in homebound/hospital environments, and less than 1 percent were served in public or private residential facilities (see table III-2). From 1995-96 to 1996-97, the number of students receiving services outside the regular class for less than 21 percent of the

Table III-1
OSEP Placement Categories and Definitions

Special education outside the regular class less than 21 percent of the day. Unduplicated number of children and youth with disabilities receiving special education and related services outside the regular class for less than 21 percent of the school day.

Special education outside the regular class at least 21 percent of the day and no more than 60 percent of the day. Unduplicated number of children and youth with disabilities receiving special education and related services outside the regular class for at least 21 percent but no more than 60 percent of the school day.

Special education outside the regular class more than 60 percent of the day. Unduplicated number of children and youth with disabilities receiving special education and related services outside the regular class for more than 60 percent of the school day.

Public separate facility. Unduplicated number of children and youth with disabilities receiving special education and related services for greater than 50 percent of the school day in public separate facilities.

Private separate facility. Unduplicated number of children and youth with disabilities receiving special education and related services for greater than 50 percent of the school day in private separate facilities.

Public residential facility. Unduplicated number of children and youth with disabilities receiving special education and related services for greater than 50 percent of the school day in public residential facilities.

Private residential facility. Unduplicated number of children and youth with disabilities receiving special education and related services for greater than 50 percent of the school day in private residential facilities.

Source: U.S. Department of Education, Office of Special Education Programs, *OSEP IDEA, Part B Data Dictionary, 1998.*

school day increased by 3.8 percent from 2,554,635 to 2,651,394; the percentage served in public separate day schools for students with disabilities decreased by 1.7 percent, from 131,785 to 129,578.[1]

Although the overwhelming majority of children with disabilities were served in regular school buildings, placement in regular schools varied considerably by disability (table III-3). More than 90 percent of students ages 6-21 with speech or

[1] Since States and Outlying Areas may update previously reported data as necessary, the data reported here may differ from those included in prior annual reports.

Table III-2
Number and Percentage of Students Ages 3 Through 21 with Disabilities Served in Different Educational Environments: 1996-97

Environment	1996-97	
	Number	Percentage
Regular Class	2,651,394	46.2
Resource Room	1,534,941	26.7
Separate Class	1,285,626	22.4
Public Separate School Facility	129,578	2.3
Private Separate School Facility	61,260	1.1
Public Residential Facility	22,479	0.4
Private Residential Facility	14,828	0.3
Homebound/Hospital Placement	38,526	0.7
Total Children	5,738,632	100.0

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

language impairments (99.6 percent), specific learning disabilities (99.1 percent), mental retardation (93.1 percent), other health impairments (93.1 percent), and orthopedic impairments, (92.7 percent) were served in regular school buildings. Students with deaf-blindness (64 percent) and multiple disabilities (70.5 percent) were least likely to be served in regular schools with their nondisabled peers.

There was also considerable variation by disability in placements within regular school buildings. The majority of students with speech or language impairments (88.6 percent) were served outside the regular class less than 21 percent of the school day as were large percentages of students with visual impairments (48.3 percent), specific learning disabilities (43.1 percent), orthopedic impairments (41.6 percent), other health impairments (41.3 percent), and hearing impairments (37.6 percent). Substantial percentages of students with specific learning disabilities (38.9 percent) and other health impairments (34.5 percent) received special education and related services outside the regular class 21 to 60 percent of the day. The majority of students with mental retardation (54.2 percent) and autism (53.1 percent) were served outside the regular class for more than 60 percent of the day as were large percentages of students with multiple disabilities (44.4 percent), deaf-blindness (38.1 percent), emotional disturbance (35.3 percent), and traumatic brain injury (30.6 percent).

Table III-3
Number and Percentage of Students Ages 6 Through 21 Served in Various Educational Environments Under IDEA, Part B by Disability on December 1, 1996

Disability	Served Outside the Regular Class			Separate Facility	Residential Facility	Home-bound/ Hospital
	0-21% of the Day	21-60% of the Day	More Than 60% of the Day			
Specific Learning Disabilities	43.1 (1,146,168)	38.9 (1,035,406)	17.1 (454,822)	0.7 (9,542)	0.1 (3,442)	0.2 (4,679)
Speech or Language Impairments	88.6 (927,727)	6.6 (68,794)	4.4 (46,110)	0.3 (3,365)	0.0 (344)	0.1 (726)
Mental Retardation	10.5 (62,248)	28.4 (168,516)	54.2 (321,132)	5.9 (34,706)	0.5 (3,056)	0.5 (2,932)
Emotional Disturbance	22.5 (99,956)	23.3 (103,352)	35.3 (156,759)	13.7 (60,756)	3.7 (16,210)	1.5 (6,603)
Multiple Disabilities	9.5 (9,894)	16.6 (17,252)	44.4 (46,194)	24.0 (25,026)	3.1 (3,181)	2.5 (2,552)
Hearing Impairments	37.6 (25,613)	18.4 (12,531)	26.6 (18,160)	7.6 (5,155)	9.5 (6,474)	0.4 (282)
Orthopedic Impairments	41.6 (27,428)	20.4 (13,430)	30.7 (20,230)	5.0 (3,286)	0.2 (148)	2.3 (1,486)
Other Health Impairments	41.3 (68,522)	34.5 (57,319)	17.3 (28,675)	1.6 (2,666)	0.2 (361)	5.1 (8,420)
Visual Impairments	48.3 (12,523)	19.3 (4,993)	17.6 (4,572)	5.8 (1,506)	8.4 (2,167)	0.6 (159)
Autism	14.3 (4,897)	11.7 (4,011)	53.1 (18,240)	18.5 (6,365)	1.9 (659)	0.6 (192)
Deaf-Blindness	14.1 (213)	11.8 (178)	38.1 (575)	19.9 (230)	14.6 (221)	1.5 (23)
Traumatic Brain Injury	28.8 (3,049)	26.1 (2,758)	30.6 (3,240)	10.4 (1,110)	1.6 (173)	2.5 (260)
All Disabilities	45.7 (2,388,228)	28.5 (1,488,540)	21.4 (1,118,709)	3.1 (158,705)	0.7 (36,436)	0.5 (28,314)

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

Educational Environment by Age Group

Educational environments also varied by age group, with younger children more likely to receive services in regular school buildings and regular classes (table III-4). More than 50 percent of children ages 3 through 5 with disabilities received services

Table III-4
Number and Percentage of Students Ages 3 Through 21 Served in Different Educational Environments by Age Group: 1996-97

Age Group	Served Outside the Regular Class			Separate School	Residential Facility	Home-bound/ Hospital Placement
	0-21% of the Day	21-60% of the Day	More Than 60% of the Day			
Age 3-5	50.9 (263,156)	9.0 (46,401)	32.3 (166,917)	5.7 (29,275)	0.2 (871)	2.0 (10,212)
Age 6-11	55.6 (1,475,507)	24.0 (636,219)	18.1 (479,222)	1.9 (51,296)	0.2 (6,318)	0.2 (6,205)
Age 12-17	36.2 (839,517)	34.2 (793,062)	24.4 (564,229)	3.8 (87,101)	1.0 (24,360)	0.8 (18,792)
Age 18-21	29.1 (73,214)	27.5 (69,259)	29.9 (75,258)	10.0 (25,166)	2.3 (5,758)	1.3 (3,317)
Total, 3-21	46.2 (2,651,394)	26.7 (1,534,941)	22.4 (1,285,626)	3.3 (190,838)	0.7 (37,307)	0.7 (38,526)

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

outside the regular class for less than 21 percent of the time.[2] An additional 9 percent received services outside the regular class for 21 to 60 percent of the time, and 32 percent received services outside the regular class for more than 60 percent of the time.

The majority of children in the 6 through 11 age group (56 percent) received services outside the regular class for less than 21 percent of the day. An additional 24 percent received services outside the regular class for 21 to 60 percent of the day, and 18 percent were served outside the regular class for more than 60 percent of the day.

Students ages 12 through 17 were fairly evenly distributed among the three regular school building placements. Thirty-six percent, 34 percent, and 24 percent received services outside the regular class 0-21 percent, 21-60 percent, and more than 60 percent of the school day, respectively.

The largest percentage of students ages 18 through 21 received special education and related services outside the regular class for more than 60 percent of the school day (29.9 percent). Smaller percentages of students in this age group (29.1 percent and

[2] Children 3 through 5 do not have a typical 5- or 6-hour school day, so percentages are based on the amount of time they receive services.

27.5 percent, respectively) received services outside the regular class for 0-21 percent and 21-60 percent of the school day.

Summary

This module summarized literature on the outcomes of inclusive schooling practices for students with and without disabilities and presented data on the number and percentage of students with disabilities served in different educational environments. Findings from previous research suggest that social interactions between students with and without disabilities are enhanced when students with disabilities are served in regular classes, particularly if teachers use deliberate techniques to promote interaction. Some students with disabilities in general education classes exhibited improved social and academic skills. Changes in instructional strategies designed to address the needs of students with disabilities were cited as beneficial for many students who had not been identified as eligible for special education services.

Over 95 percent of students with disabilities received special education services and related services in regular school buildings, and 46 percent were removed from regular classes for less than 21 percent of the school day. This varied considerably by disability and age group. Students with speech and language impairments were most likely to receive services primarily in regular classes. Elementary-aged children were more likely than secondary-aged children to receive services outside the regular class for less than 21 percent of the school day.

References

Affleck, J., Madge, S., Adams, A., & Lowenbraun, S. (1988). Integrated classroom versus resource model: Academic viability and effectiveness. *Exceptional Children*, *54*, 339-348.

Bennett, T., DeLuca, D., & Bruns, D. (1997). Putting inclusion into practice: Perspective of teachers and parents. *Exceptional Children*, *64*, 115-131.

Brady, M.P., Shores, R., Gunter, P., McEvoy, M.A., Fox, J.J., & White, C. (1984). Generalization of an adolescent's social interaction behavior via multiple peers in a classroom setting. *Journal of the Association for Persons with Severe Handicaps*, *9*, 278-286.

Bricker, D.D., Bruder, M.B., & Bailey, E. (1982). Developmental integration of preschool children. *Analysis and Intervention in Developmental Disabilities*, *2*, 207-222.

Brinker, R.P. (1985). Interactions between severely mentally retarded students and other students in integrated and segregated public school settings. *American Journal of Mental Deficiency*, *89*, 587-594.

Brinker, R.P., & Thorpe, M.E. (1986). Features of integrated educational ecologies that predict social behavior among severely mentally retarded and nonretarded students. *American Journal of Mental Deficiency*, *91*, 150-159.

Brown, L., Long, E., Udvari-Solner, A., Davis, L., VanDeventer, P., Ahlgren, C., et al., (1989). The home school: Why students with severe intellectual disabilities must attend the school of their brothers, sisters, friends, and neighbors. *Journal of the Association for Persons with Severe Handicaps*, *14*, 1-7.

Cohen, P.A., Kulik, J.A., & Kulik, C.C. (1982). Educational outcomes of tutoring. *American Educational Research Journal*, *19*, 237-248.

Cole, D.A., & Meyer, L.H. (1991). Social integration and severe disabilities: A longitudinal analysis of child outcomes. *Journal of Special Education*, *25*, 340-351.

Cosden, M.A., & Haring, T.G. (1992). Cooperative learning in the classroom: Contingencies, group interactions, and students with special needs. *Journal of Behavioral Education*, *2*, 53-71.

Dugan, E., Kamps, D., Leonard, B., Watkins, N., Rehinberger, A., & Stackhaus, J. (1995). Effects of cooperative learning groups during social studies for students with autism and fourth-grade peers. *Journal of Applied Behavior Analysis*, *28*, 175-188.

Dunn, L.M. (1968). Special education for the mildly retarded--Is much of it justifiable? *Exceptional Children*, *35*, 5-22.

Evans, I.M., Salisbury, C.L., Palombaro, M.M., Berryman, J., & Hollowood, T.M. (1992). Peer interactions and social acceptance of elementary-age children with severe disabilities in an inclusive school. *Journal of the Association for Persons with Severe Handicaps*, *17,* 205-212.

Evans, I.M., Salisbury, C., Palombaro, M., & Goldberg, J.S. (1994). Children's perception of fairness in classroom and interpersonal situations involving peers with severe disabilities. *Journal of the Association for Persons with Severe Handicaps, 19,* 326-332.

Faught, K.K., Balleweg, B.J., Crow, R.E., & Van den Pol, R.A. (1983). An analysis of social behaviors among handicapped and nonhandicapped preschool children. *Education and Training of the Mentally Retarded*, *18*, 210-214.

Fryxell, D., & Kennedy, C.H. (1995). Placement along the continuum of services and its impact on students' social relationships. *Journal of the Association for Persons with Severe Handicaps*, *20*, 259-269.

Giangreco, M., Edelman, S.W., Luiselli, T.E., & MacFarland, S.Z. (1997). Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children*, *64*, 7-18.

Giangreco, M., Edelman, S., Cloninger, C., & Dennis, R. (1993). My child has a classmate with severe disabilities: What parents of nondisabled children think about full inclusion. *Developmental Disabilities Bulletin*, *21*, 77-91.

Guralnick, M. (1981). The efficacy of integrating handicapped children in early childhood settings: Research implications. *Topics in Early Childhood Education*, *1*, 57-71.

Guralnick, M., & Groom, J.M. (1988). Peer interactions in mainstreamed and specialized classrooms: A comparative analysis. *Exceptional Children*, *54*, 415-425.

Guralnick, M.J., Connor, R.T., & Hammond, M. (1995). Parent perspectives of peer relationships and friendships in integrated and specialized programs. *American Journal on Mental Retardation*, *99*, 457-476.

Hanline, M.F. (1993). Inclusion of preschoolers with profound disabilities: An analysis of children's interactions. *Journal of the Association for Persons with Severe Handicaps*, *18*, 28-35.

Helmstetter, E., Peck, C.A., & Giangreco, M.F. (1994). Outcomes of interactions with peers with moderate or severe disabilities: A statewide survey of high school students. *Journal of the Association for Persons with Severe Handicaps*, *19*, 263-276.

Hollowood, T.M., Salisbury, C.L., Rainforth, B., & Palombaro, M.M. (1995). Use of instructional time in classrooms serving students with and without severe disabilities. *Exceptional Children*, *61*, 242-253.

Hunt, P., Alwell, M., Farron-Davis, F., & Goetz, L. (1996). Creating socially supportive environments for fully included students who experience multiple disabilities. *Journal of the Association for Persons with Severe Handicaps*, *21*, 53-71.

Hunt, P., Staub, D., Alwell, M., & Goetz, L. (1994). Achievement by all students within the context of cooperative learning groups. *Journal of the Association for Persons with Severe Handicaps*, *19*, 290-301.

Janney, R.E., & Snell, M.E. (1996). How teachers use peer interactions to include students with moderate and severe disabilities in elementary general education classes. *Journal of the Association for Persons with Severe Handicaps*, *21*, 72-80.

Jenkins, J.R., Odom, S.L., & Speltz, M.L. (1989). Effects of social integration on preschool children with handicaps. *Exceptional Children*, *55*, 420-428.

Johnson, D.W., & Johnson, R.T. (1981). The integration of the handicapped into the regular classroom: Effects of cooperative and individualistic instruction. *Contemporary Educational Psychology*, *6*, 344-353.

Johnson, D.W., Johnson, R.T., & Anderson, D. (1983). Social interdependence and classroom climate. *Journal of Psychology*, *114*, 135-142.

Johnson, D.W., Johnson, R., Tiffany, M., & Zaidman, B. (1983). Are low achievers disliked in a cooperative situation? A test of rival theories in a mixed ethnic situation. *Contemporary Educational Psychology*, *8*, 189-200.

Jolly, A.C., Test, D.W., & Spooner, F. (1993). Using badges to increase initiations of children with severe disabilities in a play setting. *Journal of the Association for Persons with Severe Handicaps*, *18*, 46-51.

Kennedy, C.H., Shukla, S., & Fryxell, D. (1997). Comparing the effects of educational placement on the social relationships of intermediate school students with severe disabilities. *Exceptional Children*, *64*, 31-48.

Kishi, G.S., & Meyer, L.H. (1994). What children report and remember: A six-year follow-up of the effects of social contact between peers with and without severe disabilities. *Journal of the Association for Persons with Severe Handicaps*, *19*, 277-289.

Kozleski, E.B., & Jackson, L. (1993). Taylor's story: Full inclusion in her neighborhood elementary school. *Exceptionality*, *4*, 153-175.

Lew, M., Mesch, D., Johnson, D.W., & Johnson, R. (1986). Components of cooperative learning: Effects of collaborative skills and academic group contingencies on achievement and mainstreaming. *Contemporary Educational Psychology*, *11*, 229-239.

Logan, K.R., Bakeman, R., & Keefe, E.B. (1997). Effects of instructional variables on engaged behavior of students with disabilities in general education classrooms. *Exceptional Children*, *63*, 481-498.

Madden, N.A., & Slavin, R.E. (1983). Mainstreaming students with mild handicaps: Academic and social outcomes. *Review of Educational Research*, *53*, 519-569.

Maheady, L., Sacca, M.K., & Harper, G.F. (1987). Classwide student tutoring teams: Effects on the academic performance of secondary students. *Journal of Special Education*, *12*, 107-121.

Manset, G., & Semmel, M.I. (1997). Are inclusive programs for students with mild disabilities effective? A comparative review of model programs. *Journal of Special Education*, *31*, 155-180.

Mathur, S.R., & Rutherford, R.B. (1991). Peer-mediated interventions promoting social skills of children and youth with behavioral disorders. *Education and Treatment of Children*, *14*, 227-242.

McDonnell, J., Hardman, M., Hightower, J., & Kiefer-O'Donnell, R. (1991). Variables associated with in-school and after-school integration of secondary students with severe disabilities. *Education and Training in Mental Retardation*, *26*, 243-257.

McDonnell, J., Thorson, N., McQuivey, C., & Kiefer-O'Donnell, R. (1997). Academic engaged time of students with low-incidence disabilities in general education classes. *Mental Retardation*, *35*, 18-26.

McDougall, D., & Brady, M.P. (1998). Initiating and fading self-management interventions to increase math fluency in general education classes. *Exceptional Children*, *64*, 151-166.

McGregor, G., & Vogelsberg, R.T. (1998). *Inclusive schooling practices: A synthesis of the literature that informs best practices about inclusive schooling.* Monograph prepared under grant no. H086V40007 for the U.S. Department of Education.

Meyer, L.H., Minondo, S., Fisher, M., Larson, M.J., Dunmore, S., Black, J.W., & D'Aquanni, M. (1998). Frames of friendships. Social relationships among adolescents with diverse abilities. In L.H. Meyer, H. Park, M. Grenot-Scheyer, I.S. Schwartz, & G. Harry (Eds.), *Making friends: The influences of culture and development* (pp. 189-218). Baltimore: Paul H. Brookes.

Miller, L.J., Strain, P.S., Boyd, K., Hunsicker, S., McKinley, J., & Wu, A. (1992). Parent attitudes toward integration. *Topics in Early Childhood Special Education*, *12*, 230-246.

O'Connor, R.E., & Jenkins, J.R. (1996). Cooperative learning as an inclusion strategy: A closer look. *Exceptionality*, *6*, 29-51.

Odom, S., & Strain, P.S. (1986). A comparison of peer-initiation and teacher-antecedent interventions for promoting reciprocal social interaction of autistic preschoolers. *Journal of Applied Behavior Analysis*, *19*, 59-71.

Odom, S.L., Deklyer, M., & Jenkins, J.R. (1984). Integrating handicapped and nonhandicapped preschoolers: Developmental impact on nonhandicapped children. *Exceptional Children*, *51*, 41-48.

Osguthorpe, R.T., & Scruggs, T.E. (1986). Special education students as tutors: A review and analysis. *Remedial and Special Education*, *7*, 15-26.

Peck, C.A., Donaldson, J., & Pezzoli, M. (1990). Some benefits adolescents perceive for themselves from their social relationships with peers who have severe disabilities. *Journal of the Association for Persons with Severe Handicaps*, *15*, 241-249.

Ryndak, D.L., Downing, J.E., Morrison, A.P., & Williams, L.J. (1996). Parents' perceptions of educational settings and services for children with moderate or severe disabilities. *Remedial and Special Education*, *17*, 106-118.

Sale, P., & Carey, D.M. (1995). The sociometric status of students with disabilities in a full-inclusion school. *Exceptional Children*, *62*, 6-19.

Salisbury, C.L., & Palombaro, M.M. (1998). Friends and acquaintances: Evolving relationships in an inclusive elementary school. In L.H. Meyer, H. Park, M. Grenot-Scheyer, I.S. Schwartz, & B. Harry (Eds.), *Making friends. The influences of culture and development* (pp. 81-104). Baltimore: Paul H. Brookes.

Salisbury, C.L., Evans, I.M., & Palombaro, M.M. (1997). Collaborative problem-solving to promote the inclusion of young children with significant disabilities in primary grades. *Exceptional Children*, *63*, 195-210.

Sasso, G.M., & Rude, H.A. (1987). Unprogrammed effects of training high-status peers to interact with severely handicapped children. *Journal of Applied Behavior Analysis*, *20*, 35-44.

Schnorr, R.F. (1990). "Peter? He comes and goes. . . ." First graders' perspective on a part-time mainstream student. *Journal of the Association for Persons with Severe Handicaps*, *15*, 231-240.

Schnorr, R.F. (1997). From enrollment to membership: "Belonging" in middle and high school classes. *Journal of the Association for Persons with Severe Handicaps*, *22*, 1-15.

Sharpe, M.N., York, J.L., & Knight, J. (1994). Effects of inclusion on the academic performance of classmates without disabilities. *Remedial and Special Education*, *15*, 281-287.

Staub, D., Schwartz, I.L., Gallucci, C., & Peck, C.A. (1994). Four portraits of friendship at an inclusive school. *Journal of the Association for Persons with Severe Handicaps*, *19*, 314-325.

Strain, P.S., & Odom, S.L. (1986). A comparison of peer-limitation and teachers-antecedent interventions for promoting reciprocal social interaction of autistic preschoolers. *Journal of Applied Behavior Analysis*, *19*, 57-71.

Turnbull, A.P., Winton, P.J., Blacher, J., & Salkind, N. (1982). Mainstreaming in the kindergarten classroom: Perspectives of parents of handicapped and nonhandicapped children. *Journal of the Division for Early Childhood*, *6*, 14-20.

Voeltz, L.M. (1982). Effects of structured interactions with severely handicapped peers on children's attitudes. *American Journal of Mental Deficiency*, *86*, 380-390.

Wang, M.C., & Birch, J.W. (1984). Comparison of a full-time mainstreaming program and a resource room approach. *Exceptional Children*, *51*, 33-40.

York, J., & Tundidor, H. (1995). Issues raised in the name of inclusion: Perspectives of educator, parents, and students. *Journal of the Association for Persons with Severe Handicaps*, *20*, 31-44.

Zigmond, N., & Baker, J.M. (1990). Mainstreaming experiences for learning disabled students (Project MELD): Preliminary report. *Exceptional Children*, *57*, 176-185.

SCHOOL DISCIPLINE AND STUDENTS WITH DISABILITIES

When students with disabilities are involved in misconduct, implementation of discipline policies can be perceived as complex because of laws designed to protect these students' civil rights. Prior to 1975, an estimated 1 million students with disabilities were excluded from public elementary and secondary schools on the basis of their disability. Public Law 94-142 included due process protections to guard against further exclusion of students with disabilities on the basis of disability. In *Honig v. Doe,* the Supreme Court found that "Congress very much meant to strip schools of the unilateral authority they had traditionally employed to exclude disabled students, particularly emotionally disturbed students, from school." One of the limits to this authority, the "stay-put" provision, was interpreted by the Court to require that students remain in their current educational placement during due process proceedings. Districts seeking to change the educational placement of a student with a disability against the parent's will could seek a court order but could not unilaterally remove the student from school for more than 10 days. In the past 20 years, case law has defined suspensions or expulsions of more than 10 days in a school year as a change of educational placement subject to the IDEA stay-put provision.

Recent education policy reflects an attempt to balance the rights of students with disabilities to a free appropriate public education with the rights of students to an educational environment that is safe and conducive to learning. This module describes Federal policies regarding discipline and students with disabilities, summarizes available research relevant to those policies, and outlines the discipline provisions enacted in the IDEA Amendments of 1997.

In recent years, the stay-put provision has been perceived as conflicting with goals for safe and drug-free schools by limiting the authority of school personnel to unilaterally remove students with disabilities from school for disciplinary infractions without regard for the nature of the disability or the appropriateness of behavioral interventions. Furthermore, anecdotal evidence suggests that students with disabilities continue to receive services in general education classes and schools after committing dangerous acts because of the protections awarded in IDEA, while nondisabled students are suspended or expelled for similar misconduct. The perception of a double standard has raised concern about the fairness of school discipline policies for students with disabilities (Egnor, 1996). In one qualitative study, many teachers and administrators indicated that students with disabilities should be subject to "the same disciplinary actions as other students." Some speculated that students with individualized education programs (IEPs) were aware of differences in disciplinary procedures and took advantage of the protections afforded by their special status (Butera, Klein, McMullen, & Wilson, 1998).

These perceptions raise two questions that are relevant to policy. First, to what extent are students with disabilities actually engaged in misconduct, particularly acts that are a threat to themselves or others? Second, to what extent are students with disabilities excluded from school through suspension or expulsion, as a result of misconduct?

School Misconduct/School Discipline for Students with Disabilities

Under contract with the U.S. Department of Education, the Research Triangle Institute (RTI) conducted a study of misconduct and discipline for students with disabilities using extant data from States and districts. The study found that most States did not collect the data necessary for assessing the extent or type of misconduct by students with disabilities or the disciplinary actions resulting from that misconduct. IDEA due process hearings around issues of misconduct were rare, as were court injunctions to remove dangerous students from school pending an IEP meeting. Suspension of students with disabilities was quite common, especially for males and for students with emotional disturbance. Almost 28 percent of all special education students who were suspended or expelled had emotional disturbance, while less than 9 percent of all special education students had emotional disturbance. Males were more likely than females to be suspended or expelled, and the gender discrepancy was greater among students with disabilities than for the entire school population (Fiore & Reynolds, 1996). However, this discrepancy may be attributable to the disproportionate representation of males in special education.

The researchers concluded that students with disabilities were suspended and expelled at rates that exceeded their proportion in the school population (Fiore & Reynolds, 1996). This finding was supported by a Kansas study, which found that students with disabilities were suspended/expelled at twice the rate of their nondisabled peers (Cooley, 1995). However, data from the 1994 Office for Civil Rights (OCR*) Elementary and Secondary School Compliance Reports* did not support this finding. Although disproportion was evident in a few States, an estimated 6.2 percent of students with disabilities nationwide were suspended for at least 1 day in 1994 compared to 7.2 percent of all students (U.S. Department of Education, 1994).

Findings on the use of corporal punishment were also discrepant. Data from OCR (1994) show that approximately 0.7 percent of students with disabilities were subject to corporal punishment compared with 1.1 percent of students overall (see table III-5). This finding contrasts with the findings of a study of 4,391 discipline records from nine Florida schools (McFadden, Marsh, Price, & Hwang, 1992). In that study, 56 percent of students with disabilities caught fighting received corporal punishment, compared to 36 percent of nondisabled students.

Table III-5
Number and Percentage of Students with Disabilities Subject to Different Types of School Discipline: 1994

	All Students		Students with Disabilities	
	Number	Percent	Number	Percent
Students suspended more than 1 day	3,078,314	7.2	288,508	6.2
Students subject to corporal punishment	470,683	1.1	30,541	0.7

Source: U.S. Department of Education, Office for Civil Rights. (1994). *Elementary and secondary school Civil Rights compliance reports.* Washington, DC: Author.

With regard to the types of misconduct committed, Fiore and Reynolds (1996) estimated that 80 percent of reported incidents involving students with disabilities were fights or general misconduct. Weapons offenses accounted for 6 percent of all reported misconduct for students with disabilities and 5 percent of misconduct overall. The vast majority of weapons offenses involved possession or concealment as opposed to use.

McFadden et al. (1992) found that defiance of school authority (27 percent), bothering others (20 percent), fighting (15 percent), and unacceptable physical contact (8 percent) were the most common offenses for students with disabilities. Defiance of authority, fighting, and bothering others were also common among nondisabled students. However, 12 percent of nondisabled students were disciplined for truancy, a form of misconduct that was rare for students with disabilities.

Cooley (1995) found no differences in the types of misconduct leading to suspension/expulsion of students with and without disabilities. For all students, disobedience, altercations with other students, disrespect, and smoking were the most frequent forms of misconduct leading to suspension/expulsion. Incidents involving weapons and drugs were far less common. Of those students with disabilities who were suspended/expelled, 3 percent were suspended/expelled for a drug offense, 2 percent for possessing a gun, and 2 percent for possessing a knife. These percentages were very similar to the percentages for students without disabilities.

Discipline Provisions of the IDEA Amendments of 1997

The 1997 Amendments contain exception to the stay-put provision; the exception states that if a student with a disability brings a weapon to school, commits a drug offense, or a hearing officer determines that the district has demonstrated by substantial evidence that maintaining the student's current placement is substantially likely to result in injury to the child or others, the student may be placed immediately in an interim alternative educational setting (AES) for up to 45 days. The student's IEP team and, in the case of a hearing, the hearing officer, are given the authority to determine an appropriate interim AES. This policy gives local administrators the authority to unilaterally change a student's educational placement under certain circumstance but also provides protections for students. Students placed in an interim AES are guaranteed access to the general education curriculum, continuation of IEP-specified services, a functional behavioral assessment, and implementation of positive strategies to address behavior.

Under Section 615(k)(1)(A)(ii) and (B):

> (A) School personnel . . . may order a change in the placement of a child with a disability--(ii) to an appropriate interim alternative educational setting for the same amount of time that a child without a disability would be subject to discipline, but for not more than 45 days if--(I) the child carries a weapon to school or to a school function . . . ; or (II) the child knowingly possesses or uses illegal drugs or sells or solicits the sale of a controlled substance while at school or a school function . . . [I]f the local educational agency did not conduct a functional behavioral assessment and implement a behavioral intervention plan for such child before the behavior that resulted in the suspension . . . , the agency shall convene an IEP meeting to develop an assessment plan to address that behavior; or (ii) if the child already has a behavioral intervention plan, the IEP Team shall review the plan and modify it, as necessary, to address the behavior.
>
> A hearing officer under this section may order a change in the placement of a child with a disability to an appropriate interim alternative educational setting for not more than 45 days if the hearing officer--(A) determines that the public agency has demonstrated by substantial evidence that maintaining the current placement of such child is substantially likely to result in injury to the child or to others . . . .

The IDEA Amendments of 1997 require that States report to the Secretary each year the number of students with disabilities removed to interim educational settings, the

acts precipitating those removals, and the number of students with disabilities subject to long-term suspension or expulsion. Those requirements indicate that:

> Each State . . . shall provide data each year to the Secretary . . . on . . . (I) the number of children with disabilities, by race, ethnicity, and disability category, who under subparagraphs (A)(ii) and (B) of section 615(k)(1), are removed to an interim alternative educational setting; (II) the acts or items precipitating those removals; and (III) the number of children with disabilities who are subject to long-term suspensions or expulsions . . . . (§618(a)(1)(A)(vii))

States will begin reporting these data in 1998-99. The IDEA Amendments of 1997 also require that States examine "data to determine if significant discrepancies are occurring in the rate of long-term suspensions and expulsions of children with disabilities--(i) among local educational agencies in the State; or (ii) compared to such rates for nondisabled children within such agencies." (§612(a)(22)(A))

Nowhere in the provisions of IDEA or in other Federal statutes do lawmakers specifically recognize students with disabilities as likely victims of school violence and misconduct. Research suggests that individuals with mental retardation are vulnerable to psychological and physical abuse (Edgerton, 1981; Halpern, Close, & Nelson, 1986); adolescent males with learning disabilities are more likely than their peers without disabilities to be victims of crime (Bryan, Pearl, & Herzog, 1989); and youth with emotional disturbance who exhibited low personal/social skills were more likely than other youth with disabilities to be victimized during their school careers (Doren, Bullis, & Benz, 1996).

Summary

The IDEA Amendments of 1997 sought to clarify the relationship between the right to a safe learning environment and the rights of students with disabilities to a free appropriate public education. Limitations in available data preclude a thorough assessment of the extent to which students with disabilities are subject to long-term suspension or expulsion. In fact, it is not clear whether students with disabilities are more likely than students without disabilities to engage in serious misconduct or to be suspended from school. The IDEA Amendments of 1997 require States to report the number of students with disabilities subject to long-term suspension/expulsion and removed to AESs for disciplinary reasons. States will begin reporting these data to the Office of Special Education Programs in 1998-99.

References

Bryan, T., Pearl, R., & Herzog, A. (1989). Learning disabled adolescents' vulnerability to crime: Attitudes, anxieties, experiences. *Learning Disabilities Research*, *5*, 51-60.

Butera, G., Klein, H., McMullen, L., & Wilson, B. (1998). A statewide study of FAPE and school discipline policies. *The Journal of Special Education, 32,* 108-114.

Cooley, S. (1995). *Suspension/expulsion of regular and special education students in Kansas: A report to the Kansas State Board of Education.* (ERIC Document Reproduction Service No. ED 393 403)

Doren, B., Bullis, M., & Benz, M.R. (1996). Predictors of victimization experiences of adolescents with disabilities in transition. *Exceptional Children*, *63,* 7-18.

Edgerton, R.B. (1981). Crime, deviance, and normalization: Reconsidered. In R.H. Bruininks, C.E. Meyers, B.B. Sigford, & K.C. Lakin (Eds.*), Deinstitutionalization and community adjustment of mentally retarded people* (pp. 145-166). Washington, DC: American Association on Mental Deficiency.

Egnor, D. (1996). IDEA reauthorization and the debate on schools' disciplinary procedures under IDEA. *Focus on Exceptional Children, 29,* 17-22.

Fiore, T.A., & Reynolds, K.S. (1996). *Analysis of discipline issues in special education.* Research Triangle Park, NC: Research Triangle Institute.

Halpern, A., Close, D., & Nelson, D.J. (1986). *On my own: The impact of semi-independent living programs for adults with mental retardation*. Baltimore: Paul H. Brookes.

Individuals with Disabilities Education Act Amendments of 1997 (IDEA), P.L. 105-17. 20 U.S.C. § 1400 *et seq*.

McFadden, A.C., Marsh, G.E., Price, B.J., & Hwang, Y. (1992). A study of race and gender bias in the punishment of handicapped school children. *The Urban Review, 24,* 239-251.

U.S. Department of Education, Office for Civil Rights (1994*). Elementary and secondary school Civil Rights compliance reports.* Washington, DC: Author.

PREPARING TEACHERS TO SERVE STUDENTS WITH VISUAL IMPAIRMENTS[1]

Administrators of schools and agencies that provide services to persons with visual impairments have raised concerns about the growing shortage of teachers for children with visual impairments, orientation and mobility (O&M) instructors, and rehabilitation teachers[2] (Wiener & Joffee, 1993). Chronic shortages of trained personnel have been well documented in the literature (Head, 1989; Hunter, 1994; Silberman, Corn, & Sowell, 1996). Although the personnel shortfall affects students with visual impairments in all parts of the country, the impact appears to be greatest in rural areas, where the nearest teacher trained in visual impairments may be in a remote location or hundreds of miles away.

The personnel shortage is influenced by several factors, including limited public awareness of the field, specialized requirements such as Braille and hand-sign language that are not routinely taught in special education training programs, and the relatively low number of training programs designed specifically for vision specialists. The last factor may be particularly important: In recent years, more visual impairment training programs have closed than have opened (Corn, Ferrell, Spungin, & Zimmerman, as cited in NASDSE, 1997). The low number of training programs in the visual impairment field suggests that the personnel shortage will not lessen in the near future. The Office of Special Education Programs (OSEP) has joined with university researchers and other agencies to develop innovative programs that are designed to reduce the shortage of teachers for students with visual impairments.

This module first describes the population of students served by visual impairment specialists and looks briefly at some of the factors that contribute to the shortage of teachers in this field. The second section of the module examines training programs in the field and its specialty areas, such as deaf-blindness and O&M, and the third section discusses licensure issues. The final section presents initiatives aimed at reducing the shortages of teachers for students with visual impairments, with an emphasis on OSEP-funded research and personnel preparation projects.

---

[1] The term "visual impairments" will be used throughout this module to describe students who are blind or deaf-blind, or who have low vision.

[2] Because rehabilitation teaching in visual impairments involves working with persons with adult-onset blindness, this specialty area is less relevant to students with visual impairments and is not treated in depth here.

Students Served by Visual Impairment Specialists

The population of students served by visual impairment specialists is quite varied and includes those who have low vision or those who are blind or deaf-blind. Students with multiple disabilities that include visual impairments or deaf-blindness may be reported under those categories or under the multiple disabilities category. In addition, noncategorical reporting affects the number of children reported as receiving services for visual impairments.

All States use noncategorical reporting methods for children ages birth through 2, and States now have the option of using the developmental delay category for children ages 6 through 9; Data on disability category are not collected for children ages birth through 5. Five States allow noncategorical reporting beyond age 5: Idaho (through age 9) Iowa and Massachusetts (through age 21), Minnesota (through age 6), and Virginia (through age 7) (NECTAS, 1998). Categorical reporting of students ages 6-21 with visual impairments also varies across States. For example, in 1995-96, Michigan and Wyoming reported school-aged children with deaf-blindness in the hearing impairments category.

These reporting differences make it difficult to determine accurately how many children need special education and related services for visual impairments. This is an important issue because the number of children reported as receiving services under a given disability category is often one of the key determinants of funding priorities for preservice and in-service training.

In 1997-98, 26,070 students ages 6 through 21 were reported as receiving services for visual impairments under IDEA. An additional 1,463 students were reported as receiving services under the deaf-blind category. It is unclear how many children with visual impairments were reported noncategorically or under different categories for the 1997-98 school year.

Factors Contributing to the Shortage of Visual Impairment Teachers

Several factors that may contribute to the shortage of teachers for students with visual impairments were mentioned briefly in the introduction to this module. One such factor is the status of visual impairments as a low-incidence disability. Because public awareness of low-incidence disabilities is often limited, potential students usually are not aware of and thus do not consider careers in the field (Mazzocco et al., 1992).

Students who do enter the visual impairments field soon learn that they have a number of career opportunities beyond classroom teaching, including adult rehabilitation, program administration, and university teaching. This is another factor in the shortage of teachers for 6- through 21-year-olds with visual impairments. Wiener, Fauver, and Schwartz (1995) conducted a study of persons employed in the visual impairments field across the United States and Canada. The 440 respondents were virtually all degreed professionals, with almost 84 percent holding a master's or doctoral degree. In addition, many had degrees specific to the visual impairments field: 25 percent held degrees in O&M, 9.3 percent in rehabilitation teaching, and 13 percent in special education, including the visual impairments specialty. The researchers found that although the largest percentage of their respondents were employed primarily as teachers of students with visual impairments, that percentage was only 27.7 percent. Twenty percent of the respondents worked in the O&M field, and almost 19 percent worked in administration. It is clear that at least in this sample, less than one-third of professionals in the visual impairments field were working primarily as teachers for students ages 6 though 21. The remaining respondents either worked in multiple settings or did not respond to the question.

Another possible factor in the teacher shortage is that the specialized skills required for teaching subgroups of students with visual impairments, such as Braille and hand-sign language, are not taught in typical special education training programs (Mazzocco et al., 1992). Learning these skills requires some degree of specialization during training. Special education teachers without such skills may not be able to teach students with visual impairments as effectively as teachers who do have these skills.

A final factor that contributes to the shortage of teachers for students with visual impairments is the relative lack of training programs in the visual impairments field. This aspect of the teacher shortage is best examined by looking individually at the different programmatic areas of training in the visual impairments arena: blindness and low vision, deaf-blindness, O&M,[1] and rehabilitation training. The next section of this module examines the availability of teacher training programs in the visual impairments field, including blindness and low vision, deaf-blindness, and O&M. The extent of the teacher shortage in each specialty area is also addressed.

[1] O&M specialists teach students independent travel skills, including the use of a long cane and residual vision, sensory skills, concept development, street crossings, route planning, and traveling by mass transportation.

Teacher Training Programs

Although the visual impairments field can be divided into several discrete areas of training, in many cases there is an overlap in program requirements and instruction. In addition, some programs incorporate visual impairment programs into their severe disabilities or multiple disabilities programs. There are often not clear lines between visual impairments training programs and other special education training programs or between the various visual impairments specialty programs themselves. This makes it difficult to determine how many visual impairments teacher training programs there are and how many graduates they produce.

There are 1,200 colleges and universities that graduate 500,000 students each year in the field of education (Doyle, as cited in McLetchie & MacFarland, 1995), but only a handful of these schools have programs in blindness and low vision, deaf-blindness, or O&M. Within the visual impairments field, there is disagreement as to the exact number of teacher training programs. According to one study (Corn, Ferrell, Spungin, & Zimmerman, as cited in NASDSE, 1997), there are 26 programs in 19 States that meet the standards established by the American Association for Education and Rehabilitation of the Blind and Visually Impaired (AER). These standards are stringent; perhaps the most binding is the requirement that programs have at least one full-time faculty member dedicated solely to visual impairments. Of the 26 programs that meet AER standards, 16 received OSEP funding, and 12 prepared graduates eligible as both vision and O&M specialists. However, the National Clearinghouse for Professions in Special Education (1997a) lists 51 colleges or universities with programs in visual impairments. At three of the schools, the highest degree offered is an associate degree, for specialized paraprofessional training in the field of blindness. Ten colleges or universities offer programs in deaf-blindness (McLetchie & MacFarland, 1995).

The shortage of visual impairments specialists appears to be multilevel, with low numbers entering the field at the bachelor's, master's, and doctoral levels (Bowen & Stearns, 1994; Head, 1989; Pierce & Smith, 1994). The shortfall is also apparent at the faculty level in colleges and universities. Silberman, Corn, and Sowell (1996) surveyed faculty members in the field of visual impairments to determine whether there were enough doctorate-level faculty members to train the needed number of classroom teachers at the bachelor's and master's levels. They surveyed 34 preparation programs for teachers of children with visual impairments, O&M instructors, and rehabilitation teachers.

Of the 69 faculty members who responded to the survey, only 28 reported spending their time in one specialization area, and 14 respondents reported spending at least half of their time in disability areas other than visual impairments. Fifty-nine of the

respondents planned to remain in the field for the next 5 years, five planned to retire, and five were unsure of their plans. Furthermore, 21 believed their positions would be filled when they retired, 5 anticipated that they would not be replaced, and 43 were unsure of the future status of the position. At the time of the study, only 2 of the 32 programs surveyed were in the process of hiring a full-time faculty member, and neither program had received any applications from people with doctorates in the applied areas. The study results led the authors to conclude that "the future of the programs continues to be threatened" (Silberman et al., 1996, p. 121).

Orientation and Mobility Programs

Wiener and Joffee (1993) surveyed student enrollment in O&M programs and found somewhat more promising results. In 1990, 186 students were enrolled in O&M programs, which the authors claim is an increase from 1985 enrollment levels. The rise is attributed in part to a cooperative student recruitment effort between AER and the Affiliated Leadership League of the Blind. The collaboration included innovative approaches to facilitating completion of required coursework, the strengthening of accreditation standards, and a video marketing effort. Weiner and Joffee (1993) believe that cooperative and innovative teamwork between these agencies and teacher training programs holds significant promise for effective solutions to the orientation and mobility teacher shortages.

Deaf-Blind Programs

In 1967, in response to the rubella epidemic of 1964-65 that resulted in more than 5,000 children being born with combined hearing and vision losses, the Federal government funded 10 Deaf-Blind Centers (Heumann, 1994; McLetchie, 1995). The Centers and Services for Deaf-Blind Children Program was established a year later. These programs served as the primary resource for direct services and personnel training for children with deaf-blindness, producing more than 100 graduates in this specialty area per year in the late 1960s and the 1970s. Most of those graduates became teachers for students with deaf-blindness, and some became administrators of the deaf-blind centers (McLetchie & MacFarland, 1995). The program was later amended to maintain direct services for children who are not served under a State-service mandate, provide technical assistance to improve services, and fund projects of research, innovation, development, and demonstration to improve knowledge and practices (Heumann, 1994).

However, significant changes within the field have made the task of addressing the needs of children with deaf-blindness more difficult in recent years. One such change, the geographic dispersion of the children receiving services, is due to inclusive programming. In 1983, the 215 children receiving services for deaf-

blindness in Maine, New Hampshire, Massachusetts, and Connecticut were served in 29 school buildings. In 1992, 267 children in these States were receiving services but in 218 different programs or sites (Collins, as cited in McLetchie & MacFarland, 1995). Yet the supply of qualified teachers needed to provide a quality education for children who are deaf-blind has become critically limited (Heumann, 1994).

State Licensure Requirements

The shortage of teachers for students with visual impairments may be exacerbated by a lack of standardization in State licensure requirements. Teacher training requirements vary by program and are often influenced by State department of education guidelines. Licensure qualifications also vary by State and may differ depending on whether a teacher enters the field of general visual impairments, O&M, or deaf-blindness. Forty-five States have specific requirements for individuals who seek to become visual impairment specialists. These States require that teachers either meet State licensure requirements in visual impairments or first meet the general special education licensure requirements and then take additional coursework to obtain an endorsement in visual impairments. Five States offer only generic or noncategorical licensure, which may have implications for children who need highly specialized services (National Clearinghouse for Professions in Special Education, 1997b).

DuPass and Fazzi (1996) found that of the 41 States responding to a survey about O&M licensure requirements, only 17 required O&M specialists to meet specific qualifications for employment. In most of those States, minimum qualifications included completion of an undergraduate or graduate program in O&M, AER certification as an O&M specialist, or both. These researchers also learned that in many of the States that do not have statewide qualifications for O&M specialists, local school districts, State schools for the blind, or private agencies that provide O&M services on a contract basis have established their own employment qualifications. In some cases, those qualifications were as stringent as those established by departments of education in other States. However, it is clear that although most States have established some form of minimum qualifications for visual impairment specialists, those qualifications can vary considerably by State.

Efforts To Produce More Qualified Teachers for Students with Visual Impairments

The shortage of teachers for students with visual impairments requires innovative, collaborative efforts between OSEP and other agencies. This section of the module highlights OSEP's partnership with the Council for Exceptional Children (CEC), the American Foundation for the Blind (AFB), and Texas Tech University as well as

other OSEP research investments aimed at helping ensure an adequate supply of qualified teachers for students with visual impairments. The AFB's national agenda, reflecting the changes needed in teacher training and strategies to help bring about those changes, is also discussed.

OSEP's Research and Training Initiatives

In 1997, OSEP awarded a 2-year grant to a consortium composed of the CEC, the AFB, and Division 17 of the Association for the Education of the Blind and Visually Impaired to conduct a national needs assessment and develop the National Plan for Training Personnel to Serve Children with Blindness and Low Vision (NPTP). Information on the NPTP can be found at *www.cec.sped.org/nptp.html*. Needs assessment data were collected through a national survey of teachers and field-based specialists and through telephone surveys, focus groups, and literature reviews. A national advisory board and other key stakeholders were involved in a strategic planning session and a series of followup consensus-building activities as well. The goal of the project was to reach consensus regarding national needs and problem-solving methods in the recruitment and preparation of teachers for students with visual impairments. The plan is scheduled for dissemination in early 2000.

In addition to the NPTP project, in 1999 OSEP was funding a number of other preservice and inservice training grants in the visual impairments field. Recognizing that personnel shortages "have created continuing demands for creative, practical, and productive personnel programs" (Spooner, Spooner, Algozzine, & Jordan, 1998, p. 122), OSEP has made particular investments in distance learning programs. Distance learning involves the separation of the learner from the instructor in location and in some instances time; it relies on technology such as interactive television, electronic mail, compressed video, and telephone link-ups (Spooner et al., 1998). The method allows teachers who are certified in other areas to obtain certification in the visual impairments field without traveling great distances and often while retaining their current teaching positions. Distance learning also provides training to teachers in areas of the country that lack certified teachers who specialize in visual impairments; this is particularly helpful in rural areas where there is little access to traditional training programs. The goal of most of these distance learning programs is to produce teachers who, after completing training, will remain in their local area and provide services to students with visual impairments (Spooner et al., 1998). Between 1995 and 1999, OSEP invested over $5 million in personnel preparation grant monies to fund 12 projects related to distance learning programs for personnel providing services to children with visual impairments.

A 2-year grant to the University of Arizona supported a project to train special and regular education teachers to work with students with visual impairments or deaf-

blindness in Arizona, as well as in Nevada and New Mexico, where there are no university personnel preparation programs that specialize in the instruction of these students. The project utilized three instruction methods, combining traditional and distance-learning approaches. The first, an alternative sites model, delivered courses on-site in Nevada and New Mexico. The alternative method model offered the same courses, but in a VideoCampus format, requiring only two weekends of on-site training. The third model, an alternative scheduling format, offered coursework in deaf-blindness in intensive workshops at the University of Arizona during the summer and fall semesters. The summer sessions involved 3-week workshops, and the fall sessions were held over a period of 5 weekends, to allow students who lived at a distance to attend.

Another distance learning program currently funded by OSEP is a collaborative effort between the University of Utah and Utah State University. This program prepares early interventionists to serve children ages birth through 5 with vision and hearing impairments. The program will enroll at least 18 students during each year of a 3-year period. Because this is an endorsement program, eligible students are already certified in special education. The program is offered simultaneously on campus and through distance learning. Clinical instructors travel all over the State to meet with students on a regular basis. Students complete required practica at sites close to home or at other sites during the summer.

In addition to distance learning programs, OSEP funds a number of more traditional personnel preparation programs for teachers and other personnel who provide services to children with visual impairments. For example, California State University at Los Angeles received a 4-year grant to train 48 qualified professionals in visual impairments. The project's emphasis is on training graduate students to be O&M specialists and teachers of children with visual impairments. Although it is less recognized by the literature, there is a shortage of teachers trained in visual impairment in urban areas as well as in rural areas. An OSEP-funded project in Chicago addresses this shortage. Northern Illinois University, in conjunction with the Chicago public schools, received a 4-year grant to train 20 Chicago public school teachers to work with students with visual impairments in kindergarten through 12th grade. The project has three goals: (1) to recruit well-qualified individuals to work in the Chicago public schools, (2) to train special educators in the area of visual impairments to meet the needs of students in a multicultural urban environment, and (3) to contribute to the research literature on these issues. Classes take place during the summer and in the evening during the school year. Project participants complete their student teaching in mentoring programs without taking a leave of absence from their other teaching duties. Each participant signs a statement pledging to teach

Table III-6
National Agenda Goal Statements

1. Students and their families will be referred to an appropriate education program within 30 days of identification of a suspected visual impairment.
2. Policies and procedures will be implemented to ensure the right of all parents to full participation and equal partnership in the education process.
3. Universities, with a minimum of one full-time faculty member in the area of visual impairment, will prepare a sufficient number of educators of students with visual impairments to meet personnel needs throughout the country.
4. Service providers will determine caseloads based on the needs of students and will require ongoing professional development for all teachers and O&M instructors.
5. Local education programs will ensure that all students have access to a full array of placement options.
6. Assessment of students will be conducted, in collaboration with parents, by personnel having expertise in the education of students with visual impairments.
7. Access to developmental and educational services will include an assurance that instructional materials are available to students in the appropriate media and at the same time as their sighted peers.
8. Educational and developmental goals, including instruction, will reflect the assessed needs of each student in all areas of academic and disability-specific core curricula

Source: Corn, A.L., Hatlen, P., Huebner, K.M., Ryan, F., & Siller, M.A. (1995). *The national agenda for the education of children and youth with visual impairments, including those with multiple disabilities.* New York, NY: American Foundation for the Blind.

children with visual impairments in the Chicago school system for a minimum of 5 years.

The National Agenda

In addition to OSEP's efforts to provide an adequate supply of well-trained teachers for students with visual impairments, the AFB issued *The National Agenda for the Education of Children and Youth with Visual Impairments, Including Those with Multiple Disabilities* (Corn, Hatlen, Huebner, Ryan, & Siller, 1995). The agenda represents a broad consensus of the changes needed in educational programs to meet the needs of students with visual impairments. It comprises eight goals and a commitment to achieve each goal by the year 2000 (see table III-6).

The eight goals "reiterate in a simple yet thorough manner the very same concepts that are at the core of our efforts to bring about lasting and effective educational reform at the U.S. Department of Education--ensuring that each individual student

receives the free appropriate education to which he or she is entitled under the law. Along with our efforts, school districts and States around the nation are actively engaged in education reform. Using our Goals 2000 and the School to Work initiatives in concert with IDEA as a framework for change, educators throughout the country are promoting comprehensive strategies for education reform based on high academic and occupational standards, improving teaching, and strengthening family involvement" (Heumann, as cited in Corn et al., 1995, p. V).

The agenda's third goal addresses personnel preparation. It states, "Universities, with a minimum of one full-time faculty member in the area of visual impairments, will prepare a sufficient number of educators of students with visual impairments to meet personnel needs throughout the country" (Corn et al., 1995, p. 6). The goal has five national and five regional, State, and/or local strategies. The national strategies are:

1. Develop a model of excellence for personnel preparation.

2. Encourage establishment of a national research center on the education of students with visual impairments, including those with multiple disabilities.

3. Develop a collaborative national recruitment program in conjunction with AER.

4. Encourage all university personnel preparation programs in the area of education of students with visual impairments to implement national standards.

5. Determine the number of teachers of students with visual impairments as well as O&M specialists who graduated from university preparation programs in 1995. Ensure that the number who will graduate in the year 2000 is the same or greater than the number in 1995 (Corn et al., 1995).

Part of the fourth goal also deals with teacher training issues; it addresses the need for ongoing professional development for all visual impairments teachers and O&M specialists. The goal includes a national strategy for developing an information base on a variety of training programs, including independent study, distance education, and mentoring programs.

Summary

There are persistent shortages of classroom teachers for students with visual impairments. Low numbers of doctoral-level faculty members and a relative lack of teacher training programs contribute to the shortage. In addition, most children with visual impairments are no longer clustered in schools for the blind, but are instead attending their neighborhood schools. The geographic dispersal of students has

increased the need for qualified personnel in the field and for innovative techniques for serving these students.

OSEP has taken steps to ensure that all children with visual impairments are served by qualified teachers, including funding a joint project of CEC, AFB, and Texas Tech University to develop a national plan for training teachers to serve children with visual impairments. OSEP also sponsors both traditional and innovative preservice and inservice training grants to universities to improve the training of teachers who work with these children. In addition, the AFB has issued a National Agenda that delineates areas of concern and offers strategies for change.

References

Bowen, M.L., & Stearns, K.E. (1994). *Low-incidence special education teacher preparation: A supply and capacity pilot study*. Normal, IL: Illinois State University.

Center for Exceptional Children. Information on the National Plan for Training Personnel to Serve Children with Blindness and Low Vision. Available online at www.cec.sped.org/nptp.html.

Corn, A.L., Hatlen, P., Huebner, K.M., Ryan, F., & Siller, M.A. (1995). *The national agenda for the education of children and youth with visual impairments, including those with multiple disabilities.* New York, NY: American Foundation for the Blind.

DuPass, M., & Fazzi, D.L. (1996). State qualifications for orientation and mobility specialists working in the public school system: A national survey. *RE: view, 28,* 136-144.

Head, D.N. (1989). The future of low incidence training program: A national problem. *RE: view, 21,* 145-152.

Heumann, J.E. (1994). Improving outcomes and quality of life for children, youth, and adults who are deaf-blind. *Deaf-Blind Perspectives*, *2*, 1-3.

Hunter, D. (1994). Now is the time for action. *Deaf-Blind Perspectives*, *2*, 10-11.

Mazzocco, V., Bina, M., Corn, A., Friedman, P., Graves, W., Herie, E., et al. (1992). Report of the professionalism work group. *Journal of Visual Impairment & Blindness*, *86*, 346-348.

McLetchie, B.A.B. (1995). Personnel preparation, past, present, and future perspectives. *Deaf-Blind Perspectives*, *3*, 15-18.

McLetchie, B.A., & MacFarland, S.C.Z. (1995). The need for qualified teachers of students who are deaf-blind. *Journal of Visual Impairment & Blindness, 89,* 244-248.

National Association of State Directors of Special Education. (1997). *Policy forum report: Training educators to work with students who are blind or visually impaired.* Alexandria, VA: Author.

National Clearinghouse for Professions in Special Education. (1997a). *Personnel preparation programs in visual impairments/blindness.* Reston, VA: Author.

National Clearinghouse for Professions in Special Education. (1997b). *State requirements for licensure of special educators, certification for related services, and reciprocity agreements*. Reston, VA: Author.

National Early Childhood Technical Assistance System (NECTAS). (1998). *NECTAS Notes, Issue 6*, 1-16.

Pierce, T.B., & Smith, D.B. (1994). Career choices of recent special education graduates holding doctoral degrees. *Teacher Education and Special Education, 17*, 129-136.

Silberman, R.K., Corn, A.L., & Sowell, V.M. (1996). Teacher educators and the future of personnel preparation programs for serving students with visual impairments. *Journal of Visual Impairment & Blindness*, *90*, 115-123.

Spooner, F., Spooner, M., Algozzine, B., & Jordan, L. (1998). Distance education and special education: Promises, practices, and potential pitfalls. *Teacher Education and Special Education, 21*, 121-131.

Wiener, W.R., & Joffee, E. (1993) The O&M personnel shortage and university training programs. *RE: view, 25,* 67-73.

Wiener, W.R., Fauver, R., & Schwartz, M. (1995). Survey of salaries of professionals in the field of blindness. *RE: view, 26,* 149-157.