2 STATE PERSPECTIVES ON MEETING PERSONNEL CHALLENGES

Closing the Gap Between Vision and Reality

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The vision presented to states with the passage of early intervention legislation was of a comprehensive, multidisciplinary, interagency, coordinated service system for infants and toddlers with disabilities and their families. This called for the restructuring of service delivery systems, delegating to states the task of creating one coordinated system from many existing fragmented and disjointed systems, each with its own set of rules and policies (Harbin, 1996; Harbin, Gallagher, & Lillie, 1991). Change, in general, is not easy, but it is even more complex when the target of change is an entire state system involving groups, agencies, and individuals at different levels in the system (Apter, 1994). Bridging the gap between the vision of Part H of the Education of the Handicapped Act Amendments of 1986, PL 99-457 (Infants and Toddlers), and the reality of its implementation has proven to be a very demanding challenge for state systems (Dokecki & Heflinger, 1989; Gallagher, Harbin, Thomas, Clifford, & Wenger, 1988; Gallagher, Trohanis, & Clifford, 1989; Garwood & Sheehan, 1989; Martin, 1989; McCollum & Bailey, 1991).

As with any legislative initiative that drastically changes a service delivery system, immediate personnel needs resulted from the passage of PL 99-457. States were faced with the reality that regardless of how comprehensive the design of a system, it would not be effective without competent and qualified personnel to implement it (Gilkerson, Hilliard, Schrag, & Shonkoff, 1987; McCollum & Bailey, 1991; Winton, 1990). This presented a particularly challenging task to systems that even before the passage of PL 99-457 reported shortages in the availability of early intervention personnel (McLaughlin, Smith-Davis, & Burke, 1986; Meisels, 1989). Hence, one of the greatest challenges that states have faced has been the development of a personnel system that ensures not only availability of but also high quality in all personnel (Harbin, Gallagher, & Batista, 1992; McCollum & Bailey, 1991; Winton, Catlett, & Houck, 1996). An analysis of states' progress toward implementing Part H found personnel development to be one of the areas in which the least amount of progress had been made (Harbin et al., 1992).

Of the 14 programmatic components to be addressed by each state participating in Part H of PL 99-457, two were related to the development of a statewide personnel system: 1) the setting of professional standards and 2) the design of a Comprehensive System of Personnel Development (CSPD). The components to be included in the development of this statewide system are summarized in Figure 2.1 (McCollum & Bailey, 1991). In general, early intervention services were to be provided by qualified personnel representing a range of disciplines. If necessary, new occupational categories could be created to support the new service delivery systems. Personnel standards requiring all early intervention personnel to meet the highest entry-level degree applicable to their given profession or discipline were to be used as basic minimum standards. The overall design of the CSPD was to include qualified personnel, a preservice system, an inservice system, methods for dissemination, and technical assistance. In addition, a set of special provisions was provided to support the unique nature of working with infants and their families. For example, staff development activities were to occur on an interdisciplinary basis and respond specifically to the interrelated nature of development in infancy and the skills necessary to help families enhance the development of their child and participate in the development and implementation of the individualized family service plan (McCollum & Bailey, 1991).

Although these components represent only 2 of the required 14, they are critical to the full implementation of the services required by the law (Bruder, Klosowski, & Daguio, 1991; Gilkerson et al., 1987; Meisels, Harbin, Modigliani, & Olson, 1988; Smith & Powers, 1987). As states have moved forward in the development of statewide systems and their required components, complex issues have arisen. Different activities have been used by individual states to implement these components under the assumption that each state is different in terms of the populations served, administrative structures, delivery models, geographic boundaries, collaborative efforts, and financial situations (Campbell, Bellamy, & Bishop, 1988; Striffler, 1995).

This chapter identifies and discusses critical issues, challenges, and strategies associated with the design and implementation of statewide personnel systems and shares the findings from a national survey on the directions that individual states have taken in bridging the gap between the vision and reality of PL 99-457. This chapter is organized around a set of questions used to guide states in considering the range of personnel issues involved in the development of their comprehensive, systematic personnel plans (Bruder & McCollum, 1991; McCollum & Bailey, 1991). These questions are as follows:

- I. Individuals included (personnel representing range of disciplines)
- II. Personnel standards
 - A. Highest standard
 - B. Infancy specialization
 - C. Assurance of qualified personnel
 - 1. Analysis of current status
 - 2. Steps to meet standards
- III. Comprehensive system of personnel development
 - A. Qualified personnel
 - B. Preservice system
 - C. Inservice system
 - D. Dissemination
 - E. Technical assistance
- IV. Special provisions
 - A. Interdisciplinary instruction
 - B. Variety of personnel C. Interrelated needs

 - D. Assistance to family

Figure 2.1. Components of a statewide early intervention personnel system.

- What personnel configurations and occupational categories will define the early intervention service delivery system?
- What kind of credentialing systems or structure will ensure that entry-level personnel are qualified for early intervention services?
- What systems will be used to enable early intervention personnel to meet qualifications or recommendations established for the statewide early intervention system?
- What are the characteristics of a statewide preservice system that will meet long-range, entry-level personnel needs?
- What system or structure will be needed to meet ongoing inservice and professional development needs?
- How will long-term personnel needs be determined?
- What structures and processes are needed to develop and institutionalize personnel standards and establish a comprehensive system for personnel development?

Using these questions as a guide for addressing state perspectives on meeting personnel challenges, information is given on why these areas are considered to be issues for states, what the challenges have been, what the survey and other sources of information revealed, selected examples of how states are addressing some of these issues, and suggestions for future directions.

ISSUES, CHALLENGES, AND STRATEGIES IN DESIGNING PERSONNEL SYSTEMS

States have used a variety of approaches to face the challenges of developing their statewide personnel systems. Information for this chapter on individual states was gathered from a variety of resources, including information obtained in a national survey of Part H coordinators as part of a follow-up study (Bruder, Hains, & Yates, 1995) to a national review of personnel standards that was completed during the spring of 1989 (Bruder et al., 1991). In addition to obtaining information about certification, licensure, and credentialing issues, the study gathered information on broader issues that states have faced in the development of their statewide personnel systems. States were asked to comment on the development of new occupational categories, the establishment of short- and longterm structures to support personnel in meeting new standards, state CSPD linkages, and preservice and inservice activities.

The Part H coordinators were initially contacted by telephone to provide a brief explanation of the survey and determine a time for a 30-minute telephone interview. A letter confirming the interview and a copy of the questions were then sent to each coordinator. In two of the interviews, the Part H coordinators believed they were unable to provide all of the information requested, and a referral was made to other Part H staff members more involved in the day-to-day personnel preparation activities. After the information of the accuracy of the data recorded and any necessary corrections. Forty-seven of the 50 states in addition to the District of Columbia participated in the telephone interviews.

Personnel Configurations and Occupational Categories

In addressing issues of personnel configurations and occupational categories, states had to consider first what staffing patterns would need to be established to support their early intervention service delivery systems. In addition to the disciplines listed in the law, each state was given the option of defining new occupational categories to meet the needs of their new system. Several states reported the development of new occupational categories for personnel who would provide services to infants, toddlers, and families (see Table 2.1). In response to the emphasis on family-centered services, some states added categories that recognized the importance of the role of families of young children with disabilities and developed new categories that could be filled by parents. Some examples include community resource parent (Vermont), community outreach worker (Massachusetts), family health adviser (Massachusetts), parent liaison (Illinois), and parent-to-parent specialist (Michigan). Typically, no license or certification is needed to fill these roles, although in most cases documentation of completion of specialized instruction is required. Thus, states were also faced with the development of instruction to support personnel in these new roles.

In addition to the development of roles recognizing the importance of support and coordination to families, several states have added new categories for various roles of professionals who provide early intervention services, including infant mental health specialist (Michigan), early intervention specialist (Illinois, Texas, Utah, Virginia), early interventionist (Massachusetts, Rhode Island, Vermont), child development specialist (Illinois), family support specialist (Illinois, Montana), intake specialist (Montana), and service coordinator (Illinois, Nebraska). Another approach, which was taken by Utah and Virginia, was to define occupational categories by multiple levels of preparation and experience in early intervention. For example, as shown in Figure 2.2, Utah uses the levels of EI Specialist III (individuals with licensure/certification and completion of a program of advanced studies), EI Specialist II (individuals with licensure/certification), EI Specialist I (individuals working as service coordinators and/or assistants), and EI aide (individuals working in paraprofessional roles). Other states have defined the requirements for an early interventionist at a single level. For example, Rhode Island requires a high school diploma, experience, instruction, and mentoring; Virginia requires a bachelor's degree in human services; and Illinois, Massachusetts, and North Carolina require advanced study beyond initial licensure/certification or degree. Thus, requirements for early interventionists vary considerably across states.

Credentialing Systems or Structures to Ensure Qualified Personnel

In setting new standards for early intervention personnel, many complex issues needed to be addressed to ensure that entry-level personnel were qualified for providing early intervention services. PL 99-457 required states to use the highest entry-level degree needed

Occupational category	State(s)	
Child development specialist	Illinois	
Community outreach worker	Massachusetts	
Community resource parent	Vermont	
Early intervention specialist	Illinois, Texas, Utah, Virginia	
Early interventionist	Massachusetts, Rhode Island, Vermont	
Infant mental health specialist	Michigan	
Intake specialist	Montana	
Family health adviser	Massachusetts	
Family support specialist	Illinois, Montana	
Parent liaison	Illinois	
Parent-to-parent specialist	Michigan	
Service coordinator	Illinois, Nebraska	

TABLE 2.1. Examples of new occupational categories



Figure 2.2. Levels of early intervention personnel in Utah.

for state credentialing (i.e., licensure, registration, certification) as a minimum standard requirement for all early intervention personnel. This forced states to reexamine their existing standards for personnel across disciplines because the development of a comprehensive, interdisciplinary system required that emphasis be placed equally on the needs of all professionals recognized under Part H (Bruder et al., 1991; Burke, McLaughlin, & Valdivieso, 1988). Consideration also had to be given to the unique knowledge and skills required to provide services to infants and toddlers and their families. The credentialing process needed to consider not only the broad experience of personnel already employed in the field but also recognize that future personnel might not have had access to specialized early intervention instruction in university programs. In addition, the process needed to apply to multiple disciplines working in different settings and different capacities (McCollum & Bailey, 1991). Two themes dominated discussions of standards: 1) how restrictive or extensive to make standards and 2) how to ensure that standards reflect inclusionary placements for young children with disabilities.

Extensiveness of Standards In establishing personnel standards, many states struggled with the conflict of whether to establish restrictive standards that would entail very extensive requirements or to add broader (more general) and less-restrictive standards. Although restrictive standards would ensure high-quality personnel, they might limit the number of available qualified service providers, whereas broader standards would allow more personnel to enter the field but result in less thoroughly prepared providers (Burke et al., 1988). This created a difficult situation for states already faced with shortages of

personnel under their previous service delivery systems. Accompanying this larger issue were many other issues, ranging from determining who should actually be expected to meet the new standards to finding appropriate avenues for making early intervention personnel aware of new standards and requirements (McCollum & Yates, 1994).

In the process of developing personnel standards, most states relied on existing state or national standards for licensure or certification. When no existing standards were available for a particular category, licensure or certification of other categories typically has been used (Bruder et al., 1991). For example, states might use existing licensing or certification standards for social workers, counseling psychologists, and school psychologists to define the family therapist category. In the 1995 study (Bruder et al., 1995), most states reported personnel standards for all required disciplines except nutrition. However, the information obtained also indicated an increase in the number of states working toward development of standards in nutrition (n = 30) in comparison with what was reported (n = 18) in 1991 (Bruder et al., 1991). Although most states have completed identifying personnel standards for all required disciplines, these standards do not always require demonstration of knowledge or instruction specific to the unique needs of infants and toddlers and their families.

Inclusionary Standards A few states, such as Illinois, Massachusetts, and North Carolina, have addressed issues related to including all disciplines by adding crossdisciplinary certification and/or credentials in early intervention. The Massachusetts Department of Health's cross-disciplinary certification is competency based for all 12 disciplines listed in PL 99-457. Personnel employed in early intervention programs must take an orientation course, and they have 3 years to achieve a set of early intervention core competencies. These competencies address infant and toddler development; program development and implementation (including family support, screening and evaluation, and intervention); collaboration (including interpersonal skills and service coordination); and policies, procedures, and advocacy. A portfolio approach is used to demonstrate the attainment of these competencies. The Massachusetts Department of Health hired a fulltime staff member to oversee the certification process and the evaluation of portfolios.

Illinois developed a new early intervention credentialing system that requires all personnel working with children birth to 3 years old to have additional early intervention instruction beyond the minimum entry license required by their discipline (McCollum & Yates, 1994). This process essentially defined a new entry level for both current and future personnel. Two credentialing mechanisms were developed to assist personnel in obtaining the new early intervention specialization: 1) a portfolio review process and 2) approved university programs. The individual portfolio process was designed to meet the needs of personnel who have not completed an early intervention specialization through a university program. It also addressed the needs of personnel currently employed in early intervention programs who may not meet the new minimum degree and/or specialization requirements. Using the portfolio approach, individuals obtain a minimum number of credit points, depending on their particular roles and backgrounds. As shown in Table 2.2, credit points may be obtained through a variety of activities. Portfolios are submitted for individual review by a credentialing committee comprising early intervention providers, parents, preservice and inservice instructors, and lead agency representatives.

North Carolina has an extensive certification system. This state identified specific competencies in seven general areas relevant to working with infants and toddlers and their families. To earn the Personnel Certificate, early interventionists must participate in training and demonstrate competencies in their work settings. All interventionists are required to obtain the Personnel Certificate within a specific period of time. Personnel with degrees related to working with young children are required to complete 9 additional

Activity	Credit points	Maximum points
Experience in early intervention birth to 3	1 year = 1 point	4
Early intervention inservice, continuing education	10 contact hours = 1 point 1 contact hour = .10 point	5
P*TElS ^a early intervention field training sites	8 contact hours = 1 point	5
P*TEIS staff mentoring process	8 contact hours = 1 point	5
Coursework	1 semester hour = 1.5 points	no maximum
P*TEIS validation of performance tasks	1 task = 1.5 points	no maximum
Other proposed tasks	(proposed by individual)	2

TABLE 2.2. Illinois portfolio credit points

^aP*TEIS, a federally funded Partnerships Project under the U.S. Department of Education, Office of Special Education and Rehabilitative Services, has supported a variety of training opportunities for credentialing early intervention personnel in Illinois.

instruction credits, and personnel with less relevant degrees are required to complete 18 credits. The Personnel Certificate is awarded after an examination of each individual's record by a local certifying program, in accordance with statewide standards.

Another means of addressing the development of inclusionary standards, as reflected in a number of states, is reform in the early childhood/early childhood special education certification and licensure standards. Although early childhood education/child development is not a Part H personnel category, many states are changing standards to include preparation of early childhood interventionists. States are merging general early childhood education and early childhood special education for teachers serving young children (birth to age 8 or birth to age 5) and their families. States that have adopted unified early childhood standards include Iowa, Kansas, Kentucky, and North Carolina.

The information obtained from the interviews with Part H coordinators indicates that, in general, movement continues to be slow. Although the initial response of most states to Part H was to adopt existing standards without modification (Bruder et al., 1991), there is ongoing concern that both disciplinary and cross-disciplinary competencies specific to early intervention still need to be addressed (Bruder et al., 1995). Although most states have not developed new occupational categories or changed existing standards to include specializations in early intervention, many states expressed interest in moving in this direction. Several states have a personnel committee or task force to address the issues raised when personnel do not have to meet any early intervention requirements within existing standards. Many questions and concerns have been raised about whether higher standards increase personnel shortages. States that have adopted higher standards did not believe that their systems had created personnel shortages, although specific studies had not been completed to officially address this issue. Other concerns that were raised, and that need to be addressed before these systems become institutionalized, centered around the costs and benefits of portfolio systems and inclusionary licensure processes.

COMPREHENSIVE SYSTEMS OF PERSONNEL DEVELOPMENT

The second personnel component in the development of a statewide personnel system is the design of a CSPD, which would include qualified personnel, preservice and inservice systems, methods for dissemination, technical assistance, and special provisions related to the unique nature of working with infants and toddlers and their families. These requirements mirror the CSPD provisions of Part B of the Education for All Handicapped Children Act of 1975, PL 94-142, and the Individuals with Disabilities Education Act Amendments of 1991, PL 102-119, (McCollum & Bailey, 1991) and could be included as part of the system developed for Part B. The interviews with Part H coordinators indicated that most states had separate CSPD systems for Part H and Part B. Several states (e.g., Utah, Washington) reported having a birth to 21 CSPD system including Part H and Part B. The differences in lead agencies were reported as a major personnel preparation issue in states where these two systems were separate. Many states reported that although the Part H CSPD system was separate, it shared several common committee members, exchanged meeting minutes, and held joint conferences with the Part B system. Others expressed concern over the lack of communication between the two systems and were working on building these relationships. Even states with a unified CSPD system on paper were not always unified.

As states have moved beyond the initial period of reacting to the new legislation, concern has shifted to issues of building infrastructures to support the new systems. One approach, present in most states, has been to create a system that uses existing infrastructures to support ongoing instruction and technical assistance. This goal ties into the intent of Part H in that the "new" system should be built on the strength of the already existing system. The task was not to duplicate existing instruction or other personnel development structures but to build on what was already available (Apter, 1994; Miller, 1992). Nevertheless, most states have found their existing systems to be fragmented and disjointed, creating yet another challenge in meeting the demands of developing a coordinated, statewide personnel development system.

The following section addresses issues that states have faced as they have moved forward in the development of their statewide CSPDs. Challenges include how the system would help current personnel to meet the new qualifications; how it would meet the longrange needs of personnel; and what systems or structures could be established to meet the ongoing inservice, preservice, and professional development needs.

Systems to Enable Current Personnel to Meet Standards

As stated previously, the system changes had the potential to increase an already existing personnel shortage (Meisels, 1989; Meisels et al., 1988; Yoder & Coleman, 1990). The question arose as to whether states would have staff available who met the minimum requirements for their discipline and who were also adequately prepared to meet the unique needs of infants and toddlers and their families. In addressing these issues, it became obvious that current personnel could serve as one of the best sources of recruits. Most direct service providers not only have valuable experience with infants and toddlers but have also participated in a variety of types of instruction specific to early intervention (McCollum & Bailey, 1991). Thus, states could choose to implement a short-term system to overcome current shortages by upgrading the skills of existing personnel who required additional instruction to achieve an appropriate entry level and qualify them to work with infants and toddlers and their families. In addition to these short-term solutions, current and future personnel would need to be supported by the planning and implementation of long-term systems.

The survey indicated that states vary greatly in their decisions to implement shortand/or long-term approaches to personnel development. States with a history of early intervention programs and federal- or state-funded planning efforts reported having fewer problems instituting short- and long-term plans than those that did not. Twenty-three states reported requiring the highest standard for credentialing without implementing short-term strategies to upgrade the skills of current personnel to new standards. A frequent rationale was that standards were already required for Medicaid-funded services; thus, short-term measures were not necessary. Many states that did develop short-term strategies to accommodate current personnel used emergency or provisional licenses (ranging from 2 to 5 years), reimbursement of tuition for coursework toward full qualification, grants or contracts with institutions of higher education to develop preservice programs for preparing personnel in targeted disciplines (e.g., early childhood special education, nursing, occupational therapy, physical therapy, speech-language pathology), and inservice courses offered through the lead agency (e.g., Ohio offers two early intervention courses through the Department of Health). "Grandfather" clauses for personnel already employed in early intervention were also used (e.g., in Arkansas, Iowa, Nevada, New Jersey, New Mexico, Texas). A few states provided tuition reimbursement and inservice staff development opportunities to support existing personnel in achieving new entry-level requirements (e.g., Illinois, Massachusetts, Vermont).

A number of states identified the Part H CSPD as the long-term structure supporting their standards. Many states indicated that once standards were set, they assumed they were being implemented and appropriately regulated by the licensing agencies for each discipline. States reported that at the local level programs would address the long-term structure supporting the standards by employing appropriately credentialed personnel. As an example, Arkansas was in the process of having state agencies include early intervention standards as part of the yearly employee contract agreements. Several states reported that their plan was to use the preservice personnel preparation system as part of their long-term structure by developing the capacity of university programs offering early intervention coursework across disciplines. Specific examples related to how states are accomplishing these goals at a preservice level can be found in the next section. Other states require staff to complete a certain number of hours per year of instruction specific to early intervention content.

In the short term, one of the major issues for states has been to support existing personnel as they adapt to the system changes and new approaches to service delivery, as well as to plan for preparing entry-level personnel at the college and university level. Reflecting on the issues raised in Janet's story in Chapter 1 not only reinforces the importance of designing systems that support the ongoing development of personnel but also highlights the magnitude of this task. Issues ranged from personnel feeling inadequately prepared at the preservice level to the frustrating experience of participating in statewide inservice activities as a means of "filling in the gaps," only to believe that specific needs had not been addressed.

Statewide Preservice Systems to Meet Long-Range Personnel Needs

Ensuring that a statewide preservice system is in place to support the development and supply of personnel has presented a number of challenges for states. Although it is unrealistic to expect that personnel needs can be completely met through traditional, university-based preservice programs, building the state's capacity in this area is crucial (McCollum & Bailey, 1991). However, there are few college and university preservice personnel preparation programs available that provide infancy specializations, regardless of discipline (Bailey, Simeonsson, Yoder, & Huntington, 1990; Courtnage & Smith-Davis, 1987).

One drawback is that developing new preservice programs or even integrating programmatic changes into existing programs can be a lengthy, involved process (Gallagher, 1989). Progress in this area is also affected by personnel certification and standards. Getting universities involved in the development of new programs is difficult when there are no financial incentives and a lack of certification and licensing standards for the various disciplines. Other barriers include lack of qualified faculty and lack of an identifiable job market.

A major barrier to meeting the personnel demands of early intervention has been the lack of collaboration between higher education and state agencies. Historically, the relationship between state government and higher education has been characterized by issues of autonomy and accountability (Fisher, 1988). State agencies are responsible for supplying personnel to service delivery programs, but they are not responsible for funding for universities to establish personnel preparation programs. Of the few preservice programs that offer infancy specializations, most have been funded on a short-term basis by federal grants. Universities need funding and time to initiate preservice programs. Both state agencies and universities are limited by constraints of time, funding, and authority in forging ahead with personnel preparation. Without additional incentives or external support for personnel preparation, significantly involving higher education in early intervention may continue to prove difficult.

States have taken a variety of approaches to addressing these barriers. For example, the federally funded Partnerships Project in Illinois offers small grants (minigrants) of \$2,000 to assist faculty in their efforts to develop early intervention instruction options. This process has been well received, with an average of 32 colleges and universities representing nine disciplines being awarded minigrants on a yearly basis. Minigrants have been used for activities such as establishing inter-university early intervention discussion groups, developing a student library containing early intervention resources, sponsoring parents as co-teachers, and developing early intervention coursework. Another example is Wisconsin, which has developed a Parents as Presenters model in which faculty can apply for funds to pay a small stipend to parents for presenting in preservice courses. Faculty from all public and private institutions of higher education across all disciplines can apply for stipends. A strategy used by several states to support faculty in their early intervention instruction roles has been to hold faculty development institutes to upgrade faculty knowledge and skills in early intervention. Many of these institutes were inspired by regional faculty development activities funded through federal grants sponsored by the Department of Education, Early Education Program for Children and Disabilities.

Many states reported that although they do not have a systematic program within a university that specifically focuses on early intervention, they have offered individual coursework that focuses on infancy content. For example, Delaware and Rhode Island have disseminated modules to faculty as a means of encouraging integration of early intervention content into existing curricula. These modules were developed and disseminated through the Northeast Regional Faculty Training Institutes to support states in their efforts to increase personnel preparation options. Several other states have used distance learning courses and teleconferences offered for university credit as a means of reaching a larger number of early intervention personnel (e.g., Arkansas, Nevada, Utah, West Virginia). Virginia Polytechnic Institute and State University has offered child development courses via e-mail and the Internet. In Massachusetts, the Department of Public Health sponsors an award program for participants in disciplines relevant to early intervention services. Five students enrolled in degree programs from nursing, early childhood, developmental or special education, social work, physical or occupational therapy, speechlanguage pathology, or psychology are awarded a \$2,000 stipend in their last year of training if they complete a practicum in early intervention (minimum of 250 hours). The recipients are also expected to work in a Massachusetts early intervention program for at least 1 year following their graduation. In addition, three senior fellowships are awarded for 1 year to seniors who wish to conduct research in an identified early intervention area of need. Each award for \$2,000 is to be used in a 6-month period to pay for educational expenses or to support release time from the early intervention program. Many other states reported that they are working toward assisting university programs to incorporate inter-disciplinary coursework, team teaching, and parents as co-instructors at the preservice level.

Systems to Meet Ongoing Inservice and Professional Development Needs

State and national standards for licensure and certification in specific disciplines do not typically include requirements for early intervention; therefore, preservice programs often do not include early intervention preparation. Based on this situation, the pattern that has emerged across states is a reliance on inservice activities for providing early intervention information to personnel. Although inservice instruction has been criticized as being ineffective (Bailey, 1989; Odom, 1987), the reality is that this continues to be a main avenue for instructing early intervention personnel. A 1996 study by Sexton and colleagues stated that part of the criticism has stemmed from the assumption that inservice instructional outcomes should result in positive practice changes within service delivery contexts, whereas in reality these service contexts are rarely taken into consideration during planning and evaluation activities. Sexton and his colleagues also pointed out that another reason for the lack of success with inservice instruction has been the immediate demand for appropriately instructed personnel, resulting in a "crisis-mentality" approach to inservice instruction. States quickly instruct large numbers of personnel in primarily didactictype instructional situations with no follow-up system. These are major challenges to determining the best and most cost-efficient way for a statewide system to support the development of qualified personnel.

Given the range of professionals who function as early intervention personnel, states have had to be creative in ensuring that professionals continue to develop early intervention competencies (Hanson & Brekken, 1991; Trohanis, 1994). Alternatives to large, didactic instructional activities have emerged as states have begun to make training more accessible and relevant to personnel. For example, Illinois developed several field-based training alternatives to expand existing options and offer geographically and financially accessible instruction to personnel. Two examples are staff mentoring and field instruction sites, both funded through a federal partnerships grant under the Department of Education. Staff mentoring (Wischnowski, Yates, & McCollum, 1996) provides individual guidance to personnel in one or more of the following areas of competence: legislation and program models, family-centered principles, assessment, intervention, service coordination, teaming, typical/atypical development, biological risk factors, and interagency collaboration. Mentees indicate an instructional need and are matched with a mentor with expertise in that area. Each mentor-mentee partnership includes a minimum of 8 hours of contact time, with at least half of this time completed at the mentee's site. Field training sites comprise six exemplary early intervention programs per year that are willing to provide 1 day of instruction (a minimum of four times per year) to share their strategies, techniques, and ideas with other early intervention personnel. They are awarded a \$2,000 minigrant to help with expenses. Both of these options not only offer a cost-effective way to meet individual instructional needs but also serve as a means of recognizing and building on the knowledge and expertise of early intervention personnel within the state (McCollum & Yates, 1994).

To coordinate instructional efforts, several states have developed inservice instructional modules that are presented statewide to ensure that all personnel receive consistent knowledge, skills, and philosophy. States such as Massachusetts and North Carolina have developed statewide orientation that includes overviews of new state systems as a means of meeting the needs of new personnel and ensuring the delivery of consistent information. Other states (e.g., Delaware, Idaho, Nebraska, Virginia) have developed instruction for specific job roles such as service coordinator. In addition, other states (e.g., Kansas, Oklahoma) have expanded their existing inservice instructional options by requiring personnel to attend instruction with the teams with whom they work. As an incentive, teams in these states are offered follow-up consultations at their worksites to assist in embedding workshop information into daily practice. Five states reported that annual statewide early intervention/early childhood conferences have supported collaborative efforts among instructional entities, accomplished through coordination and sponsorship of the conference by multiple state interagency groups. In general, the most common instructional events reported were conferences, inservice workshops, and short-term professional development activities.

Determining Personnel Needs

Another challenge for states has been the development of a systematic statewide needs assessment process to support the preservice and inservice aspects of the system (see Chapter 6 for more information on conducting needs assessment). Most states indicated that they had established a systematic means of identifying the instructional needs of personnel. These ranged from informal surveys to annual needs assessments. Some were individual needs assessments completed at the preservice level, whereas others represented a statewide, cross-agency survey of instructional needs. Several states regionalized their needs assessment process to better meet the needs of personnel in particular settings and geographic locations. Only a few states reported linkages between preservice and inservice instructional needs at the level of needs assessment information and planning; the majority of states reported no linkages at all between inservice and preservice systems. Most often two systems were in place, one charged with inservice and continuing education and the second with the preparation of new personnel at the preservice level.

Several states have moved forward in developing models that are more responsive to statewide personnel needs. For example, Maryland has an inservice model in which local and state instructional needs are assessed and met. Local programs in urban areas may indicate a continuing need for orientation of new staff, which represents a need that is not likely to be addressed at a statewide level. By assessing needs at both the local and state levels, the state is better able to meet and support the instructional needs of early intervention personnel. To further support this bilevel system, funds are allocated for both local and state instructional activities. Other states, such as Washington, contract with one of their institutions of higher education to design the statewide inservice activities based on the results of their needs assessment. This process not only serves as a means of linking preservice and inservice instructional efforts but also integrates into inservice instruction the issues being taught at the preservice level.

As states strive to meet the future needs of personnel within their systems, it also has been necessary to develop a structure for the ongoing collection of information related to the supply and demand of early intervention personnel (McCollum & Bailey, 1991). In response to the questions concerning critical shortages of personnel, 43 states reported shortages of occupational therapists, physical therapists, and speech-language pathologists. This finding is similar to information gathered in a 1990 supply-and-demand study in which substantial shortages were reported in these same three areas (Yoder & Coleman,

1990). Yoder and Coleman also documented a decline in personnel preparation programs in speech-language pathology with little indication that this situation would improve. This shortage of personnel, along with declining personnel preparation programs, creates additional barriers as states strive to meet the demands of full implementation of Part H. Many states have continued to strengthen existing personnel preparation programs; several states also expressed the desire to explore the role of community colleges in the development of early intervention personnel at the paraprofessional level. Part H coordinators also expressed concern over the retention of currently employed personnel. Forty-two states reported retention as a problem primarily due to the salary range for early intervention personnel and the unavailability of additional funds to increase salaries as an incentive to remain in the field.

Collaborative Statewide Personnel Structures

Collaboration is critical to the successful implementation of a comprehensive system that calls for instructional institutions, professional organizations, state agencies, and families to work together to develop personnel preparation opportunities (Hanson & Brekken, 1991; Rosin et al., 1996). The states surveyed for this chapter, however, identified many barriers to such collaboration. Achieving interagency collaboration and coordination has been difficult because multiple players contribute to the preparation of early intervention personnel; thus, creating linkages among the different levels of the service delivery system is critical if change is to occur. A CSPD should be representative of all key players, including institutes of higher education such as private and public universities and colleges, technical colleges, and university affiliated programs; families who have young children with special needs; people representing agencies conducting inservice instruction in the state; students who participate in preservice and inservice activities; professional associations encompassing all disciplines; service providers including early intervention direct service providers and child care providers; and state agencies including Part H and Part B. It also is critical for states to link the components of Part H and Part B under the state's CSPD plan. Differences in lead agencies and the structure of state mandates have often made articulation between these two systems difficult (Winton et al., 1996).

A significant challenge for states in building a more collaborative, linked system has been to identify, coordinate, and develop the resources necessary to accomplish this task (Winton, 1990). Questions such as who provides professional development in the state and how collaborative efforts can be facilitated across key players represent major issues. One mechanism that states have used to obtain this information has been to develop a map of the organizations and the key players. In the information obtained for a 1995 study (Bruder et al., 1995), states that were more successful in their collaborative attempts reported building broad personnel development systems that were interdisciplinary and interagency in nature. The important feature in those states was a designated group, such as a personnel committee of the state interagency council, to directly address the issues and lead, not just manage, the change process. Themes that emerged as necessary components across states included the following issues: identify the key players, identify instructional issues, set priorities and time lines, develop structures and incentives to support the retention of personnel, and identify funding sources.

CONCLUSION

The survey (Bruder et al., 1995) conducted for this chapter indicated that although states have put much energy into developing personnel systems responsive to the components described in early intervention legislation, significant work remains. Two areas that must receive priority are personnel standards and personnel shortages. In each, the experiences of other states can be a major source of guidance.

Personnel Standards

The initial study of personnel standards revealed that most states adopted existing standards without modification; few states developed new occupational categories (Bruder et al., 1991). The 1995 study replicated these findings; however, many states reported concern that disciplinary and cross-disciplinary competencies in early intervention still need to be addressed. Overall, these states reported that once existing state and national standards for licensure and certification were adopted, they turned their attention to other priorities such as expanding early intervention direct services. There is dissatisfaction with continued reliance on inservice activities, yet preservice programs continue to address existing standards. This has led to challenging situations, such as national professional standards not including early intervention; many states adopting existing national professional standards as institutes of higher education in these states provide preservice programs that meet existing standards; and new professionals entering the field without early intervention preparation.

The challenge is how to further refine existing standards to include early intervention and/or to develop new occupational categories. On examining the states that have accomplished these activities, a variety of approaches for exceeding minimum standards have been used successfully. All of these approaches require states to engage in continued development of personnel standards, and all will be influenced by each state's supplyand-demand issues, recruitment and retention efforts, and economic conditions. The assumption is that state regulatory standards for personnel are critical to the success of implementing the law and in providing guidance to institutions of higher education for their personnel preparation programs.

An additional approach is to consider national professional recognition. The professional disciplines identified in the federal legislation represent diversity in traditions, standards, levels, and models of personnel preparation. The Carolina Policy Studies Program found in a survey of 10 professional organizations that only 1 professional association (the Council for Exceptional Children) encouraged the establishment of a special certification (Gallagher & Coleman, 1990). All 10 organizations supported inservice activities and annual convention sessions on early intervention (Gallagher & Coleman, 1990). Many of these organizations planned to develop "best practice" guidelines (Gallagher & Coleman, 1990). Documents exist for early childhood special education, nursing, nutrition, occupational therapy, physical therapy, psychology, social work, and speech and language (cf. Miller & Stayton, 1996). These professional associations have delineated specific competencies required to work with infants, toddlers, and preschoolers with disabilities (Miller & Stayton, 1996); however, the documents are guidelines that are not part of the licensing or certification standards. In the future, these documents could become part of early intervention personnel standards through work within the organizations at a national level or through standards developed at the state level.

Other creative solutions also may emerge; for example, professional organizations may endorse a national early intervention standard with interstate recognition. The Interstate New Teacher Assessment and Support Consortium (1992) proposed model standards for beginning teacher licensing and development, an example of a national effort for consensus on teaching standards that cross state boundaries. The Division for Early Childhood (DEC) of the Council of Exceptional Children, National Association for the Education of Young Children (NAEYC), and Association of Teacher Education (ATE)

developed a position statement (1994) and guidelines for personnel standards for early education and early intervention (DEC, NAEYC, & ATE, 1995). This work, extended to discipline-specific associations, could achieve consensus on standards for personnel working in programs for young children with and without disabilities and their families. Given the wide range of the "highest entry-level standard," professional organizations must take a leadership role in providing guidelines for state agencies and institutions of higher education, following a similar movement that exists for teachers of school-age students.

Personnel Shortages

The 1995 study reported in this chapter (Bruder et al., 1995) replicated previous research documenting the critical shortages of early intervention personnel (Bruder et al., 1991; Striffler, 1995). Although the need for personnel, especially therapists, continues, a number of states have designed creative solutions that may lend guidance to those states attempting to overcome these shortages.

The use of paraprofessionals may increasingly emerge as a means of addressing shortages. In a survey of 31 states, 8 (Hawaii, Illinois, Maine, Massachusetts, North Carolina, South Carolina, Texas, and Utah) reported establishing occupational categories at the paraprofessional level (Striffler, 1993). Fifteen states reported the use of paraprofessionals or assistants in providing service coordination, and 18 states use paraprofessionals or assistants to deliver special instruction. Striffler (1993) outlined several factors that contribute to states' decisions to develop paraprofessional and/or assistant positions:

- Including parents as service providers and service coordinators
- · Providing services in rural and remote areas
- · Ensuring culturally and linguistically appropriate services
- Extending services into a range of settings (e.g., inclusive, community-based programs)
- Responding to the scarcity of professional staff (especially in occupational, physical, and speech therapy)
- · Responding to state budget and monetary constraints

Controversy remains over who (professional or paraprofessional) should do what under what circumstances; however, clarification of the specific role(s), job descriptions, selection and hiring criteria, and initial and continuing education expectations will increase the likelihood that paraprofessionals deliver early intervention services congruent with their states' vision of early intervention. Given the continued reports of shortages of personnel, more states undoubtedly will turn to paraprofessionals in the delivery of various early intervention services.

Another possible solution to personnel shortages is the development of career ladder or lattice strategies for promoting personnel toward full credentials. A conceptual model of a career lattice has been delineated by the NAEYC in promoting an articulated professional development system for early childhood education (Bredekamp & Willer, 1992). The lattice encompasses the concept of career ladders that assume that higher qualifications and greater levels of responsibility will translate into higher compensation (Bredekamp & Willer, 1992). For the profession as a whole, "a 'lattice' conveys the reality of early childhood education more clearly in that there are many diverse settings, roles and responsibilities in programs servicing children from birth through age eight" (Bredekamp & Willer, 1992, p. 48). The goal of a career lattice is to support movement from one system to another and to improve compensation so that increased opportunities exist for horizontal movement. In Utah, for example, a career ladder/lattice credential-level system extends credentials from personnel with a high school degree or equivalent to full licensure. Although 19 states are working in partnership with community colleges to develop programs for paraprofessionals in early intervention (Striffler, 1995), whether clear articulations exist between levels of credentials is unknown.

The steps necessary to develop personnel career ladder/lattice recruitment, instruction, and retention initiatives depend on the purpose. One important purpose should be to improve the cultural and linguistic diversity of personnel, a challenge identified by Part H coordinators in the survey by Striffler (1995). Historically, early intervention has been disproportionately dominated by young white females (Bowman, 1990; Fenichel & Eggbeer, 1991; Kontos & File, 1992). Individuals who are representative of families' home cultures and communities must be supported in entering and remaining in early intervention. Personnel who represent diversity are often employed in child care, Head Start, and other community-based programs (Garcia, McLaughlin, Spodek, & Saracho, 1995). South Carolina recognized this resource when state leaders approached the Regional Technical Schools to develop a child development associate degree program that includes the competencies for the early intervention assistant category.

States need to identify long-term, expanded ways to recognize and build on the strengths of nondegree professionals in early intervention settings. Simultaneously, states must develop alternative preservice and inservice opportunities to assist personnel in moving up educational and career ladders. New program approaches must take into account and provide proactive responses to the reality that personnel in early childhood themselves experience economic hardships, which limit the incentive and opportunity for them to gain educational experiences, and that multicultural personnel, especially in urban communities, already encounter the complex needs of families and children, including poverty, child abuse and neglect, substance abuse, and violence (Anderson & Fenichel, 1989; Arcia, Keyes, Gallagher, & Herrick, 1993; Christensen, 1992; Harry, 1992; Phillips & Crowell, 1994; Rosin et al., 1996).

High rates of staff turnover limit consistency in services and influence the quality of early intervention (Kontos & File, 1992). At a state level, one solution may be to recognize and support preservice and inservice personnel. For example, each year Massachusetts gives awards to early intervention practitioners who have completed 5 years of service in early intervention programs. This state also provides grants to a small number of preservice students during their internship or practicum experience (A. Schuman, personal communication, June 8, 1995). Both groups of recipients attend two seminars with state agency leaders and other early intervention specialists to discuss projects and experiences and emerging issues in the field. Although not specifically mentioned, professional support and recognition are also found in this award program. Through the seminars, informal support and mentorship likely occurs for both sets of recipients—either for entering or for continuing careers in early intervention. The award program also provides public recognition of personnel working in the field of early intervention.

Another solution that has been used in developing and maintaining quality personnel has been the development of program review and monitoring systems (Winton & Crais, 1996). For example, Alaska has developed a process for monitoring early intervention programs along with a 42-page program assessment tool (Alaska Early Intervention/Infant Learning Program, 1994) that includes a section addressing personnel issues. The monitoring process involves a 4-day site review conducted by parents of children with disabilities, "peers" from other early intervention programs, and representatives from area referral sources such as Head Start. Kansas has also developed a program review process

that consists of three phases: planning for the upcoming review and preliminary data collection, on-site visitation by a five-member team, and the development of a plan to address any areas of concern that were identified during the site visit. Personnel issues are addressed in all three phases. Participants include parents of children served by Part H, service providers, and the local interagency coordinating council (ICC). One unique feature of this process involves the completion of an instrument, the Self-Assessment for the Community Network (Kansas Infant-Toddler Services, 1993), by the local ICC. The instrument provides a framework for self-evaluation and addresses such issues as how the community has changed its services based on annual evaluations, how community facilitates opportunities for continuing education among staff members. Alaska and Kansas both use the information gathered through their review and monitoring systems to identify personnel issues and develop technical assistance plans that support the needs of early intervention staff (Winton & Crais, 1996).

Some solutions to personnel standards and personnel shortages will be found with the increasing use of technology. For example, the Internet provides inexpensive access to information and communication all day, every day (Reddick & King, 1996). Electronic mail has been found to facilitate collaborative opportunities between instructors and learners (Buchana, Rush, Krockover, & Lehman, 1993; Rush, 1993) and to support preservice students in practicum experiences (Hoover, 1994). With the emergence of the Internet, interdisciplinary gatherings of teachers and learners are no longer bound by space and time; however, structured support for personnel is necessary because the fear of computer technology still exists with faculty and students (Strudler, Quinn, McKinney, & Jones, 1995; Willis, Willis, Austin, & Colon, 1995).

Technology offers many potential supports for states. These include creating the "virtual" university where students within states, countries, or the world engage in instructional activities; extending communication globally but also across urban, rural, and remote regions within states; accessing expertise from colleagues as well as information provided by thousands of organizations, companies, and individuals all over the world at a moment's notice; conferencing with audio and video capabilities; facilitating state CSPD data gathering from institutions of higher education; and increasing networking among family members; service providers; local, state, and national organizations; and agencies (see the Appendix at the end of this chapter for selected Internet sources available as of 1996). Thus, states will be able to address many of their personnel concerns by entering into cyberspace.

States across the United States continue to address the need for personnel standards and comprehensive systems of personnel development. Many creative strategies have been developed to address the goals identified in Part H. Young children often ask on car trips, "Are we there yet?" and parents often respond, "No, not yet." Study results indicate that no state has "arrived" and that states are at varying distances depending on the destination (e.g., standards, shortages, preservice/inservice preparation). However, it is reassuring that states seem to be traveling the same road together.

RESOURCES

Division for Early Childhood, National Association for the Education of Young Children, & Association of Teacher Educators. (1995, June). Personnel standards for early education and early intervention: Guidelines for licensure in early childhood special education. *Communicator*, 21(3), 1–16.

Describes the knowledge and skills necessary for effective work with all young children, including those with special needs. This publication helps distinguish the roles of educators in both early childhood education and early childhood special education and outlines recommendations for licensure for early childhood special educators serving children with special needs in a variety of settings.

Division for Early Childhood Task Force on Recommended Practices. (1993). *DEC recommended practices: Indicators of quality in programs for infants and young children with special needs and their families.* Reston, VA: Division for Early Childhood of the Council for Exceptional Children. Cost: \$20 plus shipping. (800) 232-7373.

Recommended practices for programs designed to meet the special needs of infants and young children. Aspects of early intervention that are examined include assessment; family participation; individualized family service plans and individualized education programs; interventions for children who are gifted; and interventions to foster cognitive, communication, social, adaptive behavior, and motor skills. Suggestions for service delivery models, transitions, developing personnel competence, and evaluating programs are also included.

National Early Childhood Technical Assistance System (NEC*TAS). (1996, June). *Resources from the National Early Childhood Technical Assistance System*. Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. Cost: Free. (919) 962-2001.

A listing of the most current publications and technical assistance documents from NEC*TAS on key aspects of early intervention (e.g., assessment and eligibility, personnel issues). NEC*TAS publications are low-cost, high-quality documents designed to assist states in implementing effective early intervention programs. NEC*TAS also compiles and distributes lists of the Part H coordinators, Part B/619 coordinators, and directors of special education in each state and jurisdiction.

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APPENDIX

EARLY CHILDHOOD AND EARLY INTERVENTION-RELATED WEB LINKS

GENERAL DISABILITY

CEC: Council for Exceptional Children http://www.cec.sped.org

Family Village http://familyvillage.wisc.edu

Disability Resources http://www.icdi.wvu.edu/Others.htm

The Arc, a national organization on mental retardation http://www.metronet.com/~thearc/welcome.html

Disability-Related Resources on the Web http://www.metronet.com/~thearc/misc/dislnkin.html

EARLY CHILDHOOD/EARLY INTERVENTION

Division for Early Childhood http://www.soe.uwm.edu/dec/dec.html

- Early Childhood Education On Line http://www.ume.maine.edu/~cofed/eceol/welcome.html
- National Association for the Education of Young Children http://www.america-tomorrow.com/naeyc/
- National Center for Early Development and Learning http://www.fpg.unc.edu
- National Early Childhood Technical Assistance System http://www.nectas.unc.edu
- The Pathways Service Coordination Project http://www.Waisman.Wisc.Edu/earlyint/b_index.htm

This appendix was compiled by George Jesien and Ann Hains, June 1996.

Adjunct ERIC Clearinghouse for Child Care URL:http://ericps.ed.uiuc.edu/nccic/nccichome.html

ERIC Clearinghouse on Elementary and Early Childhood Education http://ericps.ed.uiuc.edu/npin/npinhome.html

GENERAL EDUCATION

Adjunct ERIC Clearinghouse for Art Education http://www.indiana.edu/~ssdc/art.html

- ERIC Clearinghouse on Assessment and Evaluation http://ericir.sunsite.syr.edu
- ERIC Clearinghouse on Information and Technology http://ericir.sunsite.syr.edu
- ERIC Clearinghouse on Reading, English, and Communication http://www.indiana.edu:80/~eric_rec

ERIC Clearinghouse on Urban Education http://eric-web.tc.columbia.edu

CHILDREN

Children's Defense Fund http://www.tmn.com/cdf/index.html

Children Now http://www.dnai.com/~children/

Links to other resources on children's issues http://www.dnai.com/~children/links.html

The Future of Children http://www.futureofchildren.org/

National Child Care Information Center http://ericps.ed.uiuc.edu/nccic/nccichome.html

Tribal Child Care Resource Directory http://ericps.ed.uiuc.edu/nccic/tribedir/tribe.html

PARENTS AND FAMILIES

Internet Resources for Urban/Minority Families http://eric-web.tc.columbia.edu/families/other.html

National Parent Information Network http://www.ericps.ed.uiuc.edu/npin/npinhome.html

NPND Home Page http://www.npnd.org/

The Family Empowerment Pages http://www.downsyndrome.com/

MEDICAL INFORMATION

- MedWeb: Disabilities http://www.cc.emory.edu/WHSCL/medweb.disabled.html
- Medline Guide (Ovid, Grateful, Med, PaperChase, Silver Platter, McSH) http://www.sils.umich.edu/~nscherer/Medline/MedlineGuide.html

MedWeb: Pediatrics http://www.cc.emory.edu/WHSCL/medweb.pediatrics.html

Virtual Hospital Home Page http://vh.radiology.uiowa.edu/

LEGISLATIVE INFORMATION

THOMAS: Legislative information and link to Library of Congress http://rs9.loc.gov/home/thomas.html

- U.S. Senate: Info on individual senators and committees http://www.senate.gov/
- LRP Publications: Information on legislation and happenings in Washington, D.C. http://www/lrp.com/Irpnet/index.html

FEDERAL GOVERNMENT

FedWorld http://www.fedworld.gov/#hletr

- Federal Health & Human Services Agencies on the Internet http://www.os.dhhs.gov/progorg/progorg.html
- U.S. Department of Education http://www.ed.gov
- Senator Frist, Chair of Senate Subcommittee on Disability Policy http://www.senate.gov/~frist/

GRANT INFORMATION

Federal Register (October 1995-to date) ED Announcements http://ges.ed.gov/fedreg/announce.html

Community of Science http://cod.gdb.org/

Grantmaker Information http://fdncenter.org/grantmaker/contents.html

PROGRAMS AND INSTITUTES

National Institute on Early Childhood Development and Education http://www.ed.gov/offices/OERI/ECL/

National Institute on the Education of At-Risk Students http://www.ed.gov/offices/OERI/At-Risk/ar_page1.html

- Child and Family Studies Program (CFSP) of Allegheny-Singer Institute http://www.asri.edu/CFSP/brochure/
- National Center to Improve Practice in SpEd http://www.edc.org/FSC/NCIP/
- Waisman Center Home Page http://www.Waisman.Wise.Edu/
- Culturally and Linguistically Appropriate Services Early Childhood Research Institute http://ericps.cro.uiuc.edu/clas/clashome.html
- Early Childhood Research Institute on Measuring Growth and Development http://mail.ici.coled.umn.edu.8001/ecri/
- Office of Special Education http://www.ed.gov/offices/OSERS/OSEP/osep.html

MISCELLANEOUS

The Chronicle of Higher Education—Academe This Week http://chronicle.merit.edu/

Switchboard http://www.switchboard.com/