I ECOSYSTEMIC FRAMEWORKS

Part I sets the stage for this book by describing the personnel preparation challenges that the field of early intervention faces, with a particular focus on collaboration across agencies, institutions, disciplines, and constituents (e.g., consumers, administrators, direct service providers, faculty, consultants). The 1990s are a period of radical change in how we define the roles and competencies of early intervention stakeholders. It is critical that we analyze how our personnel preparation systems need to be reformed to effectively address the transformations that have occurred in early intervention. Chapter 1 provides a framework and guidelines for the change process. Subsequent chapters in Part I address personnel preparation issues and strategies and models from a systems change perspective at each of the following levels: state, community, and institutions of higher education.

1 ECOLOGICAL PERSPECTIVES ON PERSONNEL PREPARATION

Rationale, Framework, and Guidelines for Change

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When families describe their experiences with early intervention, the presence of competent and caring practitioners often is the key to those experiences being positive and successful. When practitioners describe incentives to working in early intervention, additional instruction and opportunities to be mentored by a more experienced practitioner are top priorities (Pierce & Beutler, 1996). When early intervention administrators describe the challenges they face, one of the biggest is recruiting and retaining qualified practitioners (Hebbeler, 1995). Each of these constituent groups—families, direct service providers, and administrators—places a high value on competent, confident personnel. The story of Janet, a young woman who has just embarked on her career in early intervention, illustrates two major points about the status of early intervention in terms of this shared goal for personnel: 1) the personnel development system needs changing if this goal is to be realized, and 2) making the needed changes will not be simple or easy.

JANET'S STORY
Graduate School
　　Janet enrolled in the master's degree program in speech-language pathology at the state university as a 23-year-old. The 2-year program was highly structured during the first year, with required courses in core subjects filling up all 13 semester hours suggested as a reasonable student load. Janet and her 11 classmates developed strong bonds, as they essentially spent most of their time together in class or working on class-related projects. Janet felt lucky that she was able to do her practicum placement at the university's Speech and Hearing Clinic for Children. She was interested in young children and was happy that she would have a chance to develop that interest. Although it was hard to develop a specialization in young children because of all of the required courses, Janet hoped that her practicum placement and her methods courses, which included some

early intervention content, would provide her with enough background to find a job working with young children.

Finding a Job

Janet felt very fortunate to have a number of employment possibilities when she graduated from her program. She accepted a Clinical Fellowship Year (CFY) position at a local mental health agency and arranged for a certified speech-language pathologist in the community to provide the required monitoring and supervision. She looked forward to becoming a member of the agency's early intervention team, which was designed to provide community-based services to young children with disabilities and their families. She knew that the agency would have preferred someone with more experience than she had, but because of the shortage of therapists in the community, agency staff were pleased to find a qual-ified speech-language pathologist to take the position.

Janet knew she had a lot to learn. The team members were all expected to do a variety of tasks: develop and implement individualized family service plans with families and children, coordinate services with other agencies and profes-sionals, provide consultation to child care staff and preschool teachers who might serve children on the team's caseload, and work together in a transdisciplinary method to maximize their flexibility in responding to the large number of families that they served. Janet was relieved to learn that she would be allowed some time and support for staff development. She felt fairly confident of her skills in working individually with children; however, she had very little experience work-ing with families or with other disciplines. In her coursework she had read articles about the importance of family involvement and interdisciplinary collaboration, but she had seen few of these practices in action. Because these ideas made sense to her, she believed she would be open to learning about new ways of practicing.

The First Year

Janet had no idea that her first year in practice would be as difficult as it was. She was not prepared for the gap between the "ivory tower" world of the clinic and courses at the university and the "real world" of community-based interven-tion. The area in which she had the most self-confidence, working individually with children, was the area in which she was able to spend the least amount of time. There were a number of factors that made it almost impossible to do more than a minimum amount of direct therapy with the children she served. The caseload was large. Although she had a reasonable number of families for whom she had direct responsibility, she found that her colleagues expected her to con-sult with them on their cases as well. In addition, she was expected to function as a service coordinator with many of the families; thus, she needed to keep abreast of community resources and programs and spend quite a bit of time trying to link the family with these other services. Sometimes weeks went by with-out her having spent any one-to-one time with some of the children she served.

One of the most frustrating aspects of her situation was her belief that she really wasn't prepared for the tasks that seemed to be the priority for her agency. She worked out elaborate plans for home therapy for parents to implement, but somehow the plans never seemed to get done. She sometimes found herself talk-ing with families about problems that had nothing to do with speech and lan-guage and with absolutely no idea where to go with the conversation. Another major issue was that her team members did not seem very receptive to some of her ideas. Sometimes she believed that everyone on the team had a personal agenda; each person seemed to have a different priority and a different focus for intervention efforts. It was hard to get people to see that language and speech were critical aspects of development for every child. When she consulted with child care providers and preschool teachers, she often felt unsure of her role. The teachers seemed to want some ideas about how to provide therapy but never seemed to try what she suggested. They were always asking if she knew of prac-

tical strategies for embedding speech and language development activities into ongoing routines, as they had finally accepted that she did not have time for individual therapy with each child on her caseload. The day a preschool teacher said, ''Could you spend 20 minutes with this group of six children and demonstrate how you think I can make this language activity work for everyone?'' was her lowest point. She realized that she had no idea how to conduct in-class therapy with other children around, yet everyone expected her magically to have skills that were not part of her preservice training. This teacher's request followed on the heels of the mother of one of the children on her caseload accusing her of not providing the intensity of therapy services that her daughter needed. Because of the hectic pace maintained at her agency, there seemed to be no good way to express her frustration to her colleagues. And her clinical fellowship year (CFY) supervisor seemed more interested in observing assessment protocols and reviewing therapy plans than in discussing strategies for successful team-based community service delivery. Janet had always been successful in everything she had done; acknowledging defeat or problems was not easy. One hope she had was the promise, when she was hired, that she would be given support for staff development. She knew that the annual state convention for speech-language pathologists was coming up soon and was encouraged to attend by her supervisor. She was eager to get some continuing education units (CEUs) that she would need to keep her license updated, and the convention would also provide her with that opportunity. Maybe she could find some answers at this conference.

More Instruction

The state convention was a real eye-opener for Janet. Much of the information she heard in presentations was about the importance of interdisciplinary teamwork and professional partnerships. Many of the challenges being described were similar to her own, and she found herself volunteering her perspectives in sessions and realizing that she had learned a huge amount in 8 months. She suddenly found herself in the position of being a ''voice of experience.'' Yet as she reflected on the conference, she realized that when she got back to work she had no concrete plans or ideas for how she could do a better job with families, with consultations with peers, or with understanding the complexities of her own community. She wondered how much longer she could keep ''flying by the seat of her pants.'' She started sounding like the preschool teachers when she asked herself, ''But what did I learn that was practical, that I could embed in my daily practices?'' She wondered how other professional conventions dealt with early intervention practices. Did her teammates learn things at their professional meetings that were more practical and applicable to their daily practices? She knew that some of the Head Start teachers with whom she consulted had attended workshops on routines-based interventions. This sounded like something that she could have used, but she had not been invited to attend.

Janet also started thinking about how there was never time at work to ask these kinds of questions. When the team met, there was barely time to cope with the immediate crises around individual families. They never had time to reflect on teamwork, philosophy, models of service delivery, or any of the topics that Janet struggled with privately. Did her teammates have their own private struggles with these issues? She thought back to a home visit she had made with Ruth, the special educator on the team. Ruth confided that she was going to resign from her position at the end of the month and work for her husband's contracting company. Her decision, in part, was a financial one and in part was related to feeling ''burned out.'' The new certification requirements established for early interventionists by the state agency would require her to take additional courses. She had decided to invest in accounting and computer courses instead so that she could become the office manager for her husband's growing business. This was a shock to Janet. She considered Ruth to be one of the most experienced interventionists she had ever met. It seemed strange that Ruth could not get certified based on her experience. Now she wished she had spent more time trying to learn from

Ruth. At the state convention one of the participants had talked about a series of workshops on family-centered practices that her entire agency had attended together. From how she described it, it was exactly the kind of experience that Janet believed her agency needed. When she tried to find out more about it, however, it turned out to be a special grant-funded project that had ended the year before. Working with teams and families might be what everyone talked about in glorified terms, but how were the professionals who were doing it making it work, and how were they finding help when they needed it? ''No wonder there is so much turnover in this field,'' thought Janet.

It is clear that Janet will not be able to effectively serve families and children unless she can find consistent, practical support for her continued professional growth that reflects the changes under way in the field. The approaches to early intervention that Janet is encountering in her work and believes she is unprepared to implement are part of a major transformation since the mid-1980s in how recommended practices in early intervention have been defined. One force for reform is the Regular Education Initiative (Goodlad & Lovitt, 1993), through which the inclusion of young children with disabilities in general education settings (e.g., public and private preschools, child care) has become an expectation with significant implications for personnel preparation. Another reform effort relates to an empowerment approach to the provision of services across a broad spectrum of human services (Dunst, Trivette, & Deal, 1988). The goal of this approach is to strengthen families and to promote the development and competence of individuals needing services. In the early childhood community, this reform effort is best known as a family-centered approach to care and intervention (Bowman, 1995; Shelton & Stepanek, 1994). A third initiative is the movement toward service integration (Kagan, Goffin, Golub, & Pritchard, 1995); that is, the need to build community-based systems of support for young children and their families that are coordinated across multiple agencies and disciplines with practitioners working as interdisciplinary teams. A fourth reform effort relates to the emergence of a set of developmentally appropriate practices that are being disseminated (Bredekamp, 1987), debated (Carta, 1994; Mallory & New, 1994), and refined (Johnson & Johnson, 1994; Wolery & Bredekamp, 1994) to develop definitions of quality in early childhood settings.

These reforms have brought about massive changes in the definitions of competent and qualified early childhood/early intervention practitioners (Bowman, 1995; Bredekamp, 1992; Buysse & Wesley, 1993). New roles (e.g., service coordinator, family–professional partner, interdisciplinary team member) and new competencies (e.g., teamwork, communication, consultation, cultural sensitivity) are needed to deliver services, care, and education using new models of service delivery (e.g., inclusion, integrated therapy, transdisciplinary teaming, home visiting, routines-based interventions). These are not simply trends. Support for the reforms is strong. Legislative initiatives (e.g., the Americans with Disabilities Act [ADA] of 1990, PL 101-336; Part H of the Individuals with Disabilities Education Act [IDEA] of 1990, PL 101-476) promote inclusionary, family-centered, interdisciplinary approaches to serving young children with disabilities and their families. To address these changes, states have been required to reconceptualize agency and discipline boundaries and rethink relationships among agencies, disciplines, and consumers (Shonkoff & Meisels, 1990). The challenge has been compounded because early intervention is not the only system undergoing change. Whether it is because of new discoveries, new technologies, new politics, or new policies, interaction with each other and with the world is rapidly changing. It means that changes in early intervention must be

considered within the context of the changes taking place within other human services, management, and information systems.

PURPOSE OF THIS BOOK

The reform initiatives have created tremendous pressure on state personnel development systems. State policy makers are beginning to recognize that no matter how progressive their early intervention service delivery systems may be, they will not be effective unless there are competent and qualified personnel to implement them. However, that is exactly what is missing—adequate numbers of competent, qualified professionals to implement quality services and programs. Research has demonstrated that many communities face the problems illustrated in the vignette about Janet. There are not enough qualified, experienced personnel who feel competent and confident in dealing with the complexities of providing early intervention services. Policy research indicates that personnel preparation is the component of early intervention legislation in which states have made the least amount of progress (Harbin, Gallagher, & Lillie, 1991). National Early Childhood Technical Assistance System (NEC*TAS), the agency funded to provide technical assistance to states as they plan and implement early intervention systems, reported that the greatest number of requests for help they received from clients in 1994 was in the area of personnel preparation (National Early Childhood Technical Assistance System, 1994); it was one of the top issues in 1995 as well (National Early Childhood Technical Assistance System, 1995). Eleanor Szanton, Executive Director of the National Center for Clinical Infant Programs, stated, ''As funds are beginning to flow to programs for infants and toddlers, the personnel to create and maintain quality services are not in place. THIS IS THE MAJOR CHALLENGE OF THE NEXT DECADE'' (Szanton, 1993, p. 29).

The personnel preparation system should be leading and shaping efforts to reform the early intervention system. It should be on the cutting edge of developing innovative practices and disseminating that information to the field. It is expected that an individual who has just completed a preservice program of studies or participated in continuing education will have the most updated knowledge in a particular field. Perhaps because change has happened so quickly, this is not guaranteed. The quality of instruction available for entry-level and existing early interventionists is uneven and unpredictable. Not only is it necessary to consider how to rethink the personnel development system, but it is also necessary to consider what this newly reformed system should look like so that it can better deal with the continued changes that characterize all human services systems. The system must be reformed so that it has the capacity to reform itself continuously in response to ongoing changes.

A primary purpose of this book is to set a course for rethinking how personnel in early intervention are prepared and to provide strategies for making the needed changes. Janet's story shows that simply increasing the number of existing preservice programs and inservice initiatives will not adequately address the challenges. The same kind of reconceptualization of boundaries and relationships that is happening in the early intervention service system must be made in terms of personnel development systems. Many innovative and creative models and strategies have been developed that offer solutions to the challenges faced by Janet and the early intervention community in which she works. Information about these models and strategies is shared throughout this book.

This chapter sets the context for change by providing in-depth discussion of the complex, systemic issues currently facing early intervention personnel preparation and by

delineating guidelines for developing and implementing solutions. The information in this chapter includes the following:

- Presentation of an ecological framework for describing the issues
- Description of systems-level needs that are important in effectively communicating and developing solutions to these problems
- Presentation of factors that must be considered when planning systems-level reforms
- Outline of lessons learned from other reform efforts

The discussion in this chapter is based on the following assumptions about personnel preparation:

- Personnel needs are complex and are based on interrelated phenomena that cut across disciplines, agencies, institutions, and bureaucratic levels.
- Solutions to the personnel preparation needs are equally complex and must rely on input from a broad-based and diverse number of sources, including consumers, administrators, direct service providers, and policy makers.
- A comprehensive and innovative plan that includes both long- and short-term solutions to personnel preparation needs and includes linkages among the layers and players of the different relevant systems is critical as we rethink how to adequately prepare early intervention personnel.

AN ECOSYSTEMIC FRAMEWORK

An ecosystemic framework was chosen to organize this discussion because of its ability to describe complex, interrelated phenomena. The ecosystemic framework is based on the circular manner in which parts of a system regulate and affect each other. No part of a system can change without change occurring in all other parts and the system as a whole; problems and solutions related to making improvements and changes are inextricably connected. This framework has been used to explain the development, behaviors, and outcomes of a variety of human phenomena, including families and organizations (Bronfenbrenner, 1976; Darling, 1989; Winton, 1986). It is particularly relevant for examining issues related to early intervention because one of the significant features of early intervention is that it comprises multiple service systems and financial agents (e.g., health, education, mental health, social services, Head Start, consumers, Medicaid, insurance companies, health maintenance organizations, private citizens) who operate at multiple levels (i.e., federal, state, community, agency). The individuals who are employed and served by these agencies represent multiple disciplines, backgrounds, and perspectives. The personnel development systems that support these individuals are equally diverse (e.g., universities; community colleges; professional organizations; employers; local, state, and federal agencies), as shown in Figure 1.1.

An intent of the federal legislation is that these multiple systems and individuals collaborate in their efforts to serve young children. Although the personnel development systems that support their efforts should be integrated as well, this has not happened. As a result, a series of interrelated needs and complicated, unresolved challenges characterizes early intervention personnel preparation. Choosing an ecosystemic model as an underlying framework for this book and this chapter serves as a constant reminder that personnel preparation problems cannot be described or solved in a linear, simplistic, cause-and-effect fashion. A solution to one particular problem may contribute to the development of a new
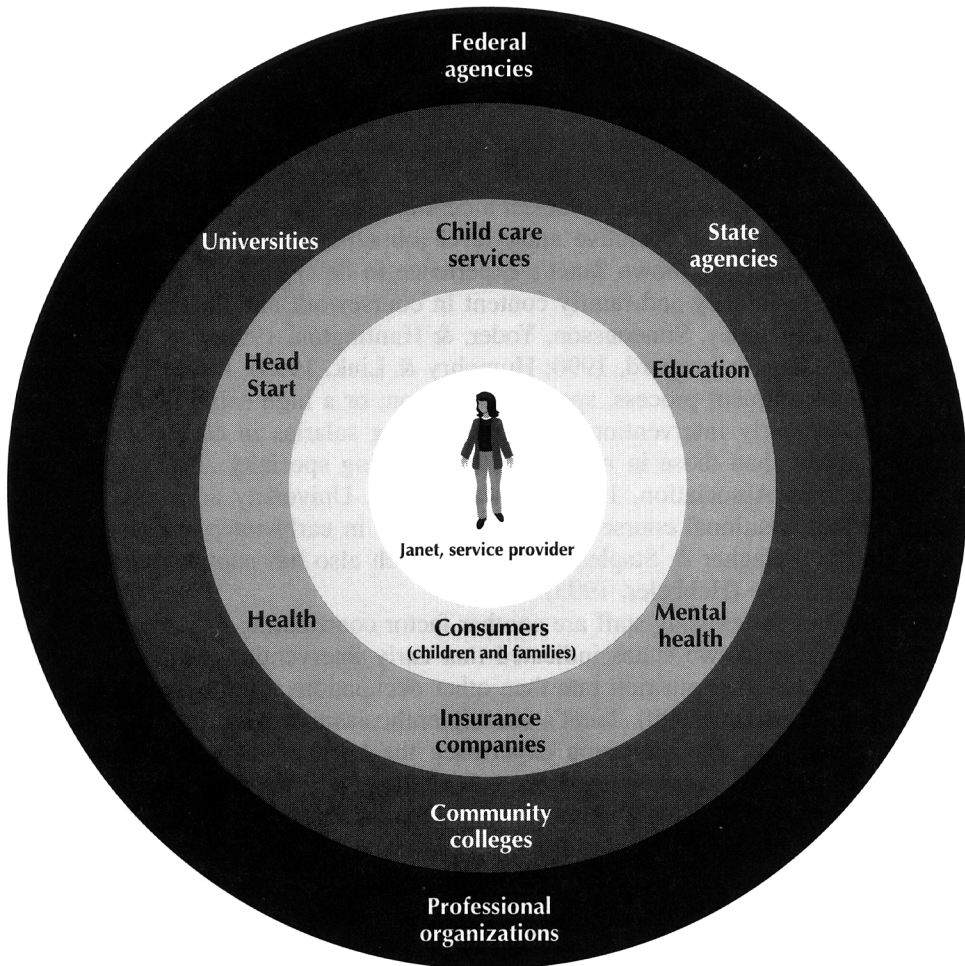
Figure 1.1.   Potential collaborators in early intervention.

problem; therefore, the needs and challenges outlined in the following sections of this chapter are described as interconnected phenomena, and the relationships among the systems and individuals involved are explored. This chapter lays the groundwork for moving toward a more focused discussion and description of a variety of issues, models, strategies, and resources, the foci of subsequent chapters of this book.

PERSONNEL PREPARATION NEEDS

Janet's story demonstrates a variety of needs. Each of these is explored in more depth in the following section.

Personnel Shortages

Personnel shortages in early intervention are a serious threat to the vision of a nationwide system of services for young children with disabilities and their families (Hebbeler, 1995). The shortages are particularly acute for allied health professionals (Hebbeler, 1995; Yoder,

Coleman, & Gallagher, 1990). Those who have studied the reasons for shortages have concluded that the problem is multifaceted and involves a complicated web of political and societal factors (Hebbeler, 1995).

To use Janet as an illustration of some of the contributing factors, a typical student in a university program of studies for allied health professionals has a multitude of specialty areas (e.g., gerontology, sports medicine) from which to choose a career direction. Factors that might attract a student to select a certain area, such as interesting coursework and practica experiences or lucrative entry-level job offers, are not guaranteed in early intervention. Research has shown Janet's experience to be typical for a student in allied health; exposure to infancy and family content in coursework and interdisciplinary experiences is minimal (Bailey, Simeonsson, Yoder, & Huntington, 1990; Cochrane, Farley, & Wilhelm, 1990; Crais & Leonard, 1990; Humphry & Link, 1990). It was Janet's personal interest, not a recruitment process, special instruction, or a high salary, that attracted her to her job in the early intervention program. Starting salaries in early intervention are substantially lower than those in many of the competing specialty areas (American Occupational Therapy Association, 1990; Shewan, 1988). University administrators do not anticipate adding additional courses or specializations in early intervention to their programs of study (Gallagher & Staples, 1990). Research also has shown that these factors are unlikely to change (Hebbeler, 1995).

Attrition rates for existing staff are another factor contributing to the shortages. Studies on staff turnover in two states indicated that early intervention personnel, especially consultants, have a higher attrition rate than other occupations (Kontos, n.d.; Palsha, Bailey, Vandiviere, & Munn, 1990). Janet's waning enthusiasm and increasing frustration in her job are signs that she may soon experience the burnout that she observes in her colleague Ruth and that is becoming more common in early intervention (Krahn, Thom, Hale, & Williams, 1995). Ruth's situation also illustrates the dangers of addressing personnel preparation problems and developing solutions in an isolated manner. The certification standards set by the state for early interventionists are designed to ensure that providers are qualified; however, higher standards can drive practitioners from the field unless the certification process is carefully constructed to credit experience and on-the-job training. The problem of shortages must be addressed; however, simple solutions are not evident. More information on solutions to personnel shortages is provided in Chapter 2.

Changes in Early Intervention Roles and Competencies

Part of Janet's frustration in her job is related to her realization that her university program did not adequately prepare her for the realities of the workplace. The model for providing therapy for which she believes she is best prepared (one-to-one direct) and the skill areas in which she believes she is most competent do not match what seems to be desired by her supervisor and colleagues. Janet enjoys working with children, and that is why she chose a pediatric specialization, but her child assessment and intervention courses did not prepare her for the play-based and routines-based intervention approaches that she is expected to implement. Her university program also did not prepare her for interacting with colleagues from other disciplines, families, agencies, and broader systems. As Janet reviewed her program of studies and the syllabi from the courses she took, she saw minimal coverage of the topics that seemed most relevant to her job: understanding family and cultural contexts, understanding the roles of different disciplines, communication/interaction/collaboration skills, knowledge about different state and community agencies

and programs, transitions into and out of programs and systems, and basic knowledge of how human services systems work and change.

Janet's experience is not uncommon. Although the literature is replete with information about changing roles and emerging skills related to early intervention initiatives (Bailey, 1989; Buysse & Wesley, 1993; McCollum & Maude, 1994; McCollum, Rowan, & Thorp, 1994; Thorp & McCollum, 1994; Winton, 1988; Winton & Bailey, 1990), university programs have lagged in offering instructional experiences that match the roles and skills needed (Bailey, Palsha, & Huntington, 1990; Cochrane et al., 1990; Crais & Leonard, 1990; Holditch-Davis, 1989; Humphry & Link, 1990; Kaufman, 1989; Peterson, 1991; Roush, Harrison, Palsha, & Davidson, 1992; Teplin, Kuhn, & Palsha, 1993). It has been argued that the manner in which the various helping professions (e.g., education, social work, nursing, health, family–child studies) are organized into specialized, separate departments in colleges and universities has perpetuated the noncollaborative approaches that characterize community-based programs (Lawson & Hooper-Briar, 1994). It also has been argued that university programs and their faculty are indifferent, unresponsive, and out of touch with the real-world problems faced by communities (Lawson & Hooper-Briar, 1994). The reward system for faculty promotion and salaries in most universities is based on the production of academic publications and scholarly work. The importance of faculty, especially from human services disciplines, being involved in community service is beginning to receive some attention from university administrators; however, the balance is still heavily in favor of traditional scholarly pursuits as the measure of faculty success. Research has shown that faculty are eager for support that would enhance their abilities to effectively teach early intervention content (Winton, Catlett, & Houck, 1996); however, universities are traditionally remiss at providing faculty with this kind of opportunity. Given the important role that colleges and universities play in socializing and shaping future practitioners, changes in the higher education communities are an important aspect of any attempt to address personnel development problems. Two chapters in this book provide specific information on issues facing institutions of higher education and specific solutions being generated within those systems: Chapters 4 and 18.

Lack of a Comprehensive, Coordinated Personnel Development System

Another frustration that Janet is experiencing is related to how she can best learn the skills she needs to survive in her job. Staff development experiences are available but do not adequately address Janet's needs. The ecosystemic framework provides a way of looking at the potential resources available to Janet (see Figure 1.1).

The first concentric circle around Janet is the families she serves. It is notable that families are not mentioned in Janet's story in terms of a formal or structured personnel development role. The field increasingly is recognizing the beneficial outcomes that result from inviting families to serve in formal personnel preparation roles (Bailey, Buysse, Edmondson, & Smith, 1992; Jeppson & Thomas, 1995; Winton & DiVenere, 1995). However, this is a new direction just beginning to be implemented more broadly and is more the exception than the rule. Professional–family partnerships in personnel preparation, including effective models, are the focus of Chapter 17. This topic is also discussed in other chapters throughout the book.

The second concentric circle around Janet includes the mental health agency where she is employed. Janet's supervisor is responsible for providing Janet with ongoing staff development through individual consultation and modeling. Although Janet indicated that individual or group supervision or planning was not available at her agency in a consistent

and supportive fashion, this might be an option in some early intervention programs. Janet belatedly recognized that her co-workers might be good resources. Chapter 8 has more information on the topic of mentoring and coaching as approaches to staff development. Also included in the second concentric circle are the other agencies in the community in which Janet's agency is housed. Janet mentioned that the local Head Start agency provided early intervention staff development to its teachers. Janet was not invited; however, there might be other community-based staff development opportunities sponsored by other agencies for which she might be eligible. Nonprofit agencies serving children or providing family support (e.g., United Cerebral Palsy Associations, The Arc) often sponsor community-based staff development open to a cross-section of the community. Chapter 3 provides more information on the important role that community-based instruction plays in personnel preparation. Chapter 20 describes a particular community-based model for staff development that involves families, providers, higher education faculty, and administrators in coinstruction and decision-making roles.

Staff development may also be available to Janet through statewide or regional early intervention conferences sponsored by one of the many state agencies involved in providing or advocating for early intervention services (the third concentric circle). These agencies include health, mental health, education, social service, child and family development divisions within the state government system, and statewide advocacy or parent groups. These various agencies also sometimes print and distribute relevant early intervention information (e.g., legislation, family rights, eligibility requirements). Some state agencies are taking innovative and more personalized approaches to staff development (e.g., McCollum & Yates, 1994; Wischnowski, Yates, & McCollum, 1995). Chapter 2 provides information on some of these strategies. In addition, some state agencies and universities are exploring ways that distance education strategies can be used to reach broader groups of participants with information on early intervention topics. Chapter 19 provides more information on distance education issues and strategies.

The fourth concentric circle, federal agencies and professional organizations, is well represented in Janet's professional development. The American Speech-Language-Hearing Association (ASHA) is the professional organization to which Janet belongs. Not only does she attend the state convention that the organization sponsors, but she also subscribes to the professional journal, and it is ASHA's credentialing and licensing requirements that most likely will influence some of the staff development activities that Janet seeks. The ASHA requirement for a CFY also is the reason for her continued supervision by a practicing speech-language pathologist at the community level.

As this description illustrates, a variety of public (e.g., Head Start, mental health, public school, Parent Training and Information centers) or private nonprofit (e.g., The Arc, United Cerebal Palsy Associations) federal/state/community agencies, universities, community and technical colleges, and professional organizations have personnel preparation responsibilities, resources, and authority. These various groups and individuals have different levels and types of personnel preparation responsibilities, including developing standards and competencies; developing policies; monitoring progress; providing funding for innovative personnel preparation models; designing and implementing programs of study, courses, conferences, and workshops; developing instructional materials; and supervising students and employees. The extent to which Janet continues to be effectively supported in her profession as she struggles with the ongoing, daily challenges of serving children and families depends on these various people and organizations working in a consistent and integrated fashion.

In Janet's case, the system is not fully ''in sync.'' Janet's university experience has not supported the development of skills commensurate with those being promoted in the professional literature or at professional conferences. Her two supervisors are supporting and encouraging different approaches to service delivery—one focusing on forms and protocols and the other emphasizing family and interdisciplinary collaboration. The teachers and parents provide a somewhat different but also inconsistent set of demands on Janet's expertise and approach to service delivery. The teachers have adopted the philosophy of integrating therapy into the classroom routine, which is the one promoted by Janet's agency. However, some of the parents want intensive, one-to-one direct therapy. Opportunities for structured interactions and problem solving around the challenges of delivering early intervention services that involve all of the players (e.g., families, teachers, child care providers, administrators, therapists) and systems (e.g., schools, child care, private preschools, health, mental health) are notably absent. Each discipline and each agency seems to have its own traditions and approaches to staff development, with little connection among them.

Limited Staff Development Options

The limited options for staff development available to Janet in the vignette reflect what is typical in the field. Despite the literature refuting their effectiveness, one-shot, discipline-specific workshops continue to be the norm for what state agencies, professional organizations, and local communities provide for ongoing staff development (Goldenberg & Gallimore, 1991; Wood & Thompson, 1980). An expectation of early interventionists is that they should be able to constantly adjust and refine their practices based on the needs, backgrounds, priorities, and cultures of each individual family. This suggests the ability to spontaneously evaluate changing situations and events and engage in creative problem solving in collaboration with others around those events. These are complex skills that require ongoing support and opportunities for professional growth. It is unrealistic to think that one-shot workshops adequately address these needs. Complex abilities require more complex instruction. There is a body of literature on adult learning (Brookfield, 1993; Knowles, 1980; Moore, 1988; Wood & Thompson, 1980) that provides guidance on the kinds of staff development opportunities that are most effective for practitioners. This research asserts that instructional activities should be directly relevant to a practice context with demonstrations and models provided of the skills being taught; instructional activities should be varied and responsive to different styles of learning; each participant should develop a specific plan of action for using the information provided as part of the learning experience; and ongoing support, monitoring, feedback, and technical assistance should be provided to participants. The suggestion that participant groups should be diverse and include families, administrators, and providers across multiple disciplines also has implications for effective instructional strategies. It suggests that strategies be used that appeal to a mixed audience of learners who represent differences in educational background, discipline, learning style, and perspective. This challenges traditional approaches and options for addressing personnel preparation needs. Information on adult learning strategies and innovative approaches for engaging diverse audiences is provided in Chapter 5 (with an emphasis on theoretical frameworks) and in Chapter 21 (with an emphasis on practical strategies and applications). Follow-up strategies for providing ongoing support are described in Chapter 7.

Problems Related to Defining and Evaluating Quality

Issues and questions related to quality pervade discussions and consideration of personnel preparation. A question that has received much attention relates to the definition of a

"qualified" service provider. Policy makers recognized the importance of addressing this question and made establishing personnel standards one of the required components of each state's plan for implementing early intervention legislation. Most states have taken the approach of requiring that professionals meet the highest standards of their respective disciplines. In some states, special infancy or early childhood certification standards have been adopted and competencies identified that must be mastered to receive certification (see Chapter 2 for a more thorough discussion of this topic). However, developing standards and identifying competencies do not automatically guarantee that personnel are qualified and that quality programs are in place. There are additional challenges that states must address.

One challenge is getting universities, colleges, and community colleges to use the competencies as guidelines for their programs. Janet met the highest standard for her discipline; however, she did not receive specialized instruction in working with infants, families, or other disciplines as part of her program of studies. A second challenge for states that create specialized certificates based on newly defined competencies is how to provide staff development to existing personnel who may or may not possess the new competencies that have been defined. The approach often taken is a series of statewide or regional workshops in early intervention content. However, these approaches are often underfunded and poorly evaluated. Given the extent to which many of the early intervention competencies are related to process skills (e.g., communication, consultation, collaboration) and discretionary behavior that is based on clinical judgment (e.g., individualized, culturally sensitive assessment and planning), providing meaningful staff development through workshop formats is an inadequate approach.

The other major quality issue is how to define quality personnel development activities that are consistent with research on adult learning and reform efforts and how to evaluate the extent to which personnel preparation efforts are effective. Often the "means" related to personnel preparation (i.e., conducting a certain number of workshops of courses attended by a certain number of people who received certification credits or graduated from accredited programs as a result) becomes confused with the "end." That is, we assume that because these events happened, we accomplished some kind of meaningful outcome. In reality, we do not know if we have reached the ultimate goal of personnel preparation—improving the quality of the services and supports available to families. Policy makers and funding agencies increasingly ask about the outcomes that result from money spent on personnel development. They want to know why serious shortages and issues of quality persist. They want evaluation data that will provide accurate information about effective models of personnel development so that future efforts can be more effective and efficient, but these kinds of data are scarce. Evaluation is one of the biggest challenges faced in reconceptualizing how to define "quality" in service provision and what that means in terms of defining "quality" in personnel preparation. Questions that should be asked in that regard include the following:

- Was the instruction consistent with research on effective teaching practices?
- Was the information conveyed and skills taught applied by trainees in the workplace?
- Were services and supports for children and families improved on a short-term and long-term basis as a result?
- Were consumers representing diverse perspectives included in evaluating the quality of programs and instruction?
- Was the state monitoring system supportive of and synchronized with the skills and practices being promoted and taught?

- Were responsibilities for personnel preparation efforts (i.e., financial, logistical, human) clearly defined?
- How was evaluation information shared? With whom? For what purposes? Was it used to inform and make changes in instructional approaches?
- Was it permissible to talk about personnel preparation failures? About shortcomings?

These questions imply that evaluation efforts must be longitudinal and must look at processes as well as products. To help individuals and agencies involved in personnel preparation consider questions such as these, quality indicators related to preservice and inservice instruction (Winton, 1994) have been developed and are described in Chapter 21. Chapter 6 provides more information on needs assessment and evaluation issues and strategies.

FACTORS RELATED TO REFORM EFFORTS

Four critical elements have been identified in the literature that must be considered in creating collaborative efforts in human services systems (Blank & Lombardi, 1991; Flynn & Harbin, 1987; Harbin & McNulty, 1990; Melaville & Blank, 1991). These same factors are relevant in transforming personnel preparation systems into collaborative, effective systems. The four factors are climate, policies, resources and problem-solving structures (see Figure 1.2).

Climate

The social and political climate at the federal, state, and community levels is a factor likely to influence changes or reforms in personnel preparation efforts. States have been slow to address the personnel preparation component of the early intervention legislation; however, interest and momentum to attend to personnel preparation have increased as policy makers and planners realize the magnitude of the problem (Safer & Hamilton, 1993). But shifts in climate experienced by one group, such as policy makers, are not necessarily shared by all groups involved in personnel preparation. Professional traditions, organizational rigidities, and disciplinary loyalties are often entrenched and create a pervasive climate that supports the status quo. University structures have been described as some of the hardest to change (Eash & Lane, 1985; Gallagher & Staples, 1990). In his book on educational reform, Fullan (1993) stated that the educational institutions responsible for ensuring that practitioners possess updated, state-of-the-art knowledge and skills are themselves so hierarchical and rigid that they are more likely to perpetuate the status quo than to provide leadership in making reforms. Climate influences policies; the next section focuses on how policies affect reforms in personnel development systems.

Policies

Policies are ''those sets of governing principles which have been established within and among agencies'' (Flynn & Harbin, 1987, p. 38), including laws, regulations, standards, licensing, certification, and interagency agreements. Policies have a significant impact on if and how agencies, disciplines, and people plan, fund, and implement personnel preparation. For instance, personnel preparation activities are often funded through categorical funding streams that originate in separate policy initiatives at the federal level (e.g., the Department of Health and Human Services has money to train nurses, the Department of Education has money to train teachers). Each professional organization also has a set of policies governing its own license and certification systems and funding of its own discipline-specific personnel preparation initiatives. The result is that personnel preparation looks like ''parallel play.'' In a single state there might be several different workshops on
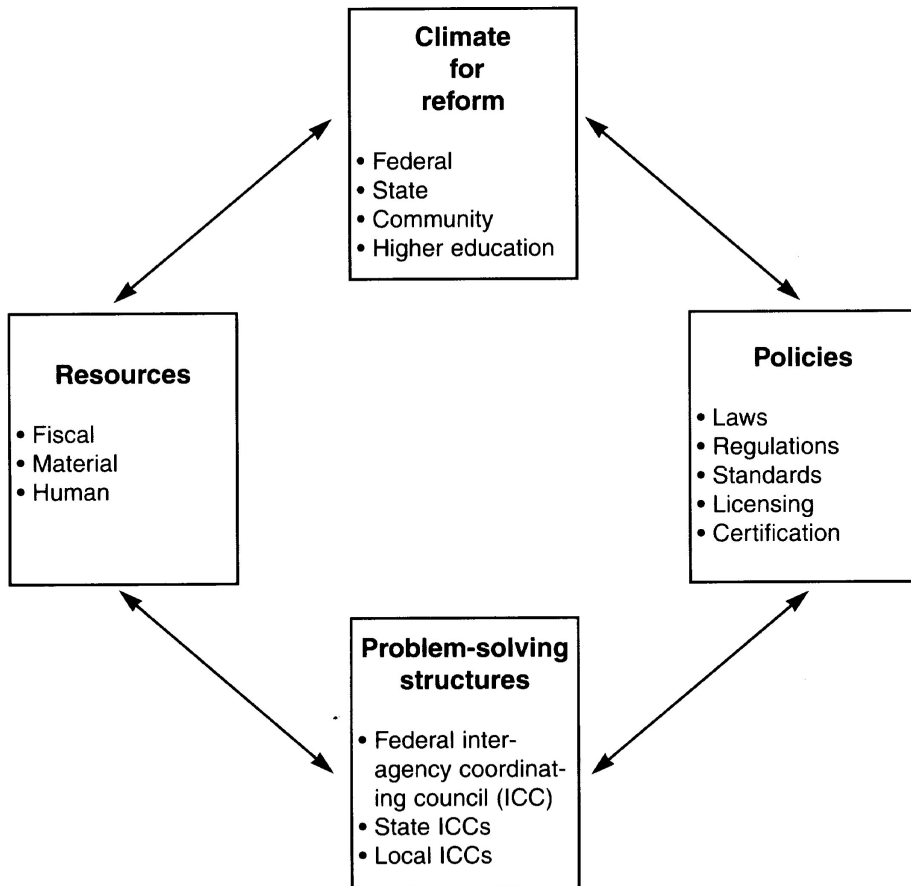
Figure 1.2. Critical elements in creating collaborative efforts.

the same topic (e.g., child assessment, service coordination), but the workshops might be sponsored by different agencies for different disciplines and may promote conflicting philosophies and contradictory approaches to the one topic. The same parallel play characterizes personnel preparation activities in institutions of higher education. A child assessment course might be offered in several different departments or divisions (e.g., nursing, psychology, special education) without any attempt to have students come together for cross-disciplinary discussions or activities. There are few policies that facilitate or provide tangible incentives for cross-agency, cross-discipline instruction.

Federal policy makers recognized this problem and tried to address it, partly by mandating that a Comprehensive System of Personnel Development (CSPD) be a required component of the state plan that each state had to submit to receive early intervention funding from the U.S. Department of Education. The CSPD was seen as a mechanism for ensuring that staff development activities in each state would be coordinated across agencies, disciplines, and institutions and would cover a variety of activities, including data collection, recruitment, preservice, inservice, technical assistance, and continuing education. However, research has indicated that most of the individuals with the power, authority, and resources to provide early intervention instruction do not even know that a CSPD plan exists in their state (Winton, 1995; Winton et al., 1996). This is an example

of how policies can be ineffective if there is not a responsive climate to ensure that the spirit as well as the letter of the law is met.

Resources

The availability, nature, and management of existing human and material resources have a significant impact on reforms and improvements to personnel preparation efforts. The evidence that states have not made progress on this component of early intervention legislative mandates suggests that adequate amounts of early intervention funds have not been earmarked for personnel preparation. Chief state school officers and school superintendents in 50 states were surveyed on the barriers to providing meaningful staff development to teachers; they indicated that inadequate financial support was one of the biggest barriers (Thompson & Cooley, 1986). Policy studies suggested that finances are a barrier to staff development in early intervention as well (Gallagher, 1993). However, as Peterson (1991) pointed out, shrinking resources across all agencies could have the beneficial effect of forcing agencies to collaborate and share their scarce resources. Anecdotally, that is what some state agency personnel in North Carolina have reported as happening. The Department of Public Instruction (preschool lead agency) and the Department of Human Resources (early intervention lead agency) have sometimes blended dollars to fund joint staff development for preschool and early intervention personnel because they did not have the money to implement separate initiatives. Rather than simply advocating for more personnel preparation money, perhaps the resources should be spent in planning and implementing events that cut across agencies.

This recommendation also should apply to instructional resources and materials. Since the 1970s, a wealth of instructional materials and products has been developed under the auspices of federal grant programs, such as the Early Education Program for Children with Disabilities (EEPCD) of the Department of Education. However, many of these materials have not been widely disseminated. What typically happens is that by the time products get developed, the project has ended, and there is little time to disseminate information about the products. Thus, information about the availability of these products does not reach the university faculty and state and local staff development consultants who could use them. One of the activities of the Southeastern Institute for Faculty Training (SIFT), a regional institute funded through EEPCD (Winton, 1996), was to identify interdisciplinary, family-centered instructional resources, many of which had been developed by small grant-funded projects, and to disseminate information to faculty about them through a resource guide (Catlett & Winton, 1996) and through demonstrations and hands-on exposure. Several findings from this activity are notable (Winton, 1995). First, most faculty were unfamiliar with these materials. Second, they were excited about finding them and started using them as resources in their teaching. Third, many states have existing resource libraries, and some of these materials were in these libraries; however, faculty either did not realize this resource was available or found it hard to evaluate the materials without an opportunity to directly examine them or see them demonstrated. Regional and statewide resource libraries of various kinds exist throughout the country. Some states use early intervention money to fund resource libraries; the Office of Educational Reform and Innovation funds 10 regional educational laboratories that provide technical assistance and instructional resources to states; and each state has a Parent Training and Information Center with instructional resources. These various centers are not necessarily coordinated in their efforts to identify and publicize resources; therefore, they may be underused by consumers. The management of resources may be of equal importance to securing additional resources.

The other kind of resource that must be considered is the human one. The importance of personal relationships, personal commitment, and leadership is reported across a number of studies and projects related to making reforms that increase collaboration across systems (Blank & Lombardi, 1991; Harbin & McNulty, 1990; Harrison, Lynch, Rosander, & Borton, 1990). Research collected as part of the evaluation of SIFT indicated that support from colleagues was a major factor that helped faculty accomplish the goals they identified for themselves for improving their own personnel preparation practices (Winton, 1995). This suggests that relationships need to be nurtured and the human resources involved in personnel preparation activities need to be expanded. As one state agency official in charge of early intervention personnel development said, ''Money is not my biggest problem. I need people who are knowledgeable about early intervention content and about our early intervention system, knowledgeable about good training practices, and willing to travel around the state providing technical assistance and training to providers'' (G. Perotta, personal communication, February, 1993). Identifying and supporting individuals (e.g., faculty, providers, consumers) who are willing to help plan and implement staff development activities is a need for most states. Creating an infrastructure that can support their efforts is another need. Some states that participated in SIFT have created regional technical assistance teams, consisting of providers, families, and college and university faculty (Winton, 1995). These ''teams'' can be pulled together to respond to regional needs for staff development; the team members are reimbursed for their involvement by the state agency responsible for early intervention. Research has shown that families can be powerful and effective in personnel preparation roles when provided with support. Exploring ways to support family involvement, especially from families from diverse backgrounds, should be pursued (see Chapter 17 for more information on family participation in personnel development). In addition, nontraditional approaches to personnel development (e.g., coaching as described in Chapter 8, use of new technologies such as teleconferencing and interactive networking as described in Chapter 19) need to be explored as strategies for coping with shortages of human resources.

Problem-Solving Structures

The presence of structures that provide opportunities for agency, discipline, and constituent representatives to develop solutions to personnel preparation challenges is an important component of change. These structures are especially important because of the continuation of such problems as the financing of personnel development efforts, collaboration across agencies, personnel shortages, and the ongoing changes in all human services systems.

At the federal, state, and local levels, interagency coordinating councils (ICCs) have been mandated through the early intervention legislation to provide advice to policy makers on policy and implementation issues. The extent to which the ICCs have effectively addressed personnel preparation issues varies tremendously. In some states, personnel preparation or CSPD subcommittees of the ICCs have effectively addressed personnel needs through activities such as conducting needs assessments, securing federal grant money to address state personnel needs, providing a means for collaborative problem solving across agencies around personnel issues, and identifying competencies and standards. Some of the difficulties encountered by such groups is that their budgets are nonexistent or limited, and they depend heavily on volunteer time from providers, faculty, and families, who may live in geographically scattered parts of the state.

External projects have demonstrated that they can serve as a catalyst for problem solving and positive changes in personnel preparation efforts. For example, data collected

by SIFT in 15 states demonstrated the following positive changes from the perspectives of state leaders who participated in problem solving that led to further staff development opportunities for individuals from their states: increased collaboration in personnel preparation activities across agencies, greater linkages between preservice and inservice efforts, greater involvement on the part of families in personnel development efforts, more family-centered inservice instruction, more interdisciplinary instruction at preservice and inservice levels, more instruction linked with certification, and increased knowledge on the part of key stakeholders of the CSPD (Winton, 1995). However, the long-term effectiveness of external efforts such as this one has not been established. The complexities of reforming personnel preparation systems require an ongoing, concerted effort that challenges the capacities of time-limited grants. The ultimate success for any external reform effort is state or local adoption and maintenance of the ideas and practices (see Chapter 3, which highlights the importance of change efforts being firmly rooted in the community context). A study by Rooney (1995) suggests that institutionalization of reforms should not be taken for granted. She conducted a follow-up study of 10 federally funded, interdisciplinary preservice preparation programs to determine the extent to which the interdisciplinary aspects would continue after the end of the funding period. Her results were discouraging: Eight of 10 programs reported that the interdisciplinary focus would not continue.

LESSONS LEARNED FROM OTHER REFORM EFFORTS

Other reform efforts involving human services and education systems (Bruner, 1991; Fullan, 1993; Havelock & Havelock, 1973; Kagan et al., 1995; Melaville & Blank, 1991; Peck, Odom, & Bricker, 1993; View & Amos, 1994) provide practical information that can be generalized to the efforts to rethink early intervention personnel preparation. These lessons have shaped the assumptions stated at the beginning of this chapter. The following is a brief summary of these lessons (Chapter 3 provides excellent detail about community-based approaches to reforms that illustrate these lessons):

- Integrate reform efforts into existing ecology.
- Involve all relevant stakeholders.
- Provide stakeholders with new information.
- Identify specific goals and action plans for making changes.
- Provide ongoing monitoring, evaluation, and follow-up.

Integrate Reform Efforts into Existing Ecology

Reform efforts and the reformed personnel development systems must be constructed with a sensitivity to the unique needs, priorities, traditions, and resources of particular localities (Bruner, 1991; Fullan, 1993; Peck et al., 1993). This implies that community, higher education, and state problem-solving structures must be in place and adequately supported to define local need and local solutions related to the broader personnel issues outlined in this chapter. The following are some of the questions that these groups might address on a local level:

- What are the specific personnel needs in our community, and what are the resources and strategies for meeting these needs?
- What should early interventionists in our community need to know and be able to do to effectively serve children and families?

- What are all of the ways that early interventionists can develop this knowledge and these skills?
- What needs to happen to create these learning opportunities?

Involve All Relevant Stakeholders

Another lesson learned is that a combination of "top-down" and "bottom-up" approaches to reform efforts works best (Fullan, 1993; Powers, 1988; Trohanis, 1994). Support from the highest administrative levels is important so that individuals believe it is in their best interest to participate in staff development and reform efforts that will ultimately result in improvements for children and families. Because the status quo is the natural state, active strategies (e.g., promotions, tenure, release time, CEUs) must be used to promote and reward change. However, it is not enough to have high-level administrators support change. All constituent groups, including families, direct service providers, consultants, and administrators, need to be involved in planning, developing, and participating in staff development related to making changes. The needs, strengths, and resources of individual learners as well as those of systems-level personnel must be addressed in an interrelated and simultaneous fashion (see Chapter 20 for a description of a collaborative model for instruction that includes these constituent groups).

Provide Stakeholders with New Information

Much has been written about the gap between research information and typical practices (c.f., Gersten, Vaughn, Deshler, & Schiller, 1995). Some blame the research community for failing to provide practical strategies for improving services (Gersten et al., 1995; Lovitt & Higgins, 1995; Malouf & Schiller, 1995), whereas others blame ineffective personnel development systems for failing to adequately disseminate new information (Goldenberg & Gallimore, 1991; Guskey, 1986; Smylie, 1988). A wealth of information exists on models of staff development, on new technologies for disseminating information, on instructional strategies that reflect principles of adult learning, and on innovative instructional resources; getting this information to those who need it is a critical part of the change process. The information must be imparted in ways that invite application to local issues. Solutions to personnel preparation issues developed in one community or in one university or community college cannot be transported in a wholesale fashion to other communities, but this information can generate variations that might be effective.

A second point is the importance of innovative processes for delivering the content. The importance of the instruction being delivered in a manner that models family-centered practices and behaviors has been stated in previous publications (Winton, 1990). Training strategies that mirror the family-centered practices being promoted include the following: 1) providing participants with choices that enable them to select experiences based on their perceived needs; 2) respecting individual differences in learning styles and preferences; 3) appreciating and building on existing knowledge, skills, and experiences; 4) providing opportunities for participants to learn from and build relationships with one another; and 5) including families as planners, instructors, and evaluators of instructional initiatives. Chapters 9–16 provide more information on considerations and strategies for designing and implementing effective instruction using innovative strategies to address key early intervention content areas.

Identify Specific Goals and Action Plans for Making Changes

A significant challenge in making reforms is translating broadly stated goals for change into measurable outcomes that can be achieved and monitored. Focusing on the gap between current status and ideal status and developing concrete goals and strategies for closing this gap have been identified as important components of making changes (Have-

lock & Havelock, 1973; Powers, 1988; Winton, 1990). In addition, it is important to make short-term, achievable goals so that participants will be motivated by their successes (Winton, 1990). Again, this suggests ongoing activities and efforts with new goals being added as accomplishments are made.

Provide Ongoing Monitoring, Evaluation, and Follow-Up

Making changes in personnel systems that ultimately benefit children and families is a slow process. Policies, resources, and other factors outside the control of those engineering the change affect structured attempts to bring about change. ''Expect the unexpected'' is the motto for those attempting to implement a plan for making reforms. Therefore, evaluation and monitoring efforts must be creative and multifaceted. Data must be collected from the systems being changed in an ongoing fashion so that the circuitous passages and derailments toward reform can be documented and used to modify strategies and revise directions. Learning from mistakes as well as successes is critical. We must assess the impact of our actions at all levels and with all constituent groups and must also examine what changes remain or become institutionalized in existing structures and which changes are transitory and ephemeral (i.e., dependent on a short-term grant or one person's support). This requires an intensive, longitudinal effort. Chapters 6 and 7 provide information on evaluation and follow-up strategies.

CONCLUSION

Perhaps the ultimate goal in rethinking personnel development systems is to create a flexible ''learning organization,'' in Fullan's words (1993), capable and expert at dealing with change as a normal part of the way it works and how it prepares others. Not only should personnel development systems be flexible learning organizations, but also individuals must be prepared who are lifelong learners, capable of dealing with unpredictable changes. The solutions to the problems and challenges outlined in this chapter remain to be developed; because the challenges and needs continue to evolve and change, this must be an ongoing activity. A spirit of inquiry needs to be promoted in individuals and the systems that support those individuals; this spirit must undergird all personnel preparation efforts.

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