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A Framework for Change in Early Childhood Inclusion

The year 1975 will always be remembered by the disability community for the passage of the Education for All Handicapped Children Act (PL 94-142). In that landmark and wonderfully crafted piece of legislation, the right of children with disabilities to obtain a free and appropriate public education was firmly and unequivocally established. Modified and extended by subsequent amendments and reauthorizations (e.g., the Education of the Handicapped Act Amendments of 1986 [PL 99-457], the Individuals with Disabilities Education Act [IDEA] of 1990 [PL 101-476], the IDEA Amendments of 1991 [PL 102-119] and 1997 [PL 105-17]) and supported by related legislation (Rehabilitation Act of 1973 [PL 93-112]. Americans with Disabilities Act of 1990 [PL 101-336]), programs of services and supports have evolved such that infants, toddlers, and preschool children who are developmentally at risk and their families have become part of a meaningful early intervention system (Guralnick, 1997b, 1998). At the beginning of the 21st century, although eligibility requirements and the details of the practices and the forms taken by the service system vary from place to place, young children and their families in communities all across the United States have access to early intervention programs.

Unquestionably, one of the most farreaching and perhaps radical components of this legislation is related to the prospect of providing services and supports to young children with disabilities together with typically developing children in what is now referred to as inclusive environments. As practiced, inclusion takes many forms and varies substantially in terms of the degree to which children with and without disabilities are actually included with one another. (Details of these variations are discussed shortly.) Nevertheless, the defining feature of inclusion for young children is the existence of planned participation between children with and without disabilities in the context of children's educational/developmental programs. Inclusion replaces terms such as mainstreaming and integration, which provided useful frameworks during early periods as the nature and meaning of participation between children with and without disabilities evolved. Of note, many professionals, families, and advocates do not limit inclusion to mean

involvement only in educational/developmental programs but extend the concept to the participation of children with disabilities and their families in typical activities found in their neighborhoods and communities. This broader conceptualization of inclusion is adopted throughout this book.

In many respects, the press for inclusion was a reaction against the stigma and isolation that almost inevitably accompanied one's "disability status": a circumstance reinforced by the separation of children with disabilities characteristic of educational settings before the passage of PL 94-142. Against the background of the emergence of principles of normalization (Wolfensberger, 1972) and the civil rights movement, questions intensified as to the ethics and legitimacy of a practice that discouraged a sense of community belonging in families and children with disabilities. At the same time, increasing recognition of the lost developmental and social opportunities that likely resulted from limiting experiences almost exclusively to children with similar special needs began to emerge, as did an appreciation by the professional community that developmental differences are primarily variations of common developmental processes that require accommodations rather than an entirely separate set of approaches and practices.

Combined with concerns regarding the low expectations that seemed to continue to accompany children who were grouped in terms of developmental status, the energies of advocates coalesced to encourage efforts that promoted interactions between children with and without disabilities in every manner and at every level. Over time, the values and principles regarding a sense of belonging, developmental continuity, respect for and celebration of individual differences, expansion of social and educational opportunities, and raised expectations for children with disabilities were joined with legal concepts related to procedural and substantive due process, to equal protection requirements, and to constitutional principles of minimum intrusion (Turnbull, Ellis, Boggs, Brooks, & Biklen, 1981). Together they established a powerful set of arguments that resulted in the language in PL 94-142 (as well as subsequent amendments and reauthorizations applied to young children) intended to promote inclusive practices.

It is important to recognize that the inclusive aspects of PL 94-142 were based primarily on ideological, theoretical, and legal grounds. At the time, little empirical evidence could be found to suggest that children with disabilities would, for example, achieve a greater sense of belonging from participation in an inclusive environment, that meaningful friendships would develop between children with and without disabilities, that social or other aspects of development of children with disabilities would be enhanced as a consequence of opportunities to interact with typically developing children, or that contact among children with diverse characteristics would engender a respect for individual differences. From a developmental perspective, there was hope that children would challenge and learn from one another, and various forms of social learning theory and imitation were appealed to that suggested the potential benefits of inclusive environments. Again, however, virtually no empirical basis existed, and the early published works using paradigms such as imitation (e.g., Guralnick, 1976) were at best crude attempts to understand a most complex process.

Moreover, particularly for young children, the field had only meager experience with programs that included children with and without disabilities. The diverse forms that inclusive programs might take, whether these programs could feasibly encompass all children with disabilities, or how individual family choice was to be weighed had simply not been examined in any systematic manner. The question of how to deliver traditional special education and related services in these new environments loomed as a major concern.

Perhaps it was this lack of experience with inclusive programs and the absence of a firm empirical basis for most of the stated and implied expectations for inclusion that led to the carefully worded statement about preschool inclusion found in PL 94-142:

To the maximum extent appropriate, [children with disabilities]. . .are educated with children who are not [disabled], and that special classes, separate schooling, or other removal of [children with disabilities] from the regular educational environment occurs only when the nature or severity of the [disability] is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (§ 612[5][b])

This statement directs educational agencies to seek out ways to educate children with disabilities together with typically developing children. The language also indicates a presumption for placement of children in general education environments but does identify conditions under which other placements could occur (i.e., "only when the nature or severity of the [disability] is such that services cannot be achieved satisfactorily"). Translating this cautious language into practice, however, was and is a complex issue. Defining what constitutes satisfactory progress and the required level of supplementary aids and services could and would serve as points of contention. Similarly, the qualification "to the maximum extent appropriate" added another element of ambiguity. Corresponding language and requirements applied to infants and toddlers in subsequent legislation (PL 102-119, PL 105-17) specifying that services and supports be provided in natural environments created similar difficulties for this group of young children and their families.

Finally, to complicate matters further, regulations for PL 94-142 mandated that each educational system have available an array of environments that vary in restrictiveness and that, to the extent appropriate, children were to be placed in the least restrictive of those environments. It was in this context of determining the least restrictive environment that the various forms of inclusion would be realized and justified. Moreover, the concept of least restrictiveness served as the basis for the tensions that emerged when inclusion was put into practice. Questions included the following: Is it appropriate to emphasize educational or social benefits? To what extent should classroom structure be altered in the interests of inclusion? What limits should be placed on resources to provide supplementary aids and services? Answers to these and other vexing questions would contribute to program design and placement decisions within the least restrictive framework. The challenge, it seems, was to apply this principle of least restrictiveness over time, to determine which questions were appropriate, to evaluate practices carefully, and, ultimately, to develop the meaning of least restrictiveness within contemporary beliefs and practices (Biklen, 1982).

Evaluating all of this in historical context, it is reasonable to consider the legislative intent regarding inclusion as both a means to remedy past failures and inequities and to serve as a catalyst for change. Despite all of the uncertainties and tensions, the message could be construed as, "Move ahead; press this issue; develop rationales for making decisions; and experiment wisely, vigorously, and creatively, but remain committed to this new paradigm." Indeed, the field of early intervention took this message seriously.

A CALL FOR CHANGE

The stage was set for what was intended to be a remarkable and inexorable shift in the expectations for and experiences of individuals with disabilities. However, it soon became apparent that the conceptual and practical implications of legislation that fostered inclusion were both extraordinary and demanding even (or especially) when applied to young children. In essence, it required change in virtually every facet of the evolving system of early intervention services and supports, as the early intervention system maintained strong historical ties to the larger educational system that operated primarily within a segregated model. For preschool-age children in particular, the very foundations of the systems themselves were challenged, encouraging educational agencies to rethink their traditional administrative structures with attendant changes in how resources were to be allocated and how and by whom decisions were to be made. Although a long-term perspective was needed, similar changes in the training of personnel at all levels, as well as changes in early childhood program staffing patterns, were implied by the press for inclusion. These changes were relevant not only to general early childhood educators and to early childhood special educators but also to members of all disciplines who were now asked to alter their practices to accommodate new inclusive approaches. At minimum, co-teaching and consultant models were needed to meet both the spirit and the letter of inclusion.

Efforts to promote education reform, redesign policies, restructure personnel preparation programs, and alter existing professional practices were forced to confront attitude and belief systems that were grounded in years of training and experience and supported by well-developed professional infrastructures. For educational staff in particular, adapting instruc-

tional materials and curricula-including incorporating the use of assistive technology-constituted not just a technical challenge but also a conceptual one, as special educational practices and beliefs about how children learn and develop now had to accommodate to general early childhood educators' practices and beliefs. Differences in approaches became most apparent when children with highly specialized needs were to be included, such as those with autism or complex special health care needs. Could a developmental approach that was common to general early childhood education practice work? How could the highly intensive and specialized techniques often needed for these children fit within the general early childhood program? These concerns were expressed by all involved, including parents, administrators, teachers, and related personnel.

At a more personal level, change was called for in the ways in which children with and without disabilities interacted socially with one another. Many children with disabilities were socially isolated, and inclusive programs were seen as a means of altering that state of affairs. Questions that plagued both parents and professionals centered on whether meaningful relationships, not just perfunctory acceptance, would form between children with and without disabilities. Would an understanding of and respect for individual differences emerge through experience with one another? How could staff incorporate activities in inclusive programs to support these social interaction processes? Could the foundation for a broader inclusive community that extended to families and neighborhoods be established? To be sure, early childhood programs were becoming more diverse, particularly with regard to their multicultural composition, yet children with a heterogeneous array of disabilities constituted an even more complex challenge for change.

Finally, change was occurring in other aspects of the early intervention system, and it had important implications for change in inclusive practices. In particular, emerging concepts of family centeredness, family empowerment, and family choice were forever altering the nature of parent-professional relationships. As parents increasingly exercised their new decision-making roles about all matters of their child's program, including type of placement, parents' perceptions of and commitment to inclusive practices added a new and once again highly complex dimension to the entire process. Issues regarding how their child would gain access to the needed special education and related services and how the program would work to minimize rejection of their child by peers rapidly moved discussions of inclusive practices from a theoretical to a very practical level.

PATTERNS OF CHANGE

Despite these and other numerous and diverse challenges to change, there remained an optimism in the field that the principles and practices of inclusion at the early childhood level would ultimately be agreed on and realized. No one, of course, thought it would be easy, yet neither did the anticipated changes seem unreasonable nor unreachable over the course of time. Indeed, in 1978, the essence of this optimism was captured in an anthology that described new models and approaches designed to "integrate" or "mainstream" young children in early childhood environments (Guralnick, 1978). A high level of activity followed in virtually every aspect of the early childhood system, and more and more children were being served in inclusive environments (e.g., Wolery, Holcombe-Ligon, et al., 1993). Personnel preparation programs were modified, new inclusive models were developed and evaluated, many administrative barriers were removed,

and a productive dialogue was established between relevant constituencies at all levels. Together, these efforts culminated in the ability of education professionals to create inclusive programs that seemed to work.

The accomplishments of the 1980s were truly impressive (see Guralnick, 1990a). Nevertheless, as discussed in the following sections of this chapter, what failed to emerge was a comprehensive, national, and well-coordinated effort to clarify, define, and foster inclusive practices. No goals were set, momentum was difficult to sustain, and the process seemed fractionated despite islands of excellence in various communities. Conceptualization of the issues and corresponding expectations for outcomes never fully developed. Consequently, continuing research and program development were not carried out within a systematic framework. A lack of focus became a critical concern.

Four goal domains, which are consistent with the rationale and expectations for inclusive programs discussed previously, provide a perspective on the status of inclusive programs and the issues that were still unresolved in the 1990s: 1) access, 2) feasibility, 3) developmental and social outcomes, and 4) social integration. In this chapter, each of these four goal domains provides a basis for specifying explicit goals and corresponding expectations for inclusion. Each goal then is evaluated in terms of existing research and practice patterns to determine the extent to which individual goals have been realized. With this framework and information, it is hoped that the field will be in a better position to establish an agenda for change.

Access

Universal access to inclusive programs for infants, toddlers, and preschoolers constitutes an obvious and essential goal (see Table 1.1). The reasonable expectation is

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Table 1.1. Goal and outcome criteria for the goal domain of access

Goal		Outcome criteria		
Universal access to inclusive programs	1.	Availability of inclusive programs in local community		
	2.	Maximum participation with typically developing children in typical activities		

that all communities will have developed and refined inclusive models that become meaningful placement options for young children with disabilities. Indeed, substantial progress toward universal access was achieved in the 1980s. One report indicated that nearly three quarters of U.S. programs that serve preschool-age children enroll at least one child with a disability (Wolery, Holcombe-Ligon, et al., 1993). Although more conservative percentages are likely to be more accurate when considering the high number of nonrespondents in survey studies (see Buysse, Wesley, Bryant, & Gardner, 1999), individual states also have reported considerable progress over time for both preschool-age children (Dinnebeil, Mc-Inerney, Fox, & Juchartz-Pendry, 1998) and infants and toddlers (Bruder, Staff, & McMurrer-Kaminer, 1997). The figures for preschool-age children are impressive when it is realized that public schools rarely provide programs for typically developing young children. As a consequence, programs that involve typically developing children either needed to be established or needed arrangements made with private preschool or child care programs or with public programs such as Head Start. Even more complex arrangements were needed to establish inclusive child care options for agencies that are responsible for infants and toddlers with disabilities.

Other evidence, however, suggests that we are far from achieving the goal of universal access to inclusive programs, irrespective of the forms that these inclusive programs may take. As might be expected from the complex arrangements with community preschools or

child care programs needed to gain access to typically developing children, this state of affairs has created numerous policy barriers regarding contractual arrangements for services, financial responsibilities, personnel standards, transportation, and many others (see Smith & Rose, 1993). Most of these issues still await resolution in many communities. Moreover, reports indicate that inclusive experiences are still not available to a substantial proportion of families (Cavallaro, Ballard-Rosa, & Lynch, 1998; Kochanek & Buka, 1999; McWilliam et al., 1995). In the study by Cavallaro and colleagues (1998), for example, findings indicated that more than one quarter of local education agencies (LEAs) in California did not provide an inclusive option to families in their community. Co-location of separate programs for children with and without disabilities was the predominant service model, but even here it was not clear whether many of these programs arranged opportunities for social interaction between the two groups (social inclusion). Even when community inclusion programs are available, inclusive placements do not necessarily follow (Kochanek & Buka, 1999). In addition, surveys of inclusive options suggest fewer opportunities in high-quality accredited programs, even with a most liberal interpretation of survey results (McDonnell, Brownell, & Wolery, 1997). Indeed, the lack of quality inclusive options clearly limits access as many parents choose specialized programs because of these concerns (see Bailey, McWilliam, Buysse, & Wesley, 1998). Also of concern is that many newly created inclusive programs seemingly disintegrate after funding or leadership is no longer provided (Peck, Furman, & Helmstetter, 1993). The absence of an infrastructure and a general commitment to and advocacy for inclusive programs to help resolve differences of approach, opinion, or values of the constituencies involved is most evident in the descriptions of these programs. Furthermore, inclusive options are more readily available to children with mild disabilities than to children with more significant problems (Buysse, Bailey, Smith, & Simeonsson, 1994). This occurs despite evidence that even children with severe disabilities can be accommodated within some type of inclusive environment (Hanline, 1990).

Data on inclusive child care options for infants and toddlers, most of whom have significant disabilities, are very limited. Despite progress in many communities, parents of infants and toddlers with disabilities report having difficulties locating community-based child care. In fact, infants with established disabilities as well as those at risk enter child care later and spend fewer hours in child care than do typically developing children (Booth & Kelly, 1998). In addition, nearly half of mothers of children with special needs who do not wish to remain home after the birth of their child were not planning to return to work because of difficulties with finding quality child care (Booth & Kelly, 1999). From a different perspective, analyses of services for infants and toddlers in early intervention programs specifically selected to be "exemplary in values and concepts," including community inclusion, revealed that only approximately one third of the services were provided in inclusive environments (Kochanek & Buka, 1998). Similarly, only a small fraction of infants and toddlers with disabilities in California receive services in inclusive environments (other than their homes) (Cavallaro et al., 1998). The importance of inclusive experiences in child care should not be underestimated, even if they occur only on a part-time basis. Not only does child care constitute the primary inclusive option for infants and toddlers, it also provides most families with their first experience with families in their communities in a formal and structured environment.

Even policy makers have become impatient with the pace of inclusive practices, strengthening the individualized education program (IEP) in the reauthorization of the IDEA amendments of 1997 in an effort to maximize the involvement of children with disabilities in general program activities. Requirements for the IEP emphasize the importance of focusing on the services, adjustments, and accommodations needed to ensure a child's participation in general programs. Moreover, required now are explanations on the IEP as to the extent to which a child with a disability will not participate in general activities. These requirements clearly encourage participants who are developing the IEP to consider carefully how to maximize inclusive experiences. Additional provisions of this reauthorization encourage inclusive practices by requiring a more central role for the general educator in developing the IEP and mandating participation of parents in determining their child's placement in a particular program.

These concerns about access to inclusive programs are complicated further when the type of inclusive program is considered (see the next section). The fact is that the level of *planned participation* between children with and without disabilities varies substantially across program types, even though all program types are considered and consider themselves to be inclusive. Indeed, the term *inclusion* is generally used in its broadest sense to refer to children with disabilities whose programs include participation with children without disabilities, despite that the level of participation may be minimal (see Cavallaro et al., 1998). However, the absence of options or failure to select an option that can readily accommodate children with disabilities and provide for far more extensive involvement in inclusive activities also can be said to restrict access. This important but often overlooked issue effectively restricts access and is discussed in the following sections.

Types of Inclusive Programs Although no official or even generally accepted typology exists for the range of available early childhood inclusion program types, the program options that exist for preschool-age children tend to parallel the special educational continuum of least restrictive environments (Taylor, 1988). Specifically, the following four general categories seem representative of current placement options. The first consists of full inclusion. In this option, children with disabilities are to be full participants in the general program environment. All activities are intended to be well adapted to children's needs, and IEPs are designed to be accommodated within the general early childhood curriculum. Depending on the number of children with special needs in the classroom or the severity of the children's disabilities, early childhood special educators and other specialists provide services on an intermittent or continuing basis.

The program and all of the children in it remain the responsibility of the general early childhood educator, although both special educational and related services can be provided by specialized staff. Ideal and most consistent with an inclusive framework is that both special education and related services are well integrated into the ongoing curriculum and general program activities are implemented by all staff. This is usually accomplished through some combination of consultation (Buysse & Wesley, 1993), team process (Bruder, 1996), and integrated strategies for providing specialized services (McWilliam, 1996b).

The second type of program, the *cluster model*, shares many characteristics with the full inclusion model. However, it is distinguished by the fact that a small group of children with disabilities is essentially grafted onto an existing program that serves typically developing children, bringing with it its own staff. Moreover, this cluster of children with special needs frequently is assigned a separate physical location within the larger program, usually an alcove or some other physically designated area.

In this model, the general early childhood teacher is responsible for all children, and children with disabilities are expected to participate in most, but not all, of the usual program activities. Some activities that are unique to children with disabilities are planned within this model. Conceptually, the cluster model can operate in a manner similar to the full inclusion model, although the clustering itself, the constant presence of a special education teacher (often an early childhood special educator), and the expectation of greater involvement of the special education teacher with the children with disabilities immediately establish some level of separation. This model can be efficient, but a tendency toward separate activities beyond those that may have been planned originally can result in substantial functional separation. Staff in this model, as in the full inclusion model, must constantly work together to maximize consultant and team approaches and to develop ways to integrate related services.

The third model, most appropriately labeled *reverse inclusion*, differs dramatically from the previous two models in that its foundation is a specialized program to which a relatively small group (usually 25%-40% of the total) of typically developing children is added. Generally staffed by early childhood special educators, this model often remains true to its "special needs" tradition, although accommodations for the typically developing children can create a program pattern that exhibits many similarities to general early childhood programs. In fact, variations across programs in terms of structure, curriculum, educational philosophy, and so forth of this reverse inclusion model can be substantial. Every effort is made to develop activities that include all children, and this model is also very efficient and can easily integrate the services provided by specialists.

The fourth and final model, social inclusion, provides the least contact between children with and without disabilities. Although housed in the same general location, programs for typically developing children and children with disabilities are maintained in separate spaces with separate staffs. Accordingly, curricula, educational philosophies, and other program features are likely to differ substantially between the two types of programs. Planned contact between the two groups generally occurs during free play and other recreational activities and is intended to provide opportunities for social interaction. Virtually all services are provided in the context of the specialized program.

These four types of inclusive program options can be operated by public or private agencies and located in community centers, private facilities, or public schools. Dual enrollment (enrollment in specialized and inclusive programs at different times of the day or days of the week) is also an option, especially when child care is needed (see Odom et al., 1999). However, dual enrollment creates very different educational/developmental opportunities. In most instances, the specialized program is conventional, with all services being provided in that context, whereas the inclusive option is a child care or similar program. Socialization with typically developing children in general child care is, of course, important, but without a knowledgeable and well-trained child care or nursery staff, the likelihood of achieving a productive socialization experience is reduced. Frequently, the complementary inclusive program is not involved or seemingly committed to the child's larger educational/developmental program. Unfortunately, effective communication across dual programs is extremely difficult to accomplish (Donegan, Ostrosky, & Fowler, 1996).

The Priority of Full Inclusion Programs Many in the field might argue that the availability of this array of inclusive options for young children with disabilities may well be appropriate and can best meet children's individual needs while balancing multiple goals. After all, this seems to be what was intended by PL 94-142 and is consistent with the notion of ensuring the availability of alternative programs that vary in terms of restrictiveness (i.e., degree of contact with typically developing children and participation in typical program activities). Of course, the specialized option (no planned participation with typically developing children) remains as well. Yet, as Taylor (1988) pointed out most thoughtfully, whereas this principle of least restrictive alternatives once served the disability field well, it may now be inconsistent with contemporary thinking and stand as a barrier to children's full participation in typical educational and community activities. Although Taylor's (1988) paper should be consulted for the detailed development of this position, he pointed out how the principle of least restrictive environments in today's framework can actually legitimize restrictive environments. As Taylor discussed, by striving to ensure the existence of alternative placements, the least restrictive principle fails to recognize that service intensity and type of program constitute independent issues except in extreme

instances; it implies a "readiness" model; it is not compatible with a true parentprofessional partnership; as practiced it may actually infringe on children's rights; it may require children to experience increasing numbers of transitions should they move toward more inclusive options; and it diverts attention to issues related to environment rather than to supports and services.

This position could be interpreted to suggest that the only appropriate inclusive placement is a fully inclusive one. However, as persuasive as this argument is, options other than full inclusion may well be appropriate for children even at the early childhood level. We just do not know. The concern, and it is as much programmatic as philosophical, is that no general, agreed-on justification or rationale for placing children in any program option has been established. Simply put, the field has not yet adequately addressed issues with regard to why these various options exist and what unique benefits they may confer. Should such a framework be developed, we will then be in a better position to address questions such as the following: Under what conditions should children be limited only to social inclusion? What child needs or program characteristics would lead to considerations of placing a child in a reverse inclusion program? Is it acceptable for decisions to be based primarily on the availability of slots or ease and efficiency with which specialized services can be provided? Are there valid concerns that the intensive specialized services for children with disabilities cannot be accommodated without disrupting the entire general early childhood program? How are decisions affected by assessments of program quality? Is it likely that children's social and educational development will be compromised as a consequence of participation in full inclusion programs? Will children with disabilities be isolated or even rejected by their peers in fully inclusive environments? Is peer rejection minimized in reverse inclusion programs? Failure to consider these and other questions that are specific to existing options allows participants to make placement decisions that are unexamined in light of both value judgments and available knowledge.

Should such a rationale be developed, it may well reveal that the choice of inclusive program type for many children with disabilities unnecessarily limits involvement with typically developing children and participation in typical activities. For example, why is it that in California only approximately one third of the children with disabilities in reporting LEAs participate in fully inclusive programs and only one half of the children with mild disabilities are fully included (Cavallaro et al., 1998)? Could more children benefit from participation in full inclusion programs? Indeed, the new language of the IDEA Amendments of 1997 with respect to IEP development and placement decisions is asking for a more thoughtful level of decision making. As noted previously, required for the IEP are new statements that focus participants on what needs to be done to maximize general classroom involvement and that explain why children are not participating in all activities. This constitutes an important direction and serves to encourage the development of rationale bases for placement decisions. For completeness, development of such a rationale should encompass a justification for placement in a specialized program as well. In fact, even in exemplary programs, child placement in an inclusive or specialized environment is unrelated to child, maternal, or service provider characteristics (Kochanek & Buka, 1999).

A related concern with respect to the absence of a well-established rationale for decisions is that virtually no motivation for change is generated. Rather than accepting what is available as a result of an ambiguous set of circumstances, being armed with a rationale allows the important issues to shift within this framework to the conditions necessary to maximize inclusion. Answers to all of the previous questions are, of course, tied to certain conditions (e.g., adequate resources and methods to promote inclusion). Accordingly, entering into a dialogue about these conditions may well constitute one of the most important strategies for altering the current pattern of inclusive options. Important information, at least at a general or group level, that relates to questions that are relevant to a rationale for deciding on specific placements is already available, including specialized placements. This information is summarized later in this chapter and in the remainder of this book. Consequently, discrepancies between what exists and what needs to be created can be identified. Goals and future directions for research and program development can follow.

Should communities undergo such a review and analysis, this process may, over time, yield results that produce important changes at a systems and general program level. Such a process is to be encouraged now, despite that more knowledge needs to be acquired. Discomfort at the level of uncertainty that exists with respect to an emerging framework to help inform decisions about inclusive options will vary from community to community, but, as will be seen, useful information that is relevant to many of the important questions is, in fact, available. Professionals who participate in research should be available not only to bring their knowledge to the attention of all those involved but also to do so in a convenient and interpretable manner. Moreover, the specific issues that could benefit from the attention of researchers would become apparent as this process of developing a rationale continues. Of note, the absence of information is especially glaring for infants and toddlers, and we have only a limited understanding of the meaning of "natural environments" for these young children.

Finally, the ultimate challenge is to apply such a framework (rationale) to an individual child and family, especially when some level of uncertainty is inevitable. Of course, a child's individual needs remain of paramount importance, and the links between a rationale and information about program options in relation to the needs of a given child and family may create tension in many circumstances. These decisions will also remain personal ones, and certain factors that govern those decisions may never be identified. Nevertheless, decisions on a child-by-child basis can become increasingly informed when presented within a well-designed rationale that frames the issues and communicates what is known. It is under these circumstances and through this process that a more thoughtful understanding of the meaning of the priority of full inclusion can be achieved.

Summary Available evidence suggests a mixed picture with regard to children's access to inclusive programs. Considerable progress, especially for preschool-age children, has been achieved, and, although a more recent phenomenon, efforts to ensure access for infants and toddlers are moving forward. Yet, universal access to inclusive programs of any type for young children with disabilities is far from a reality. A substantial proportion of families are still not offered an inclusive option. Even when offered to families, the poor quality of many programs effectively limits access. Of considerable concern is the absence of a systems-level infrastructure designed to maintain existing programs and to foster the systematic expansion of inclusive options. Moreover, there seems to be no well-developed framework justifying either the development of various inclusive options or a rationale for matching children with program types. No corresponding rationale for placement in specialized environments exists either. As a consequence, decisions about placement options, especially when considering options other than full inclusion, are likely to be uneven at best. The reauthorization of IDEA seeks to maximize the participation of children with disabilities in fully inclusive environments, but fully inclusive programs do not seem to be emphasized in community environments. For needed change to occur, a dynamic new framework is required that utilizes our existing and emerging knowledge base to identify what must be accomplished to ensure that children find their way to the most appropriate program.

Feasibility

The concept of feasibility is important and represents a recognition of and respect for the integrity of general early childhood or early intervention programs (see Table 1.2). Inclusive practices, when properly carried out, ultimately require change and accommodation at the program level to ensure an appropriate experience for children with disabilities. However, it is not the intent of inclusive practices to alter in a significant way the fundamental assumptions and structure of a particular program's model, thereby altering the experience for typically developing children. If that disruptive outcome were to occur, it is hard to imagine continued support for inclusive programs. Indeed, court cases have established that teachers in inclusive programs cannot be required to devote an unusually large proportion of their time to children with disabilities, nor are programs required to alter their nature radically (Daniel R.R. v. State Board of Education, 1989; see Lipsky & Gartner, 1997, pp. 86, 305). Feasibility, then, refers to the ability of a particular program to retain its core philosophical and programmatic approach while successfully meeting the individual needs of all children in the program (Guralnick, 1982). In a meaningful sense, then, feasibility reflects critical dimensions of program quality.

Feasibility is a particularly challenging goal for general early childhood programs that are now faced with accommodating children with a wide range of disabilities (usually in the full inclusion model). Yet, significant challenges exist for other types of inclusive programs as well. Reverse inclusion programs, for example, often dominated by an early childhood special education approach, may need to incorporate more of a developmental model to meet the needs of typically developing children-a circumstance that may challenge the basic features of a model designed originally for children with special needs. The commitment of any program to experiment with variations of their model and the availability of resources to support those adjustments are critical for ensuring that programs are feasible. In many respects, then, feasibility presents both a program integrity issue and a resource issue.

Program Integrity The goal of universal access to inclusive programs can easily be quantified, even for various program types (see the previous "Access" section). In contrast, the goal domain of feasibility has not been fully developed and therefore does not readily lend itself to such straightforward objective measures. Nevertheless, a number of measurement approaches can be suggested. For example, with regard to program integrity, teaching and administrative staff could conduct self-evaluations about the accommodations required and their impact on the program. Judgments then could be made about the compatibility of the altered program with the program's model and approach. Alternatively, observations of the ecology of the program by personnel not identified with the program could provide converging informa-

Goal		Outcome criteria		
Accommodate to and meet	1.	Self-evaluations by program staff regarding program integrity		
individualized needs of children with and without disabilities without disrupting the integrity of a program's model	2.	Independent observations to evaluate the appropriateness of curriculum adjustments, flow of activities, classroom atmosphere, distribution of teacher—child interactions, and so forth		
	3.	Instructional time, child engagement, and progress toward IFSP or IEP objectives are in accord with expectations		
.36	4.	Specialist expertise available to meet individualized child needs delivered in a manner consistent with program model		
	5.	Children with disabilities not stigmatized by teachers or program practices		

Table 1.2. Goal and outcome criteria for the goal domain of feasibility

tion regarding the application of the general or overall curriculum, the flow of activities, classroom atmosphere, the distribution of teacher-child interactions (e.g., time devoted to children with and without disabilities), and other dimensions. These observations then would be compared with expectations based on the program's philosophical and programmatic approach.

The limited and extremely preliminary data on this issue do suggest that the general integrity of early childhood programs can be feasibly maintained when children with disabilities are included. Survey research with general early childhood educators as respondents indicates that the range of activities is not restricted as a consequence of the presence of children with disabilities and that educators perceive that their general activities can be relatively easily adapted to accommodate children with disabilities (Wolery, Schroeder, et al., 1994). Similar results (i.e., minor accommodations) were obtained in a more recent study of practitioners (general educators, special educators, related services personnel, paraprofessionals) involved in early childhood inclusive programs (Stoiber, Gettinger, & Goetz, 1998). Accommodations were perceived to be more major for children with certain disorders (e.g., autism, behavior disorders), however. In addition, observations of interaction patterns of children and teachers in inclusive environments suggest an ecology that can accommodate all children (Kontos, Moore, & Giorgetti, 1998). Feasibility using engagement as the measure (i.e., time spent by children in appropriate interactions with teachers, peers, or curricular activities) is also suggested. Analyses by McCormick, Noonan, and Heck (1998) indicated high levels of engagement in similar activities for children with and without disabilities in communitybased programs using what seemed to be the cluster model. Nevertheless, no welldefined system exists to examine this goal domain, including expectations related to the flow of program activities, the frequency and consistency of teacher-child relationships, and other important features that can index the integrity of the program's philosophical and programmatic approach. This is an important task for future work.

In fact, given the often contentious debate regarding the application of a general early childhood model articulated within the framework of developmentally appropriate practices (DAP; Bredekamp, 1987; Bredekamp & Copple, 1997) to children with disabilities, legitimate concern about the feasibility of inclusive programs can be raised (e.g., Carta, Schwartz, Atwater, & McConnell, 1991). The degree of program structure, the importance of assessment and evaluation, the nature and extent of the interactions that occur between adults and children, and the relative emphasis on socioemotional as opposed to other developmental goals are among the issues that can affect feasibility. Numerous efforts toward reconciling the perspective of the primarily early childhood special education tradition with that of the general early childhood tradition have been attempted (Bredekamp, 1993; Guralnick, 1993; Wolery, 1997), and many common themes can now be comfortably identified.

Of note, research comparing inclusive and specialized programs with respect to developmental appropriateness for preschool-age children has vielded similar outcomes (approximately 50% of inclusive and specialized programs met minimum criteria for developmental appropriateness; La Paro, Sexton, & Snyder, 1998). Comparisons between specialized and inclusive programs for toddlers also have produced similar results (Bruder & Staff, 1998). Although issues of overall program quality can be raised by these and other studies (Buysse et al., 1999), it nevertheless seems that generally agreed-on quality practices are commonly shared across widely differing programs. Yet, judging by the extraordinary effort that has been required to achieve some common ground at a conceptual level regarding DAP, it seems that much remains to be accomplished at a day-today level, particularly when considering the many full inclusion programs that are administered by the general early childhood community. Moreover, issues regarding the availability of special educational and related resources and their effective integration into a program's model are likely areas of concern for feasibility. These topics, which directly address the program's ability to meet the individualized needs of children with disabilities, are examined in the following sections.

Special Educational Resources Feasible programs provide the context for educational/developmental activities that are closely linked to individualized needs of children with disabilities. At a minimum, the objectives specified in the IEP for preschool-age children and those in the individualized family service plan (IFSP) for infants and toddlers must be carried out in a thoughtful way. To accomplish this, specific curriculum adaptations often are required, and sophisticated instructional technologies must be incorporated into the daily activities of the overall program. The feasibility of this task has been amply demonstrated given adequate training and resources (e.g., Wolery & Fleming, 1993). Although evaluation approaches for feasibility with respect to meeting the child's needs have not been firmly established, measures of instructional time, child engagement, and the rate of child progress toward achieving objectives have been suggested (McWilliam, Trivette, & Dunst, 1985; Wolery & Fleming, 1993).

It is this aspect of feasibility that places demands on resources, particularly personnel. Experts in instructional technology and disability issues in general must be available to provide advice, training, and even direct child services on occasion (see Guralnick, 1999a). Without access to this expertise, the possibilities of carrying out an appropriate individualized program are remote for many children with disabilities. For the cluster, reverse inclusion, and social inclusion models, experts are usually readily available. However, for full inclusion programs, available evidence suggests that a large number of programs neither work with nor are supported by special education professionals (McDonnell et al., 1997; Wolery, Martin, et al., 1994). In fact, a survey by Cavallaro and colleagues (1998) showed that the majority of inclusive programs did not provide any services to children with disabilities in the inclusive environment. Given the overall absence of training of general educators in the disability field (e.g., Wolery,

Brookfield, et al., 1993), significant concerns can be raised about the ability of a substantial proportion of full inclusion programs to provide appropriate individualized activities for children with disabilities. This is a major threat to the feasibility of these programs.

Related Services Resources Feasible inclusive programs not only require special educational expertise but also require related services that utilize the skills of specialists, such as occupational therapists or speech-language pathologists. The question of feasibility relates to both the availability of these specialized services and how they are provided. With respect to availability, extant data suggest that specialists are in short supply in full inclusion programs (McDonnell et al., 1997; Wolery, Venn, et al., 1994). As a consequence, considerable concern exists with respect to developing and implementing an individualized program that incorporates the perspectives of relevant disciplines in full inclusion environments. This seems to be especially problematic for community-based preschool and child care programs.

With regard to the form through which these specialized services are provided, many early childhood models hold that an approach that integrates at many levels the knowledge and skills provided by various specialists (including special educators) is most effective and consistent with the way children learn about the world. The more conventional "pull-out" types of services are discouraged by most general early childhood models as being both disruptive and inconsistent with the program's overall conceptual model. The clear preference in these programs is for "integrated therapy" in which specialists weave their services into the ongoing activities and routines of the program itself (see McWilliam, 1996b). Close consultation between education and specialist personnel, even if services are provided by the specialist in the program environment (usually in the context of general activities), is part of this highly demanding collaborative approach.

In reality, numerous variations of integrated therapy models can be identified and are found in practice (McWilliam, 1995). These variations allow programs to incorporate more easily related services into their activities to meet children's individual needs and, of importance, do not depend on the type of inclusion (or segregated) model. Accordingly, feasibility can potentially be achieved within this framework.

Despite that research has not demonstrated the superiority of one approach over another (i.e., integrated or pull-out) on children's development (McWilliam, 1996a), integrated therapy approaches are far more prevalent and accepted at the beginning of the 21st century than at any other time. In fact, more and more professionals profess a need for integrative approaches. At the same time, substantial differences exist among disciplines as to the value and practice of integrated therapies (McWilliam & Bailey, 1994), and nonintegrated models remain a major force in practice (McWilliam, 1995). Reasons for this include the fact that integrated therapy requires specialists to alter historically grounded and well-established practices. Collaborative approaches are perhaps even more time-consuming than individual practice, as specialists must become familiar with a child's total program, adapt standard practice models, and enter into negotiations with staff to achieve consensus. Indeed, the limited time and opportunities available for collaboration is a recurring theme as voiced by specialists and teachers alike (Buysse, Wesley, & Keyes, 1998; McWilliam, 1995; Stoiber et al., 1998). Larger systems issues of financial considerations and billing practices are also relevant.

There is little doubt that conceptual issues and how these issues are translated

into day-to-day practices that are associated with integrated therapy approaches will require resolution to achieve feasible programs. Perhaps more fundamental is the limited supply of well-trained specialists in general, not only in full inclusion programs. In fact, the training issue is a serious one, as personnel shortages have been well documented and changes in preservice training for professional groups that is compatible with inclusive practices are not nearly keeping pace with the expected demand (Winton, 1993; Yoder, Coleman, & Gallagher, 1990). Of considerable importance, parents have consistently identified staff training and the availability of special services as concerns with respect to placing their children in inclusive programs (Bailey & Winton, 1987; Blacher & Turnbull, 1982; Guralnick, 1994). It is ironic that, to some extent, the practice of integrated therapy may exacerbate parents' concerns regarding the availability of specialized services, as the visibility of therapists and particularly therapist-child interactions (and therefore perceived intensity of services) may be reduced. Moreover, many parents seem to be interested primarily in obtaining nonintegrated related services from specialists because they believe that it provides more obvious evidence of service provision that is individualized and even most effective (McWilliam et al., 1995). As a consequence, parental choice may challenge the feasibility of inclusive models (particularly full inclusion models) by encouraging or even insisting on practices that are not compatible with the early childhood program's philosophy. In fact, parent satisfaction is an important element for all dimensions of feasibility and requires the development of a thoughtful process of parentprofessional relationships around issues related to inclusion. This process would complement parental decision making already established as part of placement and program planning procedures.

Finally, programs should Stigma be considered feasible only if they minimize the possibility that the child with a disability will be stigmatized as a result of experiences in the inclusive environment (see Goffman, 1963). This is a difficult construct to measure, but care must be taken by staff to ensure that efforts to meet an individual child's needs do not occur in a manner that unduly separates the child with a disability from his or her peers and that intervention programs are provided in a respectful manner. Virtually no direct information is available on this issue (Stoneman, 1993). However, results from preliminary studies indicate that in comparison with typically developing children, teachers tend to be less involved with children with disabilities during free play in inclusive programs (Kontos et al., 1998), the possible frustration experienced by teachers as a result of compliance concerns and the extra assistance required by children with disabilities (Quay, 1991), and data in related fields regarding how readily and subtly prejudicial categories about people with disabilities are formed suggest potential concern. Self-assessments and assessments provided by observers as to the manner and style with which services are provided to children with disabilities, how questions that arise about a child's disability are responded to, and self-exploration of staff attitudes toward people with disabilities may serve as useful strategies for evaluating whether the inclusive experience is contributing to the stigmatization of the child with disabilities. Moreover, this dimension of feasibility may well have important implications for the goal of social integration, which is discussed in the section "Social Integration."

Summary The goal of feasibility for inclusive programs represents a framework for ensuring the integrity of programs and the quality of the inclusive experience for children with and without disabilities. Despite its importance, it is perhaps the least well-developed and articulated goal, as limited programmatic work or research has been carried out. Issues of importance include maintaining the integrity of the program's model, particularly as indexed by the nature of adult-child interactions, engagement, and the ability to adapt appropriately the program's curriculum; ensuring that individualized special educational interventions occur as planned; providing specialized therapies in a manner that is consistent with the program's model; and minimizing the possibility of stigmatizing children with disabilities in the way services are delivered and how the program is organized to adapt to children's diverse skills, behaviors, and abilities. Agreeing on and developing criteria and corresponding measures of feasibility constitute important future tasks for the field and provide a more specific framework for establishing program quality. Evidence does suggest that program integrity can be maintained. Studies of practitioner perceptions and direct observations support this position. Program quality, as assessed by indicators of DAP, also seems to be unaffected by including children with disabilities. Most research, however, has focused on full inclusion programs or the cluster model. Nevertheless, concerns with regard to the availability of special educational and related services to help meet children's individualized needs (in full inclusion programs in particular), as well as differences of opinion on models of service delivery, constitute substantial threats to the feasibility of inclusive programs.

Developmental and Social Outcomes

The third goal of inclusive programs relates to the developmental (e.g., language, cognition, motor) and social outcomes of children with and without disabilities. The appropriate goal here actually should be modest (i.e., children will do at least as well developmentally and socially in inclusive programs as they do in specialized ones). Particularly for children with disabilities, a rationale certainly can be developed to suggest that these children may derive unique benefits from participation in inclusive environments that can enhance development in general. Arguments related to higher expectations that are likely to be found in inclusive environments and the more demanding nature of those environments have been put forward (see Guralnick, 1990a, 1990b). Nevertheless, it is reasonable to expect inclusive programs to provide an environment that can accommodate children with disabilities, meet their individualized needs in a nonstigmatizing manner, and not have a negative impact on typically developing children in the program. As a consequence, developmental and social outcomes should be unaffected by participation in specialized or inclusive programs (see Table 1.3).

Even if programs are considered to be feasible, it is still important to evaluate the developmental and social outcomes of all children. Theoretically, feasible programs should be more likely to yield appropriate developmental and social outcomes, but hardly any information is available on this important linkage. As noted, formal criteria for identifying feasible programs remain to be established. Even when this is accomplished, however, there may well be circumstances that are not evaluated by the feasibility measures agreed on and that can be problematic with respect to confidence that the developmental and social outcome goals are achieved. For example, the larger number of children generally found in inclusive as compared to specialized programs may provide distractions to children with disabilities that adversely influence a variety of developmental domains. Similarly, the social environment provided by typically developing peers may be of concern for children with disabilities, as relationships between children with and without

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Goal	Outcome criteria		
Children will do at least as well developmentally and socially in	 Norm- or criterion-referenced measures of cognitive, language motor, or other aspects of development 		
Construction of the second	Diverse aspects of peer-related social interactions and social competence		
	3. Establishing friendships		

Table 1.3. Goal and outcome criteria for the goal domain of developmental and social outcomes

disabilities may become strained. Over time, this may substantially restrict the development of a competent pattern of peer-related social interactions for children with disabilities. Accordingly, direct outcome, in addition to feasibility, measures are needed.

Developmental Domains In essence, the issue to be examined is whether, under optimal though realistic conditions, children's developmental and social outcomes are affected by participation in inclusive programs. This can best be addressed by comparing feasible inclusive programs with well-established specialized ones. In the absence of established criteria for feasibility, the closest approximation to these conditions is comparisons involving inclusive model demonstration or research-oriented programs, either community based or university operated. Specialized programs involved in the comparisons should also be well-established community programs or, occasionally, research-oriented models. This type of comparative analysis was carried out by Buysse and Bailey (1993), who evaluated and summarized outcomes of 22 studies that met children's chronological age, study design (i.e., emphasized a comparative between- or within-groups research design), and outcome measure criteria. Although as a group these studies exhibited many methodological problems as revealed by an analysis of threats to internal and external validity, consistent patterns did nevertheless emerge. Specifically, irrespective of the developmental domains assessed, no differences were found to result from children's participation in inclusive or specialized programs. This conclusion applies to typically developing children as well (e.g., Odom, DeKlyen, & Jenkins, 1984). Studies of the cognitive aspects of children's play continue to support the finding that inclusive environments do not create circumstances that limit development (Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996a; McCabe, Jenkins, Mills, Dale, & Cole, 1999). Of note, few studies included children with severe disabilities. Nonetheless, a later comparative study that focused on toddlers with severe and moderate disabilities in inclusive and specialized environments also did not detect differences in the developmental progress of children (Bruder & Staff, 1998). Of importance, in this particular investigation and other studies, programmatic characteristics differed between the environments (e.g., often more intensive special educational or therapeutic services were provided in specialized environments, and the teacher-child ratios were higher in those environments). In most instances, however, the quality of the inclusive environments, the level and array of available specialized services, and perhaps developmental advantages associated with inclusive programs seemed sufficient to ensure developmental outcomes that were equivalent to specialized environments.

This analysis by Buysse and Bailey (1993) accepted all inclusive program types, relatively few of which could be classified as full inclusion. However, a study that used a quasi-experimental design did compare two different inclusive program types: full inclusion and reverse inclusion with a specialized program on developmental outcomes for heterogeneous groups of children with mild and moderate disabilities (Mills, Cole, Jenkins, & Dale, 1998). Overall differences on developmental outcomes using conventional analyses were not found to be statistically significant among the three groups, thereby supporting the general pattern found in previous work. Focusing on the full inclusion and specialized programs, analyses of changes over time within the two groups and comparisons between children classified as high or low functioning between groups failed to detect any differences. Accordingly, in these analyses, specialized programs do not provide detectable developmental benefits in comparison to full inclusion programs for heterogeneous groups of children with mild and moderate disabilities. There was some suggestion that a reverse inclusion program, in comparison to both the specialized and full inclusion program types, may offer some developmental advantages for children who are higher functioning but disadvantages for children considered to be lower functioning (Cole, Mills, Dale, & Jenkins, 1991; Mills et al., 1998). These differences are small, however, and in the absence of an understanding of the mechanisms (e.g., type of curriculum, teacher-child interactions [see Guralnick, 1981b, 1982]) which mediate these effects (i.e., processoutcome studies), no clear pattern regarding the relationship among program type, child characteristics, and developmental outcome is evident. For children with severe disabilities, another recent quasiexperimental study comparing full inclusion and specialized programs indicated that the full inclusion program may provide more developmental advantages for these children (Hundert, Mahoney, Mundy, & Vernon, 1998). Taken together, the evidence suggests that children who are in feasible inclusive programs do at least as well as children who are in specialized programs. This conclusion

must remain tentative, however, as few well-designed studies have been carried out.

Social Development The comparative analysis by Buysse and Bailey (1993) that focused on children's peerrelated social development suggested a somewhat different pattern. Specifically, as they reviewed, a number of studies reported increased levels of social interactions for children with disabilities when participating in inclusive as compared with specialized environments. Of note, the peer interactions of typically developing children do not seem to be affected by their involvement with children with disabilities. Later studies confirmed these patterns for the level of peer-related social interactions (Guralnick, Connor, et al., 1996a; Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996b). However, no changes have been observed in the extent to which children establish friendships as a consequence of participation in inclusive or specialized environments (Guralnick, Gottman, & Hammond, 1996). Analyses further suggest that when advantages for inclusive environments are found, increases in the peer-related social interactions can most likely be attributed to the social demands placed on children with disabilities by their typically developing peers (Guralnick, Connor, et al., 1996a: see also McGee, Paradis, & Feldman, 1993). This finding regarding the specific role of typically developing children suggests the importance of the programmatic factor related to the proportion of children with and without disabilities in the inclusive environment. Specifically, this finding may explain why increases in social interactions by children with disabilities are less apparent when they are in an environment that contains a relatively small proportion of typically developing children (i.e., reverse inclusion program; see Guralnick & Groom, 1988b).

Moreover, and of considerable importance, this increase occurs primarily in the form of higher levels (primarily frequency) of social interactions with peers rather than in the form of more developmentally advanced levels of social competence. Consequently, it may well be that inclusive programs, particularly the full and cluster models, provide a stimulating, interactive environment that encourages a high level of social interactions. To achieve social outcomes in the form of more sophisticated skills related to socially competent interactions, however, simple placement in inclusive programs is not adequate. More comprehensive interventions that are directed specifically toward fostering children's peer-related social competence may well be required (Guralnick, 1999b; Guralnick & Neville, 1997).

Summary It seems that welldesigned inclusive programs produce no adverse developmental or social effects for children in general in comparison with specialized programs and may even provide a modest advantage in terms of the frequency of peer interactions for children with disabilities. In contrast, there is no evidence for or reason to expect similar outcomes for programs in which the integrity of the program's model is disrupted by including children with disabilities, for programs without resources that are sufficient to meet children's individual needs, or for programs that stigmatize children with disabilities (i.e., programs that are not feasible). Consequently, communities that make efforts to increase the number of feasible inclusive programs will not be disappointed when developmental and social outcomes of participating children are evaluated.

More definitive research to address this issue and perhaps to clarify the relationship to specific criteria for feasibility or to programmatic factors that mediate child outcomes is certainly warranted (see Buysse & Bailey, 1993; Guralnick, 1981b). These factors may be especially informative if consistent evidence suggests that different types of inclusive programs provide advantages for children with certain developmental, behavioral, or physical characteristics. When this information becomes available, programs that are most likely to ensure optimal outcomes for children irrespective of the type or severity of their disability can be designed. This information, therefore, will have considerable practical and clinical utility and allow professionals and parents to make well-informed decisions about placement and programs on a child-by-child basis.

Of note, practical and ethical concerns that restrict the placement of children in inclusive and specialized programs to ensure equivalence of factors that can influence developmental and social outcomes will limit the quality of the experimental designs that address these questions. Accordingly, in the absence of prospective, randomized, controlled comparisons, quasiexperimental designs may well constitute the basis for evaluating developmental and social outcomes. Given these constraints, using a variety of child characteristics (e.g., type and severity of disability) to match children in feasible inclusive programs to children in existing specialized programs may be the best option (e.g., Brown, Horn, Heiser, & Odom, 1996). Although matching will never be perfect and other often unknown confounds are inevitable, continued reports of no detrimental effects on developmental and social outcomes, at minimum, of inclusive practices will further increase confidence that this important goal can be achieved. Other evaluation approaches that closely monitor expected outcomes for children will also add to this knowledge base.

Social Integration

The goal of inclusive programs that is most directly and firmly rooted in the ideology of inclusion relates to the nature of the social relationships that occur between children with and without disabilities. The hope is that by participating in common activities that are supported by program priorities that exemplify an inclusive philosophy and value system, meaningful social relationships will result (Guralnick, 1978, 1990a, 1999c). This expectation for social integration is a demanding one, as it tests typically developing children's ability and willingness to understand and then, it is hoped, move beyond differences in the developmental, behavioral, and even certain physical characteristics of their peers. Challenges to the social skills of children with disabilities are equally demanding, and many parents of children with disabilities express concerns that their child's behavior will contribute to his or her social rejection in inclusive environments (Guralnick, Connor, & Hammond, 1995).

The goal of social integration and the goal related to social outcomes discussed in the previous section are associated in complex ways. In one sense, the increased frequency of social interactions that often is found in full inclusion environments implies at least some level of social involvement with typically developing children. This is important because a meaningful level of social integration likely is necessary for children to gain the potential developmental benefits related to cognitive, communicative, general prosocial, and other skills that have been associated with productive peer relations (Bates, 1975; Garvey, 1986; Hartup, 1983; Howes, 1988; Rubin & Lollis, 1988). However, as discussed in the next section, a high level of social separation, especially when considering forms of peer interactions involving extended social exchanges, can exist even under these circumstances.

In fact, previous (Guralnick 1981a) and recent reviews (Guralnick, 1999c) of the literature on social integration continue to reveal the existence of substantial separation between children with and without disabilities in inclusive environments. Despite the heterogeneity of participant samples in these studies, the diversity of the approaches selected to evaluate social integration (e.g., direct observations, peer sociometrics), or the way social integration is indexed (e.g., actual social exchanges, friendships, prosocial behavior), separate subgroups based on children's developmental status tend to form (e.g., Cavallaro & Porter, 1980; Guralnick, 1980; Minnett, Clark, & Wilson, 1994; Nabors, 1997; Strain, 1984). Of importance, the context for observational studies has almost always been free play. It is precisely in this situation, when children are less constrained by adult structure, that accurate assessments of the quality of social behaviors with peers and preference patterns can be obtained. Moreover, these conclusions were based on analyses of social integration from the perspective of the typically developing children. That is, the question addressed was whether in inclusive environments typically developing children interacted with children with disabilities or children without disabilities in the environment based simply on the number of children available in each group or whether children's developmental status influenced social interaction patterns (i.e., subgroup preferences).

Nature of Social Integration Of course, social interactions between children can take many forms, and the extent to which children are socially integrated may differ accordingly. Variations in play quality, complexity, and intimacy all affect the social demands placed on play partners. As might be expected, analyses of the different forms of social interaction have revealed a complex and differentiated perspective of social integration and have provided insight into the nature of the relationships that occur between children with and without disabilities in inclusive environments (Guralnick, 1999c). The series of studies conducted by Guralnick and his colleagues focusing on children with mild cognitive delays (Guralnick et al., 1998; Guralnick, Connor, et al., 1996a; Guralnick, Gottman, et al., 1996; Guralnick & Groom, 1987, 1988a; Guralnick & Paul-Brown, 1984, 1986, 1989) provides details of these variations in social integration. Specifically, social integration was analyzed within three constructs: 1) connectedness, 2) interpersonal relationships, and 3) accommodations. Results from this series of studies are summarized next (see Table 1.4).

Connectedness refers to the quantitative analysis of peer-related social interactions evaluated in relation to the availability of children who represent groups that differ in developmental status. In a real sense, these preference patterns constitute an "equity" criterion and can be applied separately to different characteristics of social interactions. Specifically, when more passive measures of connectedness are evaluated, such as parallel play or onlooker behavior, separation occurs only to a minor extent. Consequently, all children move about the inclusive program freely and engage in activities and toy play without regard to developmental status. Therefore, many opportunities exist for observational learning. For more interactive measures of connectedness, however, such as extended group play, substantial social separation is apparent. Typically developing children clearly prefer other typically developing children to children with developmental delays; they interact with children with delays approximately half as often as expected, based on availability (see Guralnick, Gottman, et al., 1996; Guralnick & Groom, 1987). For the most demanding and intimate form of connectedness, friendships, the preference by typically developing children for other typically developing children is even stronger (Guralnick, Gottman, et al., 1996).

The quality of the interpersonal relationships that occur between children with and without mild developmental delays provides an additional perspective on social integration. When these assessments are carried out, the pattern of preferences is similar to the assessment of connectedness. In particular, social exchanges, when they do occur, are not overly negative. However, detailed analyses of utterance-by-utterance evaluations of social-communicative exchanges strongly suggest the language of separation. For example, inclusionary statements by typically developing children, such as "let's" or "we," or justifications for requests occur less frequently when interacting with children who have delays in comparison with interactions with other typically developing children (Guralnick & Paul-Brown, 1984, 1989). A disproportionately high level of disagreements and an unusually high level of tension displayed during conflicts further suggest that strained interpersonal relationships exist between children with delays and children without delays (Guralnick & Paul-Brown, 1989; Guralnick et al., 1998).

Despite these circumstances, additional analyses revealed that typically developing children made important accommodations to the cognitive and linguistic levels of the children with delays. Typically developing children worked hard to clarify communications, frequently using a directive mode when relating to ensure understanding, using multiple modalities when interacting, and making adjustments in syntactic aspects of speech in accordance with their playmates' cognitive and linguistic levels (Guralnick & Paul-Brown, 1984,

Table 14	Goal and	outcome criteria	for the goal	domain of	social integration
Table 1.4.	Guai and	outcome cincina	ion the goal	aomain o	social integration

Goal		Outcome criteria		
Meaningful social relationships between children with and without disabilities will be evident in inclusive environments	1.	Connectedness of social interactions, including measures of passive and extended play as well as friendships		
	2.	Quality of interpersonal relationships		
	3.	Appropriateness of accommodations made by typically developing children in social situations		

1989). This pattern suggests a sensitivity to individual differences of play partners and a willingness and ability of typically developing children to make appropriate accommodations.

Of note, when social separation occurs, related research with groups of younger typically developing children matched developmentally to children with delays has indicated that typically developing children who are the same chronological age as children with delays are not simply responding to playmates' developmental levels but rather to characteristics associated with the child's developmental status (see Guralnick, 1999c). That is, separation goes beyond what might occur based on children's differences in developmental level. Of importance, close inspection of this pattern of social separation suggests that these social relationships may best be characterized by the tendency of typically developing children not to reject children with disabilities but rather to ignore or exclude them, in part, simply through preferences for other typically developing children.

As indicated previously, although not studied in as much detail as for children with mild developmental delays, separation in virtually all forms of social interaction seems to be characteristic of inclusive environments for children with a wide range of types and severities of disability (Guralnick, 1981a, 1999c). Social separation can be detected even for children with communication disorders (Gertner, Rice, & Hadley, 1994; Guralnick, Connor, et al., 1996b). Generally, however, the greater the severity of a child's disability, the greater the social separation found in these free play environments. It is ironic that the social inclusion model yields what seems to be the least amount of social integration, as demonstrated in perhaps the earliest study of this issue (Devoney, Guralnick, & Rubin, 1974). Meaningful exchanges between children with and without disabilities occurred in that investigation only with proper teacher structuring, a finding replicated repeatedly over the years. Limited familiarity and the awkwardness of the "designated" social play situation in the social inclusion model add to the already existing factors discussed in the next section that contribute to this high level of social separation.

Finally, it should be noted that when social separation is defined from the perspective of the children with delays, a very different pattern is obtained. Instead of separation, evidence suggests that children with disabilities either exhibit no preference or prefer typically developing children. This important finding suggests that complete social integration is indeed achieved from the perspective of children with disabilities (see Guralnick, 1981a, 1999c, for details).

The Forces that Affect Social Separation The forces that tend to produce social separation seem powerful, being resistant to explicit efforts to promote integration. Despite many strategies that are carried out in inclusive programs—such as specific teaching about disability or diversity issues, intensive efforts to encourage social interactions, and activities designed to promote inclusion in general—social separation seems to be maintained even across the school year (Diamond, LeFurgy, & Blass, 1993; Guralnick, 1980; Ispa, 1981; Jenkins, Odom, & Speltz, 1989). That is not to say that programs that exhibit state-of-the-art inclusive practices, experimenting with new techniques to develop positive relationships among all children, will not vield benefits. Such efforts need to be pursued vigorously. Studies on changes in children's attitudes resulting from specific interventions suggest potential, although their impact on actual peer relationships, including friendships, remains to be demonstrated (Favazza & Odom, 1997). Clearly, then, the absence of social integration from the perspective of typically developing children constitutes a significant concern for one of the core goals of inclusive programs.

A diverse set of factors is likely to be responsible for this absence of desired social integration. As described elsewhere (Guralnick, 1999c), perhaps of most significance is the set of expectations about children with disabilities held by typically developing children as transmitted by family members throughout the child's early years (see Stoneman, 1993). In many instances, these prior expectations are communicated via expressed or, more commonly, through implied parental attitudes toward disability and diversity. The degree to which parents encourage or arrange specific experiences with children with disabilities is important. To the extent that these expectations of typically developing children as they enter inclusive environments are not accepting of children with disabilities, as is generally the case (see Favazza & Odom, 1997), social integration patterns are certain to be affected. These patterns, it is hoped, can be modified by the inclusive preschool experience, but, as noted previously, this is difficult to accomplish. In addition, extensive experiences with children with disabilities are not likely to occur in the homes or communities of typically developing children, even when both participate in an inclusive preschool program. Evidence suggests that young children with disabilities have less welldeveloped community-based peer social networks (Guralnick, 1997a; Lewis, Feiring, & Brooks-Gunn, 1987; Stoneman, Brody, Davis, & Crapps, 1988) and have difficulties with establishing linkages between social relationships that are formed with peers in the preschool or child care environment and those in their neighborhoods (Guralnick, 1997a). Even parents of children with disabilities have difficulty with establishing relationships with parents of typically developing children when both participate in the same inclusive program (Bailey & Winton, 1989; Stoneman, 1993).

Moreover, research has clearly documented that children with developmental delays (and many other groups of children with disabilities as well) exhibit peer interaction problems that go beyond delays expected on the basis of their developmental level (Guralnick, 1999b; Guralnick & Neville, 1997). Because selection of play partners depends substantially on children's common interests, abilities, backgrounds, and styles of relating (e.g., Rubin, Lynch, Coplan, Rose-Krasnor, & Booth, 1994), these unusual peer interaction problems place children with disabilities at an added disadvantage. As discussed previously, participation in inclusive programs raises only the level of social interactions, not the level of social competence. Consequently, interventions that succeed in promoting competence with peers (a social outcome) will likely enhance social integration as well.

Summary Critical aspects of the goal of social integration have not been achieved. To be sure, positive signs exist, particularly in relation to integration for more passive forms of social interactions, accommodations by typically developing children, and integration from the perspective of children with delays. However, high expectations for the development of

meaningful and productive social relationships between children with and without disabilities have been tempered by an understanding of the dynamics of connectedness and interpersonal relationships, the unusual difficulties in peer competence manifested by children with disabilities, and concerns about the attitudes that many typically developing children hold with regard to children with disabilities by the time they enter inclusive early childhood environments. As a consequence, efforts to alter larger societal perceptions of individuals with disabilities, to design strategies that are intended to foster specific dimensions of social integration in inclusive environments, and to develop interventions that enhance children's social competence constitute major areas that demand change to achieve higher levels of social integration.

Finally-and, in some ways, alternatively-the state of knowledge regarding social integration may also serve as a catalyst for articulating a more specific set of expectations for social integration. Is it reasonable to expect children with disabilities to form close friendships with typically developing children? If so, how would we expect the nature of this relationship to differ from the relationship between two typically developing children? How would these social interaction patterns be expected to vary in accordance with children's chronological age or the type or severity of a child's disability? These and related questions are extraordinarily difficult to address, as they force us to confront deeply held ideologies and value systems. No goal domain is more sensitive to values or engenders a greater personal reaction than that involving social relationships. Nevertheless, the time may be right for a thorough review and discussion of goals and expectations as well as the programmatic implications that relate to the most fundamental goal of inclusion, social integration.

FACTORS THAT INFLUENCE INCLUSION GOALS

Through thoughtful and persistent efforts, much has been accomplished with respect to meeting the expectations for and achieving the four goals of inclusion. As indicated in numerous chapters throughout this book, important changes have occurred in virtually every area related to improving inclusive practices. Fundamental reform in the education system is occurring, policies at all levels are being modified or developed to accommodate the unique issues created by inclusive programs, legal decisions are serving as catalysts for change, and attitudes and beliefs of families of typically developing children as well as of the children themselves are being challenged by inclusive practices. The attitudes and beliefs of parents of children with disabilities are being similarly challenged as they are faced with making decisions that best meet the needs of their child and family yet require their child to engage in demanding but often uncertain patterns of interacting created by inclusive practices. Training at preservice and in-service levels for general early childhood educators, for early childhood special educators, and for professionals from virtually all relevant specialties is gradually being altered to accommodate to the goals and practices of inclusion. Correspondingly, the entire ecology of infant and toddler programs, child care, and preschool programs, including Head Start, has shifted in an effort to accommodate the highly individualized needs of children with disabilities. Efforts are also under way to include children in the broad array of community activities. Innovations in collaborative educational models, strategies for delivering assistive technologies, approaches to promote social competence, the design of instructional technologies adapted to children with diverse abilities and skills, strategies for easing transitions, and finding ways to ensure that multicultural issues are addressed constitute important service delivery patterns that have improved inclusive practices substantially. Progress also has been achieved toward including special groups of children with disabilities in inclusive environments, such as those with autism, hearing impairments, or complex health care needs. Children from these groups create unique challenges for inclusive programs at many levels. Accordingly, spurred by a vision of an inclusive community, supported by legislation and legal decisions, and encouraged by the ability of the field to develop effective inclusive programs, professionals, parents, administrators, and advocates have, through these many influential factors, permanently altered the life patterns of many young children with disabilities and their families.

These accomplishments notwithstanding, analyses of the status of the four goal domains for inclusive practices presented in this chapter suggest either that progress has slowed considerably in recent years or that conditions for furthering progress are not in evidence. It now seems that numerous conceptual and practical problems must be resolved for the pace of change to increase. In particular, the goal of universal access to inclusive programs is far from being realized and is further compounded by the existence of different types of inclusive programs that may unnecessarily restrict the participation of children with disabilities with typically developing children. Clarifying the purposes, conceptual bases, advantages, and disadvantages of these various types of inclusive programs and providing a rationale for placement of individual children in each program type undoubtedly will uncover the diversity of assumptions and meanings of inclusion held by various constituencies, yet this is a necessary step for appropriate change to result. Similarly, the absence of generally agreed-on

criteria for establishing feasible programs is of concern and limits understanding of quality environments and associations of program ecology with developmental and social outcomes. Concerns about staff training and availability of needed resources are long-standing problems, and many families continue to choose less inclusive and even noninclusive environments because of these issues. However, evidence suggests that participation of children with disabilities in feasible inclusive programs does not adversely affect their developmental or social progress. In fact, there may be some advantage to children with disabilities in terms of an increased level of social interactions. Typically developing children's progress also seems unaffected, yet this information is based on a relatively small number of studies that were carried out primarily in research or demonstration programs. As a consequence of this and other factors, there does not seem to be widespread public or professional understanding that inclusive programs, especially full inclusion programs, can produce outcomes similar to those in specialized programs for the vast majority of young children with disabilities. Correspondingly, there seems to be only limited leadership in attempting to clarify this knowledge base or to resolve conceptual or empirical issues. Even with a recognition of the possibilities for and the value of inclusive programs, the failure to generate strategies that press for systematic, national-inscope programs focused on local communities to develop feasible inclusive programs that will result in positive outcomes for all involved is a significant barrier to future progress. Finally, although perhaps unrealistic in retrospect, the high expectations for social integration, particularly in the form of more extended forms of social play activities and the development of friendships, have not been met from the perspective of typically developing children. Given the complexity of this issue and the powerful forces that seem to be operating across so many dimensions to produce social separation, a comprehensive and long-term plan to reconceptualize the nature, meaning, and expectations for social integration is likely to be required in the context of a focus on change.

ORGANIZATION OF THIS BOOK

Given this background, the primary purpose of this volume is to describe factors that influence the goals of inclusion, to articulate the barriers that prevent these goals from being realized, and, most important, to establish an agenda for change. As suggested in the final chapter, an agenda that is national in scope may well be essential for significant progress to be achieved.

Figure 1.1 depicts what seem to be the most salient factors that can influence the four goal domains (access, feasibility, developmental and social outcomes, social integration) of inclusion discussed in this chapter. As expected, some factors can influence all four inclusion goals, whereas the influence of others is likely to be limited to only one particular goal. Similarly, these factors are interrelated in complex ways, and their interactions are discussed in the context of specific issues.

Each of these influential factors corresponds to a chapter in the book. Specifically, education reform (Chapter 2, Lipsky & Gartner) at the highest levels will be required to ensure universal access to inclusive programs and will affect feasibility as well. The continuing effort to alter policies (Chapter 3, Smith & Rapport) such as those related to transportation, financing, standards, certification, and others will have an important impact on inclusive programs. Similarly, legal issues (Chapter 4, Stowe & H.R. Turnbull) that are relevant to inclusive practices have historically played an important role in clarifying and often fostering inclusion and will continue to do so in the future.

Parents have been the primary catalysts for change in the disability field, and inclusion is no exception. The attitudes and beliefs of parents of typically developing children (Chapter 5, Stoneman) and of parents of children with disabilities (Chapter 6, Erwin, Soodak, Winton, & A. Turnbull) can substantially influence most of the goals of inclusion. The attitudes and beliefs of typically developing children themselves (Chapter 7, Diamond & Innes), although closely aligned with the values of their parents, may nevertheless be subject to change through participation in inclusive programs and thereby influence some of the goals of inclusion, particularly social integration.

Training (Chapter 8, Buysse, Wesley, & Boone) of all relevant personnel clearly is a central issue, and successful inclusion in any form cannot be achieved without a comprehensive and well-articulated program of preservice and in-service training. Program ecology-particularly adult-child interactions, engagement in activities, and the classroom structure of the various programs-will be influenced by the training of staff as well as other factors. In turn, program ecology affects so many of the goals of inclusion. Accordingly, program ecology will have a substantial impact on the goals of inclusion. These issues are examined separately for infants and toddlers (Chapter 9, Bruder) and for children in child care (Chapter 10, O'Brien), preschool (Chapter 11, Odom & Bailey), and Head Start (Chapter 12, Schwartz & Brand). A separate chapter considers the ecology of inclusion of children in community activities (Chapter 14, Dunst).

There exist as well important service delivery issues that must be addressed. Considerations of multicultural influences (Chapter 18, Hanson & Zercher), collaborative models, especially for chil-



Figure 1.1. The relationship between influential factors and the goals of inclusion.

dren with communication disorders (Chapter 19, Paul-Brown & Caperton), assistive technology (Chapter 20, Romski, Sevcik, & Forrest), social competence (Chapter 21, Guralnick), instructional adjustments (Chapter 22, McWilliam, Wolery, & Odom), and transitions (Chapter 13, Sainato & Morrison) will be required to ensure the success of inclusive programs. Finally, certain groups of children pose unique and difficult challenges for inclusion and are therefore discussed separately. Groups considered are children with autism (Chapter 15, Strain, McGee, & Kohler), children with hearing impairments (Chapter 16, Antia & Levine), and children with complex health care needs (Chapter 17, Crocker & Porter).

In the final chapter of the book, these four goal areas are revisited, and an agenda for change is proposed (Chapter 23, Guralnick). In particular, the various factors that influence the goals of inclusion are integrated in an effort to encourage the creation of a coherent program of systems change, program development, and research in the field of early childhood inclusion.

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