Major Accomplishments and Future Directions in Early Childhood Mainstreaming

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Major accomplishments and future directions in the concept and practice of early childhood mainstreaming are discussed. A convergence among the three major themes of influence of (a) public policy, (b) educational practice, and (c) developmental principles and research are noted in relation to the value of fully mainstreamed programs. Specific discussions focus on the topics of implementation, the perspectives of parents, and the development of friendships and peer relations in mainstreamed settings. The importance of establishing a developmental framework and collaborating with the early childhood community are emphasized.

It has been only slightly more than a decade since systematic efforts have been directed toward examining the conceptual and practical issues in the field of early childhood mainstreaming. A book summarizing emerging program development activities during the period soon after the passage of P.L. 94-142 reflected the diverse but creative array of approaches that were being taken to design programs to integrate young handicapped and nonhandicapped children and placed mainstreaming in the general context of early intervention (Guralnick, 1978). Chapters in that volume also captured the early struggles of researchers to evaluate the impact of not yet fully understood outcome variables and provided a sense for the conceptual and philosophical clarifications that would be required in the future. In the inaugural issue of *Topics in Early Childhood Special Education* (Mori, 1981), entitled "Mainstreaming—A Challenge for the 1980s," additional ideas and concerns were expressed touching on virtually all of the problems

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we continue to address today. As we return to once again examine the critical issues in early childhood mainstreaming in this journal, we see that this challenge was indeed taken seriously, as the energies and talents of numerous educators, clinicians, and researchers were devoted to the field during the decade of the 1980s.

The many complex and controversial features associated with early childhood mainstreaming during this decade may well have been connected to its historical context and the interplay among continually evolving though not necessarily compatible themes of influence (Sarason & Doris, 1979). Three major themes can be identified: (a) adjusting to the changing interpretations of public policy relative to the principle of least restrictive environments (see Taylor, 1988), (b) designing sound and effective educational strategies to accommodate handicapped children in the mainstream, and (c) ensuring that these educational practices are consistent with contemporary developmental principles and research (Guralnick, 1982). In a real sense, the field of early childhood mainstreaming has been a catalyst for bringing into focus many critical issues such as the coordination required among service systems, the appropriate strategies for providing special education and related services in non-special-education settings, the establishment of priorities for early childhood programs (e.g., social versus academic), and the nature of the skills, attitudes, and abilities necessary for teachers to be effective in mainstreamed settings. The fact that early childhood mainstreaming is embedded well within a value system in which the terms inclusion, equity, full participation, and acceptance serve as a framework for program design and analysis has certainly added an additional dimension to our thinking.

The purpose of this article is to summarize achievements that have occurred in the 1980s and to identify important future directions for the field in the decade ahead. To organize my comments, three topics central to early childhood mainstreaming have been selected: (a) implementation, (b) parent perspectives, and (c) peer relations and friendship. Within this framework, significant consistencies or inconsistencies that exist among the three interacting themes of public policy, educational practice, and developmental principles and research will be noted.

Implementation

Despite a lack of consensus with regard to what constitutes an effectively implemented mainstreamed program, criteria for evaluating

effectiveness have conformed generally to the construct of feasibility. This construct states that in order to judge if early childhood programs that now include handicapped children are feasible, the following question must be considered: "Can the educational/developmental needs of all children continue to be met in the mainstreamed context and in relation to the intent of mainstreaming without radically departing from the fundamental assumptions and structure of that program's model?" (Guralnick, 1982, p. 463). In the past decade, various outcome indices consistent with this feasibility construct have been applied in the numerous studies and reports of preschool mainstreaming. Measures have included traditional educational/developmental outcomes and processes, effects on the administrative aspects of programs. the extent to which social integration occurs, the impact of the program on the attitudes of all individuals, and the developmental potential of interactions occurring between handicapped and nonhandicapped children.

Taken together, the following compelling conclusion emerges: Perhaps the single most significant achievement in the field of early childhood mainstreaming in the decade of the 1980s has been the repeated demonstration that mainstreamed programs can be implemented effectively (see Guralnick, 1990, in press). Just as in the case of evaluations of the effectiveness of early intervention programs (see Guralnick, 1988; Guralnick & Bennett, 1987), the political question as to whether "mainstreaming works" at the early childhood level has been answered in the affirmative. The contemporary issue is clearly not whether early childhood mainstreaming is feasible and should be encouraged, but rather how one can design programs to maximize its effectiveness.

Beyond this singular achievement, the decade of the 1980s also has been marked by a growing convergence of views in relation to the evolving concepts of public policy, educational practice, and developmental principles and research. Specifically, the concept of feasibility refers to those early childhood programs designed primarily for nonhandicapped children that include a small proportion of handicapped peers; that is, they are mainstreamed but not integrated programs (see Odom & McEvoy, 1988). This educational practice focusing on mainstreamed rather than integrated programs is consistent with recent interpretations of the principle of least restrictive environments as applied to public policy, suggesting that a commitment to integration requires participation of handicapped children in fully mainstreamed programs (Taylor, 1988). Correspondingly, recent

research indicates that developmental processes occurring in mainstreamed environments are highly supportive of the developmental growth of young handicapped children (Guralnick, 1986a; Guralnick & Groom, 1988a).

Early Childhood Special Education Partnership

In view of this convergence of themes critical to early childhood mainstreaming, what remains to be accomplished? What are the implementation problems and issues that will challenge the field in the decade ahead? Assuming that, in fact, fully mainstreamed programs are the setting of choice for the *vast majority* of young handicapped children, we can look forward to an expansion of mainstreamed programs in the general early childhood community on a large-scale basis.

Providing a program of specialized services within that context in a manner that blends the often contrasting ecologies of specialized and typical nursery school environments (Carta, Sainato, & Greenwood, 1988) will require a new level of creativity and compromise. The extent of teacher directedness, the provision of a formal structure within a classroom, the dependence on well-articulated curricula and accompanying educational objectives, and even interpretations as to the nature of the learning process, are all potential points of tension (see Kugelmass, 1989). The decade of the 1990s will test the commitment and depth of the partnership between special education and the general early childhood community.

Retaining an educationally and philosophically consistent and coherent approach to serving young handicapped children is, of course, not a negotiable issue. However, perhaps the greatest challenge to this early childhood special education partnership is the willingness and ability of all concerned to maintain an attitude of flexibility that will be required at all levels to ensure an effective program. Nicholas Hobbs anticipated these tensions even prior to the passage of P.L. 94-142, and his insights into mainstreaming still command our attention. In his thoughtful work, *The Futures of Children*, Hobbs (1975) made the following comments about mainstreaming:

In schools that are most responsive to individual differences in abilities, interests, and learning styles of children, the mainstream is actually many streams, sometimes as many streams as there are individual children, sometimes several streams as groups are formed for special purpose, sometimes one stream only as concerns of all converge. We see no advantage in dumping exceptional children into an undifferentiated mainstream; but we see great advantages to all children, exceptional children included, in an educational program modulated to the needs of individual children, singly, in small groups, or all together. Such a flexible arrangement may well result in functional separations of exceptional children from time to time, but the governing principle would apply to all children: school programs should be responsive to the learning requirements of individual children, and groupings should serve this end. (p. 197)

A central feature of this approach is the recognition of the fact that functional separation at various times may well be in the best interests of some handicapped children even in fully mainstreamed settings. However, the fundamental principles of access, belongingness, equity, opportunity, and inclusion are not abridged within this framework. If mainstreaming is to continue to be successful, the decade of the 1990s will be characterized by vigorous experimentation with various educational approaches within a fully mainstreamed program.

Variations in Setting

By extension, the concept of many streams suggests the possibility that there are many circumstances in which children can benefit from participation in both mainstreamed and specialized settings. For example, for a variety of reasons (Meadow, 1980) families of many hearingimpaired children elect to enroll their children in highly specialized programs serving only other hearing-impaired children. However, we are aware that hearing-impaired children exhibit more advanced play behavior in mainstreamed settings than in specialized settings (Esposito & Koorland, 1989). For these and other reasons, some combination of mainstreamed and specialized services might be ideal for this and other groups of children. We should also not be rigid about the issue of ratios of handicapped to nonhandicapped children or the absolute number of handicapped children in a program, although the availability of other handicapped children as peers and models for certain groups of children with disabilities may turn out to be advisable. Equal proportions of handicapped and nonhandicapped children do not typically

occur due to the nature of community programs. However, it is the case that some excellent programs result when previously existing specialized programs for handicapped children merge with typical nursery schools, yielding programs containing approximately equivalent numbers of handicapped and nonhandicapped children.

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At the same time, we must be wary of odd, nonrepresentative service approaches that have only a limited connection to meaningful integration. One such approach consists of enrolling a small number of nonhandicapped "models" in programs designed for handicapped children—the so-called reverse mainstreamed programs. Although some variation of these programs may ultimately be seen as a possible alternative for children with very severe or unusual disabilities, they remain principally programs for handicapped children. As such, the developmental potential of the environment for promoting growth and development is far more limited than that found in a mainstreamed environment (e.g., Guralnick & Groom, 1988a). Of equal importance, these programs are not consistent with handicapped children's entry to and participation in the general early childhood community.

Process Models of Implementation

Finally, it should be noted that the successful implementation of mainstreamed programs requires the involvement and participation of many groups of individuals. Parents, administrators, teachers, and community groups each contribute in a unique fashion to the quality of program outcome and to the program's stability. These groups have important roles in the effective implementation of fully mainstreamed programs. Specifically, it is essential that the roles of the early childhood special educator within the larger early childhood community be clarified further, that service and support networks at community levels be strengthened or established, and that a system of training for early childhood educators that includes disability issues be formalized in some fashion. Moreover, administrative problems related to financing and the resolution of issues associated with public and private service systems' rules and regulations are important concerns. Fortunately, process models are now emerging that recognize the factors that govern this complex implementation process (e.g., Peck et al., 1989). In view of the significance of this process, public policy research on institutional change in early childhood mainstreaming has been surprisingly limited. Hopefully, the next decade will bring a greater focus to analyses of this complex and comprehensive process.

Parent Perspectives

During the 1980s, the perspectives of parents were sought in order to examine the extent of their support for mainstreaming or integration as well as to identify concerns that could be addressed through program changes. Early research by Turnbull and her colleagues (Turnhull & Blacher-Dixon, 1980; Turnbull & Winton, 1983; Winton, 1983) yielded a balanced, though decidedly positive, sense of support for mainstreaming by parents of handicapped children. Through detailed interviews and questionnaires, these investigators were able to identify a number of parental concerns, including the availability of adequately trained teachers, fears of stigmatization, and problems ensuring access to related services. A number of important benefits of preschool mainstreaming were reported by parents of handicapped children as well, including improved social development and participation in more stimulating environments. Interestingly, there appears to be a high level of agreement between parents and teachers on most of the important mainstreaming issues (Blacher & Turnbull, 1982). In general, these results continue to be corroborated and extended by more recent studies (Bailey & Winton, 1987; Reichart et al., 1989). The investigation by Reichart et al. (1989) also emphasized the importance of parental involvement in the process of planning mainstreamed programs in order to yield a positive and consistent result. In that study, parents of both handicapped and nonhandicapped children tended to hold highly positive perspectives on the philosophical aspects of integration, the social-emotional impact of integration, as well as organizational and teacher issues during the process of blending traditional early childhood community programs with an existing specialized program. As noted in the previous section, the process of meaningful parent involvement appears to be essential for the effective implementation of mainstreamed preschools.

Despite consistency among the studies, these investigations have yielded only a series of generalizations about parents' views on critical issues of mainstreaming. However, Bailey and Winton (1987) observed that a wide range of individual differences existed in parents' expectations of the benefits and drawbacks of mainstreaming. Unfortunately,

the sources of these individual differences in parent perspectives have not yet been examined. Future research on the association between parents' perspectives of mainstreaming and child and family characteristics, for example, should begin to provide the level of detailed information that will enable programs to be maximally responsive to individual parents' concerns.

Developmental Context

Similarly, our ability to understand the views of parents and the relationship of those perceptions to actual behavior can be enhanced substantially by placing research on parents' perspectives in a developmental context. For example, parents of handicapped children have generally valued the potential of interactions occurring in mainstreamed settings for promoting higher levels of development and encouraging positive social contacts among children (e.g., Reichart et al., 1989). This parent perspective should be considered in light of recent developmental research suggesting that while the nonschool social contacts of children with their peers continues to expand for nonhandicapped children across the preschool years, the nonschool social contacts of young handicapped children are substantially more limited (Lewis, Feiring, & Brooks-Gunn, 1987; Stoneman, Brody, Davis, & Crapps, 1988). Whether this actually quite dramatic difference in the involvement of handicapped children with their peers, especially for those in mainstreamed programs (Stoneman, personal communication), is a consequence of after-school visits to specialists, unusual transportation difficulties, a response to perceived stigmatizing circumstances, parental concerns about supervision, problems in locating suitable playmates, or other factors is not known. In fact, many parents of handicapped children, even when their children are participating in mainstreamed day care programs, do not tend to associate often with parents of nonhandicapped children, thereby limiting possible playmates for their children (Bailey & Winton, 1989). Whatever the case may be, this disturbing trend is one that is likely to restrict the development of any child's peer-related social skills (e.g., Ladd & Golter, 1988).

In view of the central roles parents have in raising and facilitating peer visits, the pattern of isolation appears to be inconsistent with parents' perspectives of the benefits of mainstreaming in the social domain. To understand this issue more fully, a number of important questions must be addressed. For example, how do parents' beliefs and attitudes about the malleability of social development with peers affect their views about and perhaps the selection of a mainstreamed program? Are these attitudes associated with the extent to which nonschool peer contacts are arranged? In view of the critical importance of peer relationships in children's development (Hartup, 1989) and the well-documented effects of family interaction patterns and values in fostering the development of child-child social exchanges (Guralnick, 1990), obtaining parent perceptions within this broader developmental context constitutes an important challenge to researchers in the field of early childhood mainstreaming in the 1990s. In fact, in the field of child development, the future is certain to bring about a future refinement and understanding of the relationship between adult-child and child-child systems (Gottman & Katz, 1989; Parke, MacDonald, Beitel, & Bhavnagri, 1988).

Peer Relations and Friendship

Understanding the impact of social interactions that occur in mainstreamed settings on the peer-related social development of young handicapped children has always been a central theme of parents, teachers, administrators, and program developers. This theme has taken many forms including issues associated with the acceptance of handicapped children by their classmates, the effects on children's emerging child-child social skills and social competence, the psychological impact of possible social separation within the larger peer group, as well as concerns regarding young handicapped children's abilities to establish appropriate friendships. As noted earlier, assessments of children's peer relations and friendships constitute important indices for evaluating the feasibility of mainstreamed programs. However, the significance of this theme and the complex ways it is embedded within the dimensions of public policy, educational practice, and developmental principles and research warrant separate consideration.

Two important lines of research in the area of peer relations in the last decade have paralleled the emergence of feasible mainstreamed programs suggesting that, in fact, the initial emphasis on young children's social competence with peers was clearly justified (Guralinck,

1989). First, it has now been well established that the development of meaningful and productive relationships with one's peers constitutes an essential task of early childhood, having important benefits for language and communicative development, the development of prosocial behaviors, social-cognitive development, and the socialization of aggressive tendencies (Garvey, 1986; Hartup, 1983; Rubin & Lollis, 1988). Moreover, future adjustment problems appear to be associated with difficulties in establishing appropriate peer relations in early childhood (Parker & Asher, 1987).

The second line of research has concentrated on descriptive studies of young handicapped children's peer relations and friendships. In an extensive series of studies, it has now been demonstrated that handicapped children exhibit what is perhaps best referred to as a peerinteraction deficit; that is, they have difficulties in child-child social interactions that extend well beyond that which would be expected on the basis of the child's general developmental level. Problems have been reported in relation to young handicapped children's relative absence of group play, atypical developmental patterns, difficulties in establishing reciprocal friendships or to benefit from friendships that are formed, an inability to direct others, to use them as resources, or to show affection, and failures to appropriately negotiate or compromise in situations in which disagreements occur (see Guralnick, 1986b, 1990, for reviews).

Mainstreaming and Peer Relations

In view of these circumstances, what evidence exists regarding the characteristics of mainstreamed environments that may potentially reduce this peer-interaction deficit? Generalizing from numerous studies within the past decade, findings indicate that in comparison to specialized, segregated environments, mainstreamed settings are far more socially stimulating and responsive to handicapped children. In fact, the social/communicative environment provided by nonhandicapped children in mainstreamed settings appears well adapted to the cognitive and linguistic characteristics of the handicapped children. Overall, appropriate communicative adjustments by nonhandicapped children to handicapped children are found, including the complexity, functions, and discourse features of language. In addition, more extensive demands for appropriate social and play behaviors appear to be placed on handicapped children in mainstreamed classes, numerous opportunities for observational learning exist, handicapped children prefer to interact with nonhandicapped classmates, and handicapped children tend to engage in higher levels of play when with nonhandicapped children (see Guralnick, 1986a, 1990, for reviews). Unquestionably, strained relationships between handicapped and nonhandicapped children have been observed and social separation tends to occur as well (Guralnick & Groom, 1987; Guralnick & Paul-Brown, 1989; Vandell & George, 1981). Nevertheless, as indicated below, the apparently more stimulating, responsive, and supportive features of mainstreamed settings as compared to specialized programs can, in fact, translate into improved peer-related social competence on the part of young handicapped children.

Surprisingly, direct comparisons between any variation of an integrated or mainstreamed setting and specialized programs were not carried out very frequently during the 1980s. For those that were carried out during this period, it is important to recognize that virtually all studies actually involve a form of integrated program in which participating children were brought together only for special purposes such as free play (e.g., Field, Rosemary, DeStefano, & Koewler, 1981), or were part of a reverse mainstreamed program (e.g., Jenkins, Speltz, & Odom, 1985). These integrated programs have yielded only minimal effects especially on handicapped children's peer relations. In contrast, recent research strongly suggests that substantial benefits in handicapped children's peer-related social competence can occur in those programs consisting primarily of nonhandicapped children; that is, fully mainstreamed programs (see Guralnick & Groom, 1988a). In retrospect, developmental principles including the effects of familiarity, the demand characteristics of the environment, and social comparison processes are mechanisms that can be seen as key contributors to these positive outcomes in mainstreamed as opposed to integrated settings.

An important issue to be pursued in this context relates to the longer-term effects of mainstreaming, as existing information is based primarily on short-term projects. Evidence from a recent longitudinal follow-up study extending to 18 months involving an older group of handicapped children, however, does provide preliminary support for the unique value of a fully mainstreamed program. A comparison of full and partial mainstreaming revealed increases in acceptance and liking of handicapped children by nonhandicapped classmates and greater social involvement with nonhandicapped children over time, but only for children who were fully mainstreamed (Leonoff & Craig,

1989). Related issues of handicapped children's self-esteem as affected by social interactions with nonhandicapped peers, both immediately and over extended periods of time, remain important matters for the decade ahead.

Peer Competence Curriculum

The involvement of handicapped children in mainstreamed programs may reduce but, of course, will not eliminate the peer-interaction deficits that have been described. The social environment provided by mainstreamed settings does appear to be supportive of naturally occurring social exchanges and can be extremely valuable in maintaining gains in social behavior generated by more structured intervention programs, particularly those employing nonhandicapped peers as adjuncts to intervention (Guralnick, 1984; Strain & Odom, 1986). However, due primarily to still remaining deficits in peer social competence when in mainstreamed settings, handicapped children tend to be perceived by their nonhandicapped classmates as lower in social status than most other nonhandicapped children, and they continue to manifest significant problems in peer relationships associated with specific social tasks (Guralnick & Groom, 1987).

In view of the continued existence of the peer-interaction deficit. what approaches are available to resolve this potentially devastating problem? As argued elsewhere (Guralnick, 1990, in press), it appears that the promotion of peer social competence warrants consideration as a separate area of focus, similar to intervention efforts in the traditional developmental domains of motor, cognitive, or language development. It is certainly the case that improvements in traditional developmental areas through interventions are likely to produce positive effects on peer competence. However, it is the dynamic, sequential, integrated nature of the peer interaction process that creates a domain with unique characteristics. As a consequence, assessment procedures and intervention efforts focusing directly on the dimensions of peer social competence are essential. Issues related to behavior problems (Guralnick & Groom, 1985), social information processing skills (Dodge, Pettit, McClaskey, & Brown, 1986), processes related to emotional regulation (Gottman, 1983; Gottman & Katz, 1989), and children's behavioral style (Guralnick & Groom, in press) are only a few of the dimensions that should be probed.

Process Research

Two major themes or directions in the area of peer relations and friendship emerged from research during the decade of the 1980s. The first is a recognition of the importance of the participation of young handicapped children in mainstreamed programs as a means to minimize peer-relationship difficulties and promote social competence. The second is the value of a *developmental process* approach to understanding and promoting peer relations and friendship. Detailed analyses of the sequences of events associated with those social tasks that constitute critical components of friendship formation and peer-relationship skills, including their cognitive and socioemotional prerequisites and co-requisites as well as relevant environmental circumstances, are necessary in order to generate useful assessment instruments and intervention strategies.

Accordingly, the interesting and important questions in the field have shifted from outcome to process analyses. For example, virtually nothing is known about the friendship formation skills of handicapped children. Are they similar to those of nonhandicapped children? Assuming deficits exist (Guralnick & Groom, 1988b), what is the nature of those friendship formation problems? Do these processes vary with differing developmental characteristics of the play partner? What strategies do handicapped children use to prevent conflicts from escalating, and how are social and emotional cues interpreted by handicapped children during entry or provocation situations? Should answers be forthcoming to these and related questions over the course of the next decade, our ability to understand the nature of peer social competence problems and to design corresponding intervention programs for handicapped children participating in mainstreamed programs will be enhanced immeasurably.

The Decade of the 1990s

Dramatic improvements in our understanding of the concept and practice of early childhood mainstreaming have occurred in the past decade. This process has continued to encourage the emergence of a conceptual framework and service system for young handicapped children and their families that has edged closer and closer to the field of child development. In my view, we should embrace this movement, embrace its rich concepts and research base, support its emphasis on developmental processes and family systems, and consider its proposals regarding the complex interacting influences on development. Stated differently, we should not expect mainstreaming to be successful from a service perspective unless there is widespread agreement as to the fundamental nature and influences of the practice and principles derived from the field of child development.

The events of the 1980s have prepared us well to approach the issues of the 1990s. As we have seen, there is now far greater compatibility among the themes of influence of public policy, educational practice, and developmental principles and research. If, as appears to be the case, mainstreaming, in the inclusionary sense of the term, constitutes the service system of choice for the vast majority of handicapped children, our efforts to support handicapped children and their families in this larger service system must be accelerated. If this position is accepted, the overall challenge for the next decade is to assure that the unique needs of larger and larger numbers of handicapped children and their families are addressed within the general early childhood system. The special knowledge and skills provided by specialists working with handicapped children, particularly the important knowledge base of early childhood special education that has developed over the years, must become an integral part of the overall early childhood network. Continued research and program development in important areas including process research on acquaintanceship and friendship formation, policy issues, longitudinal studies, interactions between child and family systems, and curriculum development in the area of peer social competence, all will be of value. However, for those of us identified with the field of early childhood special education, the decade of the 1990s will be especially challenging, as the roles of those with a special interest in handicapped children are likely to continue to take many forms. As is the case for many innovative service strategies, major advances in early childhood mainstreaming may hinge on the willingness of all concerned to maintain a collaborative, flexible, and experimental attitude, while continuing to ensure that optimal services are provided for handicapped children and their families.

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