Elements of Successful Inclusion for Children with Significant Disabilities
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What is This?
Elements of Successful Inclusion for Children with Significant Disabilities

This study focused on the practices used by specialists and early childhood education personnel that contributed to the successful inclusion of 7 young children with significant disabilities who were served in typical community settings, such as preschools and childcare centers. Analysis identified 4 elements common to each of the research sites: attitudes, parent–provider relationships, therapeutic interventions, and adaptations. These were examined in depth to identify essential practices that contributed to the children’s successful inclusion in the community childcare or preschool programs.

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This research study focused on educational and therapeutic practices that facilitate the successful inclusion of young children with significant disabilities who are served in community childcare or preschool programs. Young children with significant disabilities are not often served in inclusive community placements (U.S. Office of Special Education Programs, 2002); however, they can be successfully included. As one mother reported,

“They came and told us they were going to integrate [the children with disabilities] and put them in with kids their own age, and when we heard that, my husband was like, “Definitely.” And now we still believe that was the right choice. . . . He has drastically improved from September. We really believe it is the setting, the teaching, and everything. That’s our belief.

Why should this child, who has hypotonia, double vision, limited fine- and gross-motor control, and expressive language delays, receive services in a community setting? Longitudinal data from a comparison of the outcomes for preschool-age children in various service delivery settings do not yet exist. Consequently, a rationale for choosing one service delivery setting over another has not been established (Guralnick, 2001). Nevertheless, the intent of the least restrictive environment (LRE) provision within the Individuals with Disabilities Education Act (IDEA) is that children with disabilities should be educated with their typically developing peers to the greatest extent possible (1997 amendments). For children ages 3 years to 5 years, these settings include community preschool programs, childcare centers, and Head Start classrooms, (Smith & Rapport, 2001). For infants and toddlers, the settings are natural environments—homes, community play groups, parents’ day out programs, library activities, childcare centers, and so forth (Smith & Rapport, 2001) and include the routines and activities in which young children participate.

The provisions in IDEA regarding natural environments and the LRE require that planning teams indicate on a child’s individual plan the reasons why he or she cannot be served in an inclusive setting (Smith & Rapport, 2001). The provision and intensity of services are not to be a factor in choosing placements (Guralnick, 2001; Smith & Rapport, 2001; Stowe & Turnbull, 2001). These considerations, along with the lack of a rationale for choosing among placement options, mean that decisions are based on parents’ preference (Erwin, Soodak, Winton, & Turnbull, 2001; Guralnick, 2001) and access to community settings (Guralnick, 2001). Consequently, parents, service providers, and educators must be vigilant concerning the short- and long-term impacts of the placement decision on the individual child.

What does “the child is successfully included” mean? For this study, it is the following:

1. The children made progress on their individualized outcomes or goals.
2. The children made gains in their personal development and in the acquisition of the knowledge and skills anticipated for all children.

3. The children were welcomed by the staff members and peers in each program and were accepted as full members of the group.

4. Parents were pleased with their child’s gains and that their children appeared comfortable and happy in the group setting.

The first aspect of successful inclusion is the ability of children with disabilities to attain the outcomes or goals stated on their Individual Family Service Plan (IFSP) or Individualized Education Program (IEP). Research has shown that young children with disabilities can make “at least as much developmental progress in inclusive programs as they do in noninclusive programs” (Odum, Schwartz, & ECRII Investigators, 2002, p. 168; see also Guralnick, 2001; Holahan & Costenbader, 2000; Hundert, Mahoney, Mundy, & Vernon, 1998).

Second, successful inclusion is not defined only with regard to attainment of goals and outcomes; children also must make gains in their individual development and in the acquisition of the knowledge and skills in the general education curriculum. The findings from Part D of IDEA state, “Over 20 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by . . . having high expectations for such children and ensuring their access in the general curriculum to the maximum extent possible.” The general curriculum for young children is most often available in the early childhood setting that children with typical development attend and less likely to be available in self-contained settings.

Third, children with significant disabilities need the opportunity to interact with typical peers to acquire typical patterns of social interactions. Small groups of children with disabilities in self-contained classrooms do not offer the range of child-to-child relationships that are necessary for children to learn those peer interaction skills (Hanson et al., 1998). As Odom (2000) said, “If we expect that children with disabilities will learn from, interact with, and form relationships with typically developing children, then the children with disabilities need to be around typically developing peers for a substantial part of their day” (p. 22).

Fourth, successful inclusion means that the child’s parents must be satisfied with progress being made (Erwin et al., 2001). If a child is rejected by his or her peers or is not receiving adequate supports from staff members, and if staff members do not respond to the concerns that parents express about their child, the child’s inclusion is not successful. Family support and involvement is a critical factor in the implementation of inclusion (Beckman, Hanson, & Horn, 2002; Buyse, Wesley, & Keyes, 1998).

Ultimately, successful inclusion is dependent on the therapists, early childhood special education (ECSE) teachers, and the early childhood education (ECE) teachers of the inclusive setting (Buyse et al., 1998; Odom & Bailey, 2001). As Odom et al. (2002) noted, “Programs, not children, have to be ‘ready for inclusion’” (p. 156). This study addressed children who were successfully included. Recognizing that practices of the teachers and therapists are critical to children’s success, we posed the following question for this study: “What are the practices and procedures being implemented by early intervention, early childhood special education, and general early childhood education service providers to promote the full inclusion of young children with significant disabilities in typical early care and education settings?”

**METHOD**

**Children with Significant Disabilities and the Community Settings**

This qualitative study centered on practices implemented by the groups of individuals who supported the children with significant disabilities in inclusive settings. The criteria used to select children were as follows: (a) The child had an IFSP or IEP, (b) the child had two or more disabilities affecting daily functioning, (c) the participants and researchers perceived the child to have significant disabilities, (d) the child was enrolled in an inclusive community setting in which the majority of children were developing typically, and (e) the child was successfully included, as previously defined.

The children were recruited in 2001 and 2002 through contacts with ECSE coordinators and early intervention (EI) developmental therapy specialists who were known to provide services to children in inclusive settings. The ECSE coordinators and EI specialists were asked if they provided services to children who had significant disabilities and also had been placed in community settings, such as childcare centers, Head Start programs, and preschools that served children with typical development. The recruitment process proved to be challenging. Even though a number of community programs were identified as being inclusive, children with more complicated needs or challenging disabilities were often not served in those settings. Eventually, seven children were identified.

The six boys and one girl were between 1 year 3 months and 5 years 2 months of age. Table 1 provides details of their service eligibility categories and disabilities. The eligibility categories for receiving services included developmental delay (for the children receiving early intervention), multiple disabilities, orthopedic im-
Children with Significant Disabilities

Each of the children had two or more disabilities, including hypotonic or spastic cerebral palsy, tuberous sclerosis, pervasive developmental delay, autism, Down syndrome, and traumatic brain injury. Two of the children did not yet have established communication systems, and four other children had delays in expressive or receptive communication development. The children who received preschool special education services under Part B had also been served by the Part C early intervention system.

Once the children were identified and parents and providers had expressed interest in participating, a researcher visited the setting to confirm that it met the study criterion of serving a majority of children with typical development. Four children attended church-sponsored community preschool or childcare programs, two children attended public school–sponsored community preschools, and one child attended a privately owned childcare center (see Table 1). Five settings were in towns and cities in rural counties, and two children attended a

<table>
<thead>
<tr>
<th>Child</th>
<th>Eligibility categories for services</th>
<th>Yrs.-Mos. &amp; Gender</th>
<th>Presentation</th>
<th>Participants</th>
<th>Child’s attendance &amp; setting characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Primary: multiple disabilities Secondary: communication disorder</td>
<td>3-4, male</td>
<td>Hypertonic cerebral palsy, gross-motor delays requiring use of wheelchair and mobile stander, fine-motor delays, delayed expressive language, sensory integration concerns, double vision</td>
<td>Child, mother, ECSE teacher/coordinator, SLP, PT, OT, ECSE assistant, ECE teacher, ECE assistant</td>
<td>4 mornings/wk at church-sponsored community preschool, small town</td>
</tr>
<tr>
<td>2</td>
<td>Developmental delay</td>
<td>2-6, male</td>
<td>Autism with significant behavior concerns, expressive/receptive communication delays</td>
<td>Child, mother, DT, 2 ECE teachers</td>
<td>5 full days/wk at a community childcare center, city</td>
</tr>
<tr>
<td>3</td>
<td>Primary: moderate mental retardation Secondary: communication disorder</td>
<td>3-3, male</td>
<td>Cerebral palsy and significant brain damage from surgical complication; gross-motor delays requiring wheelchair, stander, and gait trainer; fine-motor delays; significant expressive/receptive communication delays; g-tube; sensory integration concerns</td>
<td>Child, mother, father, ECSE coordinator, ECSE teacher, OT, PT, SLP, ECE teacher, ECE assistant</td>
<td>5 mornings/wk at school-sponsored community preschool, town</td>
</tr>
<tr>
<td>4</td>
<td>Primary: orthopedic impairment; Secondary: communication disorder</td>
<td>5-2, male</td>
<td>Cerebral palsy, pervasive developmental delay, gross-motor delays requiring wheelchair and walker, expressive/receptive communication delays</td>
<td>Child, mother, OT, PT, ECSE teacher, ECE director, ECE teacher</td>
<td>5 mornings/wk at church-sponsored community childcare center, large city</td>
</tr>
<tr>
<td>5</td>
<td>Developmental delay</td>
<td>1-3, male</td>
<td>Down syndrome with hypotonia, prematurity, possible hearing loss</td>
<td>Child, mother, ECE director, 2 ECE teachers</td>
<td>1 morning/wk at church-sponsored community childcare center, large city</td>
</tr>
<tr>
<td>6</td>
<td>Primary: multiple disabilities Secondary: communication disorder</td>
<td>4-3, male</td>
<td>Tuberous sclerosis with seizures; motor, vision, behavior, and communication challenges; g-tube</td>
<td>Child, father, ECSE teacher, OT, SLP, ECE teacher</td>
<td>5 mornings/wk at school-sponsored community preschool, town</td>
</tr>
<tr>
<td>7</td>
<td>Developmental delay</td>
<td>2-6, female</td>
<td>Possible cerebral palsy diagnosis; vision correction; upper/lower extremity weakness requiring ankle-foot orthotics; expressive language delays</td>
<td>Child, mother, service coordinator, DT, OT, PT, SLP, ECE director, 2 ECE teachers</td>
<td>5 full days/wk at church-sponsored community childcare center, city</td>
</tr>
</tbody>
</table>

Note. ECSE = early childhood special education; SLP = speech–language pathologist; PT = physical therapist; OT = occupational therapist; ECE = early childhood education; DT = developmental therapist; g-tube = gastrostomy feeding tube.
setting in a large urban area. At the time of data collection, the percentage of children with disabilities in the total daily attendance of children was approximately 25%.

Participants

The participants in this study were the cluster of individuals who provided services, supports, and education to each of the seven young children with disabilities and their families. For example, one cluster consisted of a parent, an ECE director, an ECE teacher, an occupational therapist, a physical therapist, and an ECSE resource teacher (see Table 1 for the details on each cluster). Interviews took place with 43 participants, including therapists, ECSE and ECE teaching staff, and family members.

Procedure

The data were gathered from three sources—interviews, observations of practitioners engaged in their typical educational routines with the children, and written records (e.g., children's IFSPs or IEPs). Using these data sources within and across settings facilitated triangulation during analysis. Data collection took between 2 and 6 months per site to ensure that observations and interviews captured data that were representative of ongoing practices.

Each of the researchers (authors) took sole responsibility for data collection at one or more of the sites. The individual interviews were arranged at times and locations convenient to the participants. The interviews were guided by a set of open-ended questions and probes (see Table 2) designed to elicit information about the practices and strategies implemented to support the development and learning of the child in the inclusive setting. Each interview session lasted from 45 to 90 minutes, as influenced by that participant. Interviews were tape-recorded or, in situations when participants declined to be taped, documented with hand-written notes. Follow-up phone calls, e-mails, and site visits were used to solicit missing information, ask additional questions, and clarify understanding of the data. All interviews were transcribed to computer files.

Three to five observations of the child and staff member interactions and activities were conducted at each site. The observations averaged 2 hours and were conducted when the specialists (EI/ECSE therapists and ECSE teachers) were present at the setting, as well as when only the ECE staff members were present. Observations were guided by a set of foci intended to provide evidence of the practices and strategies being implemented (see Table 2). The observation notes were hand-written and later typed into the computer files. The research team did not engage in direct interaction with the children during the research activities.

Data collected from records varied by setting. Each child’s IEP or IFSP was reviewed, and the goals—or outcomes—and accommodations were photocopied. This information contributed to an understanding of children’s needs and progress, as well as provider practices. Other evidence of practices and strategies was gathered, when it was available, from parent–provider communication books, posted notes in the classroom, and program descriptions. These items were photocopied or documented in hand-written notes and later transcribed.

Analysis

We analyzed the data in three stages, using methods described by Miles and Huberman (1994): coding, data display, and pattern coding. Qualitative research methods employ triangulation to ensure the rigor and trustworthiness of the analysis (Denzin & Lincoln, 2003; Janesick, 2003; Stake, 2003). Denzin’s early work on qualitative research delineated four types of triangulation (cited in Janesick, 2003). We used data triangulation and investigator triangulation in this study. Findings were confirmed through within-site data triangulation by a minimum of three confirming items, such as statements made by three study participants from the site or a combination of participant statements and evidence found in the observations or records. Across-site data triangulation meant that the finding was supported by data from every site. Investigator triangulation meant that the four researchers reached consensus at each stage of the analysis. The analytic and triangulation methods are explained further in the description of each stage.

First Stage of Analysis

The purpose of the first stage was identifying the data related to the practices and strategies being implemented, clumping the data based on commonalities, and assigning topical labels to the data clumps. A three-step process was used, with each step followed by a meeting of the research team to review coding strategies, the emerging clumps of data, and associated labels.

In the first step, the four researchers each assigned tentative labels to the topics of discussion in one of four interview transcripts from the ECE teachers. Investigator triangulation was used during the subsequent team meeting, which focused on comparing the breadth and narrowness of the content included in the codes. The research team resolved instances of disagreement by jointly reviewing the pertinent data and labels to reach consensus. The process resulted in individual researchers adjusting their coding strategies so that content was being identified and labeled at a similar depth across the team.

The second step involved each researcher coding a transcript from one of four parent interviews, a single transcript from a therapist, and one from an ECSE teacher.

...
Investigator triangulation was again used at the subsequent team meeting to arrive at a consensus on topic codes. At this point in the analysis, the topic codes covered broad content areas, such as curricular implementation, communication, organizational structures, and therapy.

The third step was application of the topic codes to the interview transcripts of the 33 other participants and adjusting the coding of the previous 10 interviews, as needed. In this step, the researchers divided the data by site to code the transcripts and other data sources. The coding process also involved adding comments and questions about the interpretation to the transcript margins, to contribute to and inform the third stage of analysis.

**Second Stage of Analysis**

The purpose of the second stage of data analysis was to identify the dominant elements of practice in the coded content, again using investigator triangulation to ensure rigor and trustworthiness. This took place at a team meeting in which data display was used. This method of analysis simply involved writing topic codes on Post-it notes and displaying them on chart paper. The various code definitions were reviewed, and the content included in the codes was either expanded, contracted, or reordered, as appropriate. The codes were then reviewed for clarity of definition, overlap, and strength. This meant that the team considered whether they had consensus on the definitions, the extent to which content under a code was discrete or overlapped with other codes, and the importance ascribed to the ideas by the participants. The most important topics were then determined by considering which codes were most prevalent within and across sites. Four topics predominated: adaptations, attitudes, parent–provider relationships, and therapy interventions. These were identified as important elements of the practices that had been implemented to include children with significant disabilities. In addition, communication as a topic was mentioned multiple times and discussed in every interview across all sites. It had strength and clarity but overlapped with each of the four topic areas. Because the purpose of the study was to look at the topical areas in depth, rather than ranking or rating them, a determination was made that for the current analysis and reporting, communication would be considered within the context of the four elements.

**Third Stage of Analysis**

The third stage of analysis was an in-depth examination of each element. Each researcher took responsibility for one of the elements and reviewed all the data from the study to ensure confidence in the coding. The coded content for each element was then copied from the individual interviews (with enough contextual statements for clarity), and from the observations and records. This information was placed in separate documents, by element, to facilitate analysis. Once this was completed, each researcher looked for patterns emerging from the coded content of the particular element. This resulted in categories of information and definitions of the categories and labels. Table 3 provides details of how this oc-
curred for one element, adaptations. The categories were relationships, which designated who implemented the adaptations; constructs, which described the various roles and the reasons adaptations were made; themes, which identified statements about communication related to adaptations, and objects to identify what was adapted. At that point in the analysis, findings emerged from the data. Data triangulation within sites and across sites ensured the validity of each statement. As a final step to ensure trustworthiness of the findings, each researcher read the analyses of the other researchers and questioned or supported each statement until consensus was achieved.

### RESULTS AND DISCUSSION

As described in the previous section, each of the elements was found in all settings. These elements were attitudes, parent–provider relationships, therapeutic interventions, and adaptations. The final stage of analysis involved examining each element in depth.

#### Results Regarding Attitudes

The providers and parents who supported the decision to include the child with significant disabilities in community settings all had optimistic, clearly identifiable attitudes.

<table>
<thead>
<tr>
<th>Pattern type</th>
<th>Definition of pattern type</th>
<th>Pattern labels</th>
</tr>
</thead>
</table>
| Relationships | Who implemented the adaptation with the child? | • EI or ECSE therapist  
• ECSE teacher or assistant  
• ECE teacher or assistant  
• Parent  
• Peer  
• Joint |
| Construct: Role | What roles did individuals take in relation to adaptations? | • Informant (parent)  
• Planner  
• Developer  
• Implementer  
• Trainer |
| Construct: Process | When or how did planning, preparation, or implementation take place? | • Prior (team): prior to first day, based on decisions at transition or other meeting with team  
• Prior (specialist): prior to first day by one or two specialists  
• At the moment need was noticed  
• After observation of need for immediate implementation |
| Construct: Purpose | Why were the adaptations made? | • Basic function  
• Play and/or learning  
• Socialization |
| Theme: Communication | What was the meaning of communication related to adaptations? | • Problem solving  
• Assignment of role  
• Information  
• Education  
• Successful/not successful |
| Objecta | What was adapted? | • Environment, time, input, output, level of support, participation, difficulty, alternative teaching opportunity, alternative goals |

Note. EI = early intervention; ECSE = early childhood special education; ECE = early childhood education.

aNot all results related to patterns were relevant for reporting in this article, such as the results related to what was adapted, because that information has been reported extensively by other researchers.
toward inclusion. Although the term *attitudes* is difficult to clearly define, we chose to define it for the purposes of this study as the parent or provider’s expression of a positive or negative perspective concerning what was happening with the child within the inclusive settings. These individuals were hopeful that placing the child in an inclusive environment would have a positive outcome on his or her developmental progress. They included teachers, specialists, administrators, and parents within the childcare or preschool setting. All were motivated to build upon the child’s strengths. The observed attitudes of these individuals were positive and accepting of the child with significant disabilities, and they were encouraged by the evident progress and success of the placement. Conversely, a few individuals had difficulty with some activities that supported the child’s inclusion but were able to work through those difficulties and put more effort into finding solutions for their questions and concerns.

As a group, therapists and special educators voiced affirmative opinions about the inclusion of children with significant needs in early childhood settings. Some specialists said that they were not specifically trained to provide their therapy services in inclusive settings, but having seen the benefits, they believed that the children worked harder and enjoyed therapy more when it was conducted in an inclusive setting with their same-age peers. In some instances, inclusion changed the therapists and special educators’ perspective about the way they work with young children. One therapist said,

> I had to learn how not to just go in and pull a kid out, do my thing and (take) him back into the classroom, and run to the next kid. It seemed like that was the only way. I’d sit here in the circle, feeling like I was wasting my time. I’m not doing what I’m supposed to be doing. Now I’ve gotten more comfortable with that and seeing that I’m getting valuable information from being with the class.

These adults’ positive experiences and observations of a child’s success affected their continued support of inclusive practices.

The response of the administrators in this study was one of support and recognition of the need for taking leadership to bring all children into inclusive settings. They cited their program’s philosophy of accommodating all children, including those with disabilities, and supported the efforts of their teachers. An administrator said, “If one school staff person is a believer in inclusion, they can motivate others. . . . One enthusiastic person is infectious.” Administrators also demonstrated support through ongoing and open communication with parents and support staff. These administrators expressed their beliefs that childcare and preschool teachers have the primary responsibility for the children in their early childhood setting and that the environment must accommodate children with a wide range of individual abilities and needs.

Parents shared their perspectives of inclusion in positive, although different, ways. Some parents stated that their child should have the same opportunities as other children. Other parents commented that their child was more independent and making better developmental progress as a result of participating in an inclusive setting. Parents recognized that their children received benefits from all of the providers, not just the specialists. In addition, parents were willing to participate in the classroom to help teachers feel more confident about working with their child. One parent stated,

> At first I had to teach, no, give them a heads-up. But that is what I appreciate about this facility as opposed to the one we were at. They have been so open. I’ve been able to have a conversation with them, back-and-forth talking to see how we could handle a situation.

Classmates of the children with significant disabilities formed another group whose importance emerged during analysis. The parent and teacher interviews provided information about the reaction of the children to the inclusion of their peers with disabilities. Basically, the typical children in the classrooms were helpful to the child with special needs. Parents and providers expressed the belief that the children were learning compassion and acceptance of differences at an early age.

**Discussion Regarding Attitudes**

Attitudes are formed through indirect and direct experiences (Triandis, Adamopoulos, & Brinberg, 1984). Research regarding attitude development has identified three interrelated components: thinking, feeling, and acting. All are critically important and mutually influential in the development of attitudes toward others (Eagly & Chaiken, 1993; Triandis, 1971).

Although community-based providers are often concerned about being prepared to serve children with dis-
abilities (Strain, Smith, & McWilliam, 1996), research has indicated that the more positive experiences childcare providers have with children with special needs, the more they enjoy their jobs and the more positive their attitude toward inclusion is likely to be (Soodak & Erwin, 2000; Strain et al., 1996). When given the appropriate supports and opportunities to learn additional strategies, they may be more open to including children with special needs, even children with more significant needs. The individuals interviewed in this study displayed positive attitudes toward supporting a child’s membership in community and educational programs.

As in other research (Proctor & Niemeyer, 2001), the positive attitudes of community childcare and preschool teachers were reflected in their expression of the value of having a child with special needs in their classroom. Some teachers reported that they were hesitant to include children when they felt unprepared (e.g., inadequate training, lack of equipment, insufficient child-specific information) to meet the needs of children in their programs. As with other research (Diamond, 2001; Stolber, Gettinger, & Goetz, 1998), teachers who were confident in their decision to include children with special needs believed that inclusion fosters gains in areas such as socialization among all the children.

In every instance, therapists and special educators supported the inclusive placement because they believed it would help the child make progress toward his or her outcomes or goals. The attitudes and beliefs of this important group often determine whether and how inclusive approaches involving young children are put into practice (Smith & Rose, 1993; Stolber et al., 1998). In addition, attitudes can be significantly related to the specialists’ level of experience (Lamorey & Bricker, 1993; Lieber et al., 2000; Stolber et al., 1998).

Administrators set the attitudinal tone for effective implementation of inclusive practices. In this study, all of the administrators supported the inclusion of the children who were observed, regardless of the significant needs of the individual child. Programs benefit when the administrative policies and procedures that support inclusion for all children influence the staff’s attitude and acceptance. It becomes the way to do business (Erwin & Soodak, 1995; Lieber et al., 2000).

In this study, all of the administrators supported the inclusion of the children who were observed, regardless of the significant needs of the individual child. Programs benefit when the administrative policies and procedures that support inclusion for all children influence the staff’s attitude and acceptance. It becomes the way to do business (Erwin & Soodak, 1995; Lieber et al., 2000).

As noted in a number of investigations (Lieber et al., 1998; Lieber et al., 2000; Stoneman, 1993), parents’ attitudes may be instrumental to the successful inclusion of young children with disabilities. In this study, families were committed to making inclusion work and often volunteered in their children’s classrooms. They did not believe their children should have to “earn” their way into the classroom but rather that programs might have to make the extra effort. They expected their children to be active participants and worked with staff to solve problems. The parents believed that their children should have the same opportunities as other children, and they worked with administrators and other leaders to make it happen.

Young typically developing children have yet to establish certain beliefs or attitudes toward inclusion. As found by Odom et al. (1999), it appears that inclusive settings, such as the childcare center or community preschool program, have positive effects on young children’s acceptance of differences. Research has suggested that children who are typically developing, who have been in inclusive settings, and who interact with children who have disabilities hold a more positive attitude toward people with disabilities than their peers who lack this experience (Favazza & Odom, 1997; Stoneman, 1993). In fact, Diamond (2001) and Stoneman (1993) suggested that those positive experiences enhance the development of positive attitudes both during the early years and later.

Results Regarding Parent–Provider Relationships

The relationships between the parents of the seven children in this study and program staff members were identified as critical to the success of the inclusive experience. Parent involvement and participation was observed at all of the sites. Parents felt a shared responsibility and were viewed as active partners by the early childhood specialists and other staff members. In this study, the parent–provider relationship was defined as one in which both parties worked together to strengthen the child’s development and build upon the child’s functional skills (Turnbull & Turnbull, 2001).

An important factor in the parent–provider relationship was the severity of the children’s needs and disabilities. Staff members relied on information from parents to guide them in determining the routines and activities for the children. Medical and health-related complications required providers to acquire specific knowledge and skills for planning and implementing each child’s individualized plan. The most immediate source for this information was the parents. Also, the parents knew that the staff members had optimal expectations for their children and worked to keep them informed of any changes that might influence the day-to-day implementation of the individualized plans. Because both parties were invested in this process, it became a team effort.

Ongoing interpersonal communication was found to be critical across all key elements of the study and was maintained through a variety of strategies. It was reciprocal, based on mutual respect. Parents and providers exchanged information and were open to each other’s ideas and suggestions. They valued each other as contributing to the growth of the children and the success of the inclusive experience.

Program staff members not only welcomed parent contribution, they sought it. As one parent said, there was
an “ease of communication.” Examples of strategies for encouraging parent contribution included coordinating information given to and received from parents and taking advantage of opportunities to interface with parents during drop-off and pick-up times.

Parents and staff members accepted the children as they were. Neither group had a “fix it” mentality, but instead both groups had an attitude of building upon each child’s strengths and making adaptations for specific disabilities or special needs. Parents indicated that the staff members “treat my child like they treat the other children” when discussing expectations for their child.

Parents saw themselves as having a role and shared responsibility for the successful inclusion of their child. For example, a speech therapist related what one mother was doing to reinforce what the staff was working on in preschool. The child was asked to sign the word more during snack time, and the mother requested the sign during meal times at home. The speech therapist noted,

His mom is awesome. . . . [She] works with him constantly . . . always asking him to sign—and he’s doing it for her more consistently than for anyone. It’s kind of the routine they’ve gotten into, and he knows what she’s expecting.”

Although the parent–provider relationship is integral to the success of inclusive services, it looked different for each child and setting. The severity of a child’s disabilities and the particular families’ priorities required strategies and solutions that respected the individuals involved.

Discussion Regarding Parent–Provider Relationships

The importance of the relationship between parents and providers is a key finding in this study. The research team made a deliberate decision to use the term parent when describing this relationship. Although the literature (see Erwin et al., 2001) has clearly discussed family-centered practices, it was the parents who had the strong relationship with the providers. The programs reflected family-centered practices, but the relationships that formed were highly individualized and were between the parents and the providers (Fialka, 2001).

The severity of an individual child’s disability and needs determined his or her parents’ frame of reference for expectations (Beckman et al., 2002). Parents did not expect their child to keep up with the other children academically, but they were hopeful that the child would develop social skills and friendships during the inclusive experience. Program staff members set up situations that facilitated interactions between the children in the study and the other children in the classroom. Intermittent and brief interactions between the two groups were reported by staff and observed by the research team. Although parents did not specifically request that staff members establish these times throughout the day, they were aware that these focused interactions were taking place. Staff members continued to plan for these brief exchanges as a result of the program philosophy (Peck, Odom, & Bricker, 1993) and the parents’ interest in the possible development of friendships.

When a working partnership is examined to see what makes it successful, it is clear that a spectrum of factors is involved. These factors attitude, openness, desire to gain needed skills, willingness to share information, and willingness to participate as a member of the instructional team. Successful inclusive programs address the children’s needs within the context of their families’ needs—they are not considered in isolation from each other (Turnbull & Turnbull, 1997). Underlying the parent–provider relationship is the ongoing communication that keeps families informed and involved in the decision-making process about their child. Early childhood programs increase the likelihood of developing a good parent–provider relationship when these features are present (Fialka, 2001).

Results Regarding Therapeutic Intervention

For the purposes of this study, therapeutic intervention entailed physical therapy, occupational therapy, speech–language therapy, and developmental therapy. Communication was identified as an essential aspect of successful therapy, regardless of the service delivery model. Therapeutic intervention contained two key features—the mode of therapy provided and specific practices that supported inclusive therapy services.

Mode of Therapy Provided. The following approaches were observed in the settings and discussed during interviews with therapists and teachers: therapy that was individualized within routines, consultative therapy, pull-out therapy, one-on-one therapy in the classroom, and joint delivery of therapy services (cotreatment).

Individualized within routines. In the inclusive sites that were studied, therapy services were usually provided within the routine of the classroom. Most therapists worked with children with significant disabilities during ongoing classroom activities because they believed the child worked harder and benefited more from therapy during those times. Therapists who individualized within routines in the classroom reported that it made more sense to them to work on a particular skill at a time when everyone was participating in that same type of activity (e.g., working on feeding self at snack time). One speech therapist said, “If I’m there to work with [child],
then I try to keep him with the activity or routine. He’s learning to feed himself, get around by himself, communicate in a meaningful way so there are less [sic] tantrums.”

**Consultative.** For these children with multiple needs, therapists frequently identified the need to work with another therapist or teacher to develop solutions for the challenges the children faced during the routines of the day. In this consultative mode of therapy, the therapist worked directly with the child only for demonstration and assessment, as needed. Subsequently, the teacher integrated the therapy in the daily routines. One therapist commented that therapy really should be a combination of consultative and direct so that there were opportunities to hear from teachers about any difficulties in a routine and to brainstorm possible solutions.

In a few situations, therapy services were provided in a segregated manner outside the classroom activities. In these cases, the therapist used the pull-out, one-on-one in the classroom, or co-treatment modes. Therapists described the difficulty presented by having so little time in the classroom. They expressed the view that because therapy embedded within an activity required more of their time, they chose not to provide it in that manner. Another reason for using these less integrated modes of therapy was that therapists could not be available at a time during those routines that they saw as conducive to providing integrated therapy.

**Pull-out.** The therapists who employed pull-out therapy services supported this choice by explaining that there are times when a certain intensity of services is needed and that this can be provided only in a one-on-one situation, isolated from the distractions of other children. When therapists provided pull-out therapy, classroom teachers were often given written, verbal, or demonstrated information on how to carry over strategies within the curriculum and daily routines.

**One-on-one.** Therapy provided one-on-one in the classroom was another therapy mode chosen by some specialists. The therapist took the child aside to work on goals that might not be relevant to the ongoing activities. Therapists who seemed to prefer this method felt that the child needed some direct, individual intervention, but also realized the value of other children for motivation or modeling during the therapy routine. This participation by other children in the classroom was unplanned, although welcomed, and it did not influence the focus of the therapy being provided. One therapist said, “It works fine in the room, though; the other kids come over and when I’m trying to get him to say something, the other kids will say it and encourage him to say it.”

**Joint delivery of therapy services.** This therapy mode, also called co-treatment, was the final mode discussed by therapists in this study. Therapists most often used co-treatment when the child had intense needs or would benefit from working simultaneously on two types of therapy that required the involvement of more than one therapist.

**Practices to Support Inclusive Therapy Services.** An important aspect of providing therapy services in inclusive settings was communication. The methods participants used for enhancing communication were not new; however, their importance to therapy delivery was emphasized. Team meetings were described by therapists and teachers as an opportunity to develop ideas, problem solve for particular children, share technical information (e.g., assistive technology) that affected the care of a particular child, talk about goals and how to implement them, and touch base with other team members. Communication between therapists and parents usually occurred in person or via written communication, such as notes or a notebook sent between home and inclusive setting. In some sites, the specialist who spent the most time in the inclusive setting became the main contact for teachers and parents and served as a communication “hub.”

Communication among team members was viewed as the key to providing effective, efficient services to children with significant disabilities in community settings. Communication with parents was reported by both the specialists and the parents as being necessary to ensure that everyone was working on goals for the child in the same way.

Sometimes this communicative process presented challenges. For example, ECE teachers described the frustration of wanting to be included in conversations with therapists in the classroom but being pulled away by the need to work with the other children. In other cases, team members voiced their frustration over the times when necessary information simply didn’t wind its way through the entire network of involved people.

The individual flexibility of team members was noted as an important strategy in supporting inclusive practices. This flexibility was noted by the researchers as being critical to the effectiveness of the team. Various team members reported that the success of the inclusive setting was enhanced when the therapist saw himself or herself as another team member and not as the person always having the answers to all questions concerning a particular child. Reliance on and respect for the ideas, opinions, and knowledge of parents, teachers, and other team members was evident. In the classroom, therapists offered general assistance when needed. Therapists indicated that they could be more effective when they were flexible about being in the classroom at times that were best for the child.

All of the specialists and most of the ECE staff expressed individual and team responsibility for ensuring that children met their IEP/IFSP goals and outcomes. A number of teachers and therapists also mentioned that the functionality of the goals and outcomes (e.g., independent eating, toileting, indicating choices) increased the like-
lihood that they could help the child achieve the goals and outcomes during the daily routine. ECE staff and parents relied on the therapists to talk about, interpret, and guide them in their implementation of the goals and outcomes, and therapists acknowledged the important role of all team members. Many therapists believed that the ECE teachers made a big difference in the children's progress. One therapist commented, “Because I am only here twice a week for 30 or 45 minutes, if he only got the therapy those two times, he wouldn’t progress nearly as much as he is.”

The ways in which IEP/IFSP information was shared among team members was also an important factor in enabling children to meet goals and outcomes. Therapists provided support for team members by giving them written directions or a hands-on demonstration of interventions.

**Discussion Regarding Therapeutic Intervention**

The coordination of people and services is essential to providing good, inclusive services for children with significant disabilities (Bruder, 2001). It appears that these teams successfully included children because they provided therapeutic interventions that reflected the child's needs, the therapist's preferences, and the characteristics of the setting in which the child was served.

It is helpful to think of therapy services for these children as sitting on a continuum somewhere between segregated (out-of-class) services and integrated (in-class) services and to consider the critical dimensions of location, involvement of other children, context of therapy, goal functionality, and the teacher's role (McWilliam, 1999). These dimensions also seemed to influence the therapy provided in the settings that were studied. Although the therapy services provided to the children reflected the whole continuum of locations, they were usually integrated within the child's school and home routines. This approach has a beneficial impact on children's services because it has been demonstrated that therapy provided in the classroom results in ECE teachers and specialists consulting with each other four times as much as they do when therapy is provided out of class (McWilliam & Scott, 2001). However, it was observed that those therapists who provided more segregated services took the time to discuss goals and outcomes with other therapists, teachers, and parents in an effort to collaborate. It should also be noted that the provider's perceptions of therapy provided within the routine of the day was different from what the research had indicated as recommended practice. The few therapists who chose to provide more segregated services assumed that providing therapy within the routine would be more time-intensive in terms of preparation and delivery of services. Thus, because of their large caseloads, they chose not to provide more integrated services.

In considering whether therapy should be provided in integrated or segregated settings, it is important to note that there are no conclusive findings that have identified the single most effective approach. Recommended practices do have contributions to make on this issue, however. The principles of normalization, inclusion, developmentally appropriate practice, individualization, and collaboration all suggest that integrated services are preferable to segregated services. As McWilliam (1996), noted, “Until conclusive evidence is found to support pull-out therapy that involves minimal contact with classroom teachers, integrated therapy is more compatible with current philosophical trends in early intervention” (p. 100).

The findings of this study concur with the literature in that the provision of therapy services in inclusive settings was further enhanced by effective communication and an understanding and flexibility about the role of each person on the child's team. Professionals and families have agreed that without regular communication and collaboration, duplication, fragmentation, and ineffective service provision occur. (Scott, McWilliam, & Mayhew, 1999).

Due to the significant nature of the children's disabilities and needs, therapeutic intervention was required for all of the children in the study and played a major role in each child's accomplishments. Ongoing communication, information sharing, and opportunities to provide reassurance among team members were essential aspects of effective inclusive experiences.

**Results Regarding Adaptations**

*Adaptation* may be defined as any change made to support a specific child's ability to develop, learn, and participate in the daily routines and activities of the setting. An adaptation may be a change to an object, environment, instruction, communication, process, or product. Adaptations include both modifications and accommodations (Horn, Lieber, Sandall, Schwartz, & Wolery, 2002).

**Purposes for Adaptations.** Analysis of the interviews and observations revealed three purposes for making adaptations: support for (a) basic function, (b) play and learning, and (c) socialization.

*Functional adaptations* supported a child's basic life functions. These adaptations were necessary for the child's health and safety, communication, positioning, and mobility. For example, one occupational therapist said, “We tried to work on . . . independent use of the spoon, (so) I gave him an adaptive handle.” Some functional adaptations were planned before the child's enrollment in the community setting; others were implemented when there were changes in a child's development or health. Case con-
Adaptations for socialization was another distinct area. The ECE staff, ECSE teachers, and speech–language therapists were the providers who seemed most often engaged in developing and implementing such adaptations. For example, in preparation for snack time, staff members specifically arranged placemats with each child’s name to bring a target child’s preferred playmates into proximity with him or her at the table. Another example was providing an object or activity that created a joint activity, such as taking turns with a musical switch toy or rolling a ball. Verbal prompts and communication symbols were used to guide the child’s behavior, as well as to help the child convey needs or frustrations. Adaptations to promote socialization were observed less frequently than adaptations for other purposes.

Roles in Making Adaptations. Making adaptations involved five identifiable roles: implementer, informant, planner, developer, and trainer. All of the adults who worked with each child were implementers. In their role as informants, parents talked about how sharing their child’s needs and preferences helped staff members in making adaptations. The role of planner, which usually was adopted by the ECSE coordinator or therapist, involved acquiring adaptive equipment. The developer created an adaptation to meet a need. The trainer showed or told another person how to implement an adaptation.

The variety of roles held by any one person with regard to a particular child was influenced by the adult’s experience and confidence in working with children with significant disabilities in general, as well as his or her personal knowledge of the child and the disability. Some ECE staff had never worked with children with significant disabilities prior to the year in which this research was conducted, and they indicated that they felt unprepared to make adaptations. One ECE assistant said, “I was petrified before school started last fall. It was scary. [The special education assistant] helped me to get through it. She had the experience and knows what to do and what not to do.” After ECE staff became familiar with the children, they were more confident about how to support them with adaptations.

Discussion Regarding Adaptations

Meeting the needs of a child with significant disabilities in any setting requires the thoughtful application of adaptations. Adaptations are child-specific within the context of the physical, learning, and social environments of which he or she is a part. They must be based on (a) knowledge of the child and his or her outcomes or goals and (b) knowledge of the disability, curriculum, setting, peers, and so forth (Wolery, 2000). This knowledge comes from multiple sources, including parents, specialists, and the ECE teaching staff. In this study, the parents wanted to make sure that their children’s needs would be addressed; in response, they shared their knowledge with both the specialists and the generalists to enable that to happen. As O’Brien (2001) stated, “Often the best trainers of teachers are the child’s parents, who have learned to respond to their child’s needs” (p. 236).

Knowledge of a child’s specific disabilities and the associated specialized strategies is necessary for making functional adaptations. As found in Crowley’s survey of childcare centers that served children with disabilities, including chronic illness (cited in Crocker & Porter, 2001), community ECE providers expressed concern about being able to meet the child’s most basic needs. In this study, the therapists or ECSE teacher provided assurance to the ECE providers and parents that when the child began attending their program, they would be there to develop the functional adaptations essential for the child and then teach the providers what to do. Parents and ECE staff also needed to know that the child’s required equipment was available to support health and safety, communication, positioning, and mobility needs. The specialists provided adaptive supports to the child, but they also had a crucial role in enabling others to confidently meet the child’s needs. This collaborative role was also identified by Buysse, Wesley, and Able-Boone (2001) in their survey of the literature on creating communities for professional development.

Implementing adaptations to enable the child with significant disabilities to engage in play and learning is necessary for accomplishment of the child’s outcomes or goals (Wolery, 1994). It has been well documented that children with disabilities tend to be engaged in the learning environment less often and with less depth than children without disabilities (Malmskog & McDonnell, 1999). Both the specialists and ECE staff took responsibility for
making adaptations for this purpose, although the specialists provided leadership and ideas to establish engagement in the play and learning environments when the child was first enrolled. Contrary to Venn and McCollum's (2002) study of the planning practices of Head Start teachers, the ECE staff did use the specialists as resources to enable them to meet the needs of the children with disabilities. When the ECE staff became familiar with the child, they were able to make adaptations to the classroom activities and routines without continued support. The time frame in which they determined that an adaptation was needed and responded to it most often occurred as they observed the child in the activity. This finding was congruent with Venn and McCollum's study of the planning practices of Head Start teachers.

Adaptations to promote socialization were most often implemented by the ECE staff and by the specialists who spent the most time in the setting. The adaptations involved positioning the child to enable him or her to engage with peers, providing an object or activity for joint attention, or guiding behavior through communication or prompting strategies. Considering the adaptations from the perspective of Brown, Odom, and Conroy (2001), it is clear that the observed adaptations fell into the most general category of classroom-wide and naturalistic interventions.

Adaptation is an essential element in the successful inclusion of children with significant disabilities in community settings. Functional adaptations and adaptations to support play and learning, as well as socialization, go beyond the accommodations addressed in an initial IFSP or IEP in that they enable the child to fully engage in the environment, curriculum, or social relationships of the classroom. Therapists, ECSE teachers, and ECE providers must be prepared, through preservice and inservice education, to adopt a variety of roles in the development and implementation of adaptations.

**Implications for Practice**

This study identified four elements associated with the successful inclusion of children with significant disabilities in communities. The Results and Discussion section described specific implications for each element. Additional implications are evident when considering the results as a whole. First, each child’s successful inclusion involved a large number of adults. This requires recognition of the interdependent nature of those relationships. Staff members, specialists, and parents benefit from a clear understanding of each others’ roles and responsibilities and from being flexible. Second, including children with significant disabilities in community settings requires looking more closely at their services, goals, and placements to ensure that the benefits of successful inclusion have an impact beyond the early childhood years. Children make gains when providers and parents are prepared to embed these elements in their next and future settings.

**Study Limitations and Questions for Future Research**

The results of this study are based on a limited number of children, settings, and providers. Also, the researchers involved in this study have a strong interest in, and are very involved in, inclusive efforts for children with disabilities. These biases may influence the findings of this study. The results thus should be considered exploratory.

More research is needed to develop a knowledge base to promote inclusion of children with significant disabilities in community settings. Several questions come to mind in this regard. What information and skills need to be acquired at the preservice and inservice levels to bring this about? The interdisciplinary nature of inclusive services means that all disciplines must be educated. What are the responsibilities of the EI and ECSE systems for meeting the challenge of providing adequate supports to the child, family, and ECE staff in the community setting?

The results of this study suggest that children with significant needs and disabilities can have a successful inclusive experience and that there are identifiable elements and associated practices that contribute to that success. These elements play a critical role in the inclusion process and need to be in place for children and their families to participate in community settings. The challenge for the field is to understand and implement practices that permit all children—regardless of ability level—to have a successful inclusive experience.

**Authors’ Note**

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