Experiences of Preschoolers with Severe Disabilities in an Inclusive Early Education Setting: A Qualitative Study

Mary Frances Hanline
Florida State University

Silvia M. Correa-Torres
University of Northern Colorado

Abstract: The purpose of this qualitative study was to explore the social experiences of preschoolers with severe disabilities in an inclusive early education setting. Teachers, para-professionals, and peers were interviewed, and the children and adults were observed in daily routines of the preschool. Findings showed that social experiences with adults were primarily assistance/help and direction/teaching and were influenced by the characteristics of the children, learning objectives, and the activity in which the child participated. The peers expressed pleasure in interacting with and sensitivity toward the children with disabilities. Results also showed that three approaches were used to facilitate peer-peer interactions: the full participation of children in activities, modeling appropriate behaviors, and enlisting the help of the children without disabilities. Implications for future research and inclusive education are discussed.

The education of individuals with severe disabilities has gradually changed from institution-based services to models of inclusion in general education settings. The federal mandates of the Individuals with Disabilities Education Act (IDEA) and No Child Left Behind have given school-age children with severe disabilities increasing opportunities to be educated with their nondisabled peers and to have access to the general education curriculum (Turnbull, Turnbull, & Wehmeyer, 2006). The same progress for preschoolers (i.e., 3- to 5-year olds) with disabilities has occurred, although inclusion opportunities often are provided through community child care programs, rather than in public schools, for this age group.

In a joint position statement, the Division of Early Childhood (DEC) of the Council for Exceptional Children (CEC) and the National Association for the Education of Young Children (NAEYC) supports "the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society. The desired results of inclusive experience for children with and without disabilities and their families include a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used to identify high quality early childhood programs and services are access, participation, and supports" (DEC/NAEYC, 2009, p.2).

In addition to these two professional organizations advocating for inclusion in the early years, research has documented increases in language, social, cognitive, and literacy development for all children in inclusive settings (e.g., Buysse, Goldman, & Skinner, 2002; Holahan & Costenbader, 2000; Kliewer, Fitzgerald, Meyer-Mork, & Hartman, 2004; Rafferty, Piscitelli, & Boettcher, 2003). Young children with disabilities benefit as much from inclusive programs as they do from segregated special education programs, and all children benefit from inclusion, particularly with respect to their social development (reviewed in Odom, Schwartz, and ECRII Investigators, 2002).

Only a few studies, however, have included preschool children with severe disabilities (Odom et al., 2002). Hanline (1993) observed spontaneous peer interactions in a preschool that included three children with profound disabilities. Results of the study showed that
the children with disabilities had many opportunities to participate in peer interactions and engaged in interactions comparable in length to those of their peers without disabilities. Hundert, Mahoney, Mundy, and Vernon (1998), comparing the progress of children with disabilities enrolled in segregated and inclusive settings over a one-year period, found that children with severe disabilities in inclusive classrooms showed greater developmental gains than children with more mild disabilities in inclusive settings. Holahan and Costenbacher (2000) found the progress of children with severe disabilities to be similar for children in inclusive versus segregated settings. In a qualitative study of preschoolers with severe disabilities in inclusive settings, Kliewer et al. (2004) found teachers were able to effectively foster the citizenship of all children in the classrooms under study.

Because of the limited number of studies of preschool children in inclusive early childhood settings, little is known about the learning opportunities available to preschoolers with severe disabilities in inclusive early childhood settings. As the benefits of inclusion occur primarily if opportunities for social interactions are available, opportunities for socialization and communication available to children with severe disabilities in inclusion preschools is of critical importance. Thus, the purpose of this study was to explore the nature of social interactions of preschoolers with severe disabilities educated in an inclusive early education program. This qualitative study focused on 1) the nature of adult-child and peer-peer social experiences (i.e., what type of interactions occurred and with whom did the interactions occur), 2) strategies used by adults to promote social and communication skills, and 3) perceptions of peers to promote understanding of peer-peer interactions. Data in this qualitative study were gathered primarily through interviews and observations.

Method

Participants

The participants in this qualitative study were three preschool students with severe disabilities, seven preschoolers without disabilities, and eight adults (teachers and/or paraprofessionals) who worked with the children in the inclusive preschool setting.

Children with disabilities. Nick, Laura, and John represent a purposeful sample; they were chosen deliberately because they were deemed the most likely candidates to offer valuable information that could not be gathered in as much detail from other possible participants. The children were selected because they were between the ages of 3 and 5 years, attended an inclusive setting with same age peers, and experienced severe disabilities. The TASH explanation of “severe disabilities,” as presented in the TASH Resolution on the People for Whom TASH Advocates (TASH, 2000), is used in this study. That is, Nick, Laura, and John required support for life activities such as mobility, communication, self-care, and learning as necessary for community living, employment, and self-sufficiency.

All three children received special education and related services during each 6 hour school day. That is, a special education teacher worked with the children directly and consulted with other adults in the program who provided instruction during the school day. In addition, therapists provided services within the 6 hour school day. All three children remained at the child care center for after-school care. Information about each child was gathered from a demographic information form and the children’s special education teacher.

Nick (5 years old) began attending the preschool at 2 years because of language and cognitive delays. He enjoys looking at books, engaging in solitary sand and water play, and playing alone with trucks. He lives with his parents and a young brother. Nick received special education, speech/language therapy, and occupational therapy (OT). Nick actively moves through his environment, but seldom initiates social interactions or responds to peers, requires adult attention to engage in play activities for longer than several seconds, and needs guidance when completing routines such as hand washing or moving to a different area of the preschool. When he made the transition to kindergarten, Nick continued to receive special education services, but under the label of autism. Nick’s preschool education goals focused on 1) in-
creasing functional use of language during play and meals, 2) obtaining other children’s attention to enter and maintain play, and 3) interacting with play materials in a functional and meaningful way.

Four-year-old Laura lives at home with her mother, father, and baby sister. She enjoys having books read to her, cause-effect toys, cooking activities with peers, and music. Laura experienced meningitis at the age of 3 months resulting in cortical blindness, cerebral palsy, seizure disorder, and severe developmental delay. She began attending the preschool at 18 months of age, receiving special education, vision, physical therapy (PT), occupational therapy (OT), assistive technology, and speech/language services. Laura is either pushed in a wheelchair or carried by an adult to move from place to place in the preschool. Laura uses vocalizations to gain attention, listens attentively to sounds around her, and responds to others with smiles, vocalizations, and movements. She requires assistance and support in all routines and activities of the preschool. Instructional goals for Laura included learning to make choices and learning to use a head touch pad to indicate yes-no. Laura was also learning to increase social responses and initiations.

John, who is 4 years old, began attending the preschool when he was 2 years old. He experiences severe developmental delay resulting from Potocki-Shaffer 11p deletion syndrome. John receives special education, OT, PT, and speech/language services. He enjoys gross motor activities, music and movement, and water play. He lives with his older brother and parents. John walks independently in all areas of the preschool and attempts to communicate with adults and peers using vocalizations, but requires adult support to engage in turn-taking with peers and to follow directions. John also requires assistance to complete daily routines such as making a transition to a new activity or passing food to peers during family-style meals. Instructional goals centered on increasing the use of verbal requests, improving fine motor skills in activities of daily living and self-care, and engaging in turn-taking with peers. An additional goal for John was to engage in associative play.

Children without disabilities. Seven 4- to 5-year-old preschoolers without disabilities were interviewed. Four were girls; three were boys. The children were selected by their teachers because of their expressive language skills and experiences with the children with disabilities. All of the participants without disabilities had attended preschool with Nick, Laura, and John for at least two years.

Adults. Eight adults, four certified teachers and four paraprofessionals, participated in this study. All of the eight participating adults represented a broad range of expertise with an average of 10 years of experience for the paraprofessionals and 14 years for the certified teachers. Of the four certified teachers, two had Master’s level degrees and two had earned PhDs. All of them held a state-recognized teacher certification in either elementary, special education, or early childhood education. Three of the teachers had more than one certification; all four of them were female. Background information on the paraprofessionals was somewhat different. Three of the four paraprofessionals were female and one was male. The highest degree earned by all of the paraprofessionals was high school diploma. All four paraprofessionals reported they had received training to work with children with disabilities through the preschool where they currently work.

Setting

This study took place in an inclusive early education program that has included children with disabilities since its inception over 40 years ago. The program has been continuously nationally accredited since 1989. The preschool provides services to 120 children ages 8 weeks old through kindergarten. Programs for infants and toddlers are located in a building separate from the preschool and kindergarten programs. Sixty children attend the “Big School” for ages 3 through kindergarten with an adult-child ratio of 1 to 10. Ten of the children in the Big School receive special education services from the local school system. The school district provides a special education teacher, a paraprofessional, related services, transportation, instructional materials, adaptive equipment, and inservice personnel development.

The philosophy of the preschool, based on the developmental theories of Erik Erikson,
Anna Freud, Jean Piaget, and Lev Vygotsky, assumes all children learn best through meaningful play interactions with the objects and people in their environments. The play is child-initiated, child-directed and teacher-scaffolded. Through carefully organized pre-arranged environments and planned play experiences by teachers with knowledge of child development, children have opportunities to manipulate, explore, experiment, problem-solve, make choices, and develop new skills. The program provides a variety of play opportunities through which each child is guided towards his/her optimal potential (Phelps, 2005).

The daily schedule of the preschool begins with supervised indoor and outdoor play from the time the child arrives in the morning until a family-style breakfast is served at 9:00 AM. Breakfast is followed by a 30 minute outside play period. Children then participate in center activities for 90 minutes. Children are divided into a consistent play group composed of 10–12 children and are supervised by the adult assigned to the center in which the children play. Centers include block play, microdramatic play, macrodramatic play, readiness, and construction play. Children experience each center one day per week in the morning. The remainder of the day includes additional supervised outdoor play that includes opportunities for sociodramatic and construction play, lunch, snack, nap, and an afternoon of child-selected centers similar to those available in the morning. In addition, small and large group reading, cooking, and music are provided at various times during the day.

Services for children with disabilities are provided within the context of the activities of the daily activities of the preschool. IEPs are developed by family members, school system special education and related service personnel, and administrators and teachers at the preschool. IEP goals and objectives for each child are discussed with the adults in the preschool who will be responsible for their implementation. The special education teacher works with other teachers to embed instruction within the context of play activities and routines. Therapists and other related services professionals (e.g., vision teacher) provide service to the children within the on-going activities or create small groups of children with and without disabilities in which to provide services. The related service personnel also consult with the preschool teachers to ensure continuous implementation of interventions (e.g., correct positioning and handling).

Data Collection Methods

For this qualitative study, interviews and observations were used as the primary methods to gather information on the nature of the social interactions of children with severe disabilities within the context of an inclusive early childhood program. Credibility of the data, as discussed by Brantlinger, Jimenez, Klingner, Pugach, and Richardson (2005), was established as follows:

- **Data triangulation**—use of varied data sources. Data were collected from two sources: adults serving in instructional roles at the preschool and the children attending the preschool.
- **Investigator triangulation/collaborative work**—use of several researchers: could involve interrater reliability checks on the coding of data. The two authors of this paper served as coders of data, reaching agreement on coding outcomes.
- **Methodological triangulation**. Two methods to gather data were used: interviews and direct observation.
- **Disconfirming evidence**—the researcher looks for evidence inconsistent with themes. No outliers were found.
- **Researcher reflexivity**—researchers attempt to understand and self-disclose their assumptions, beliefs, values, and biases. The bias of the authors toward inclusive practices influenced the focus of the study, as well as the selection of the research site.
- **Audit trail**. records of when observations occurred and interviews conducted were kept by both observers; field notes from observations, videotapes of interviews with children, and audio tapes of interviews with adults are maintained.

**Interviews**

**Interviews with adults.** Adult participants (certified teachers and paraprofessionals) were asked to share information on their per-
ceptions about the opportunities for communication preschoolers with disabilities have in this inclusive setting, approaches and strategies they used to facilitate social interactions, and their insights about this educational setting. The second author conducted the interviews with the adults at times that were most convenient for them and at a time that did not disturb the daily routine of the inclusive preschool. Interviews were audiotaped.

Interviews with peers. Peers were interviewed to learn about their perceptions of their social interactions with Nick, Laura, and John. Peers were divided into two groups. The first group consisted of two boys and two girls; the second group, two girls and one boy. The first author acted as interviewer, while the second author video-recorded. The children sat on the floor in a semicircle in front of the interviewer. The videotaper sat outside the semicircle of children. A teacher from the preschool observed the interview, but did not participate.

The interviews began with the researchers and children introducing themselves and the interviewer explaining that the children were going to talk about their friends. (At the preschool where the research took place, the word “friend” was used to refer to any child attending the preschool.) The children were asked, “Who do you like to play with?” followed by, “Why do you like to play with _____?” The children were then asked, “When you play with your friends, what do you like to do?” Because none of the children identified Nick, Laura, or John as children with whom they played, the interviewer asked specifically about these children. That is, the interviewer said, “Let’s talk about another friend at school. When you play with Laura, what do you like to do?” This question was repeated for Nick and John. Each interview lasted approximately 20 minutes.

Observations. Observations were conducted by the two authors as Nick, Laura, and John participated in their daily routine to answer the research questions related to the nature of social interactions and the strategies used to facilitate peer-peer interaction. Interactions between Nick, Laura, and John and their peers and adults were observed. Interaction was defined as any social contact or behavior between two people: child to child, child to adult, or adult to child.

Observations took place during the morning activities of center activities, outdoor play, meals and snacks, and transitions. In this way, the same activities were observed by each researcher. Each researcher observed at different days, but observed approximately 12 hours each. Researchers sat or stood on the outskirts of the activities, taking notes by hand and not initiating interaction with adults or children. If approached by a child, the researchers responded, but then directed the child back to his/her activities. Teachers were told in advance that the researchers were observing and assisted in redirecting the children. Being observed by researchers was a frequent activity in the preschool, so teachers were familiar with the process. Field notes were hand-written during observations.

Data Analysis

Field notes and interviews were transcribed by a research assistant within a few days of data collection. Data were coded within a week after transcription.

Analysis of interviews with adults. Coding of adult interview data began with the second author examining each phrase, sentence, or paragraph to determine the meaning of the unit (Merriam, 1998). Meaning units were then placed into categories based on the research questions: 1) the nature of the interactions between Nick, Laura, and John and their peers and 2) strategies used to promote social interactions with peers. The first researcher verified the accuracy of each meaning unit into one of the categories. The second author then analyzed each meaning unit within each category for themes.

Analysis of interviews with peers. The first author examined the meaning of each phrase, sentence, or paragraph to determine the meaning of the units. Units were placed into one of two categories based on the interview questions: 1) the activities in which the peers engaged with their friends without disabilities and 2) the activities in which the peers engaged with Nick, Laura, and John. The second author verified the accuracy of each meaning
unity into one of the categories and the first author then analyzed each category for themes.

**Analysis of field notes from observations.** Both researchers first coded the same three observation transcriptions, coding each social interaction of Nick, Laura, and John with peers and adults according to a first draft of the definitions provided in Table 1. Categories of social interaction behaviors are based on previous work by Correa-Torres (2008a; 2008b) and Evans, Salisbury, Palombaro, Berryman, and Hollowood (1992). Results of the independent coding of each researcher were then compared. Refinement and expansion of three of the 11 categories of social interaction behavior (i.e., conversation, affiliative comments, and assistance/help) resulted from this initial coding. Both researchers then coded the transcribed observations and again compared results, this time with no disagreements. Categories of social interactions were analyzed for each individual child and compared across children.

### TABLE 1
Categories of Social Interaction Behaviors

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Definition of Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance/help</td>
<td>Any help provided to another student (e.g., help getting up from the floor) or interaction with the student where another person facilitates communication or information from the environment; any assistance provided to the student to complete a task; physical assistance and other types of assistance such as getting a book off the shelf; not assistance related to one-on-one instruction</td>
</tr>
<tr>
<td>Discipline</td>
<td>Any statement that conveys a reprimand or correction, either by tone of voice or vocabulary; any physical gesture that is intended to identify to a child that his or her behavior is not acceptable; reminders to follow rules</td>
</tr>
<tr>
<td>Play</td>
<td>Any activity involving materials wherein the primary purpose is not instructional, but focused on the enjoyment of the participant</td>
</tr>
<tr>
<td>Conflict resolution</td>
<td>Given the occurrence of a dispute between children (argument over toys, whose turn), student makes an attempt to resolve the situation by presenting solutions; physical actions that address ending the conflict</td>
</tr>
<tr>
<td>Physical aggression</td>
<td>Any activity such as hitting, punching, kicking, biting, butting with the head, non-playful push/pull/grab, destruction of another’s property, or using materials to harm others</td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>Screaming, shouting, name calling, or otherwise derogatory comment directed toward another</td>
</tr>
<tr>
<td>Affiliative comments</td>
<td>Verbal praise (What a nice job!), questions, or comments intended to praise or encourage (I love that dress; I know you can do it)</td>
</tr>
<tr>
<td>Attention-seeking</td>
<td>Behaviors intended to gain another’s attention; may include reaching toward someone, vocalizing toward a specific individual, presenting objects to someone, physically changing body position to be in closer proximity to someone</td>
</tr>
<tr>
<td>Directions/teaching</td>
<td>Behavior that involves giving directions or instruction to a student; prompts, including hand-over-hand; one-on-one instruction with an adult</td>
</tr>
<tr>
<td>Asks for assistance</td>
<td>Verbal or gestural behaviors that involve asking for assistance; code as “conversation” if interaction continues and involves one or more contribution from each participant</td>
</tr>
<tr>
<td>Asks for information</td>
<td>Verbal or gestural behaviors that involve asking for information; code as “conversation” if interaction continues and involves one or more contribution from each participant</td>
</tr>
<tr>
<td>Conversation</td>
<td>Verbal or gestural behaviors that involve a chain/turn-taking in exchange of information; the interaction has a “fun” or casual conversation quality; involves one or more contribution from each participant</td>
</tr>
</tbody>
</table>


**TABLE 2**

Social Interactions per Interaction Category for Nick, Laura, and John

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Nick</th>
<th></th>
<th>Laura</th>
<th></th>
<th>John</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Peers</td>
<td>Adults</td>
<td>Peers</td>
<td>Adults</td>
<td>Peers</td>
<td>Adults</td>
</tr>
<tr>
<td>Assistance/help</td>
<td>4</td>
<td>27</td>
<td>14</td>
<td>52</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Discipline</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>20</td>
<td>22</td>
<td>14</td>
<td>3</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>Conflict resolution</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical aggression</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Verbal aggression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliative comments</td>
<td>20</td>
<td></td>
<td>24</td>
<td></td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Attention-seeking</td>
<td>3</td>
<td>25</td>
<td>32</td>
<td>15</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Directions/teaching</td>
<td>35</td>
<td>12</td>
<td>49</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asks for assistance</td>
<td>2</td>
<td>5</td>
<td></td>
<td>5</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Asks for information</td>
<td></td>
<td>8</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversation</td>
<td>20</td>
<td>14</td>
<td>56</td>
<td>219</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>119</td>
<td>85</td>
<td>179</td>
<td>56</td>
<td>219</td>
</tr>
<tr>
<td>Percent</td>
<td>16.78</td>
<td>83.22</td>
<td>32.20</td>
<td>67.80</td>
<td>20.36</td>
<td>79.64</td>
</tr>
</tbody>
</table>

**Results**

*Nature of Interactions between the Children with Severe Disabilities and Adults*

The majority of Nick, Laura, and John’s social interactions were with adults (teachers and paraprofessionals), as can be seen by the data provided in Table 2. For all three children, the nature of the interactions was mostly that of assistance/help and direction/teaching by the adult. Assistance/help was both verbal and nonverbal in a variety of activities throughout the preschool. Some of the activities in which adults were observed assisting and teaching were: play-based activities, transitions, daily routines, and structured small and large group activities.

*Influence of activity type on adult-child interactions.* The type of activity influenced the focus of the instruction and assistance. That is, when in play-based activities, the instruction usually emphasized promoting interactions with peers and using play materials appropriately. During routines and transitions, the instruction focused on assistance to complete the routine or transition. More physical assistance (such as hand over hand assistance) or guiding the child in a specific direction with physical contact (for Nick and John) were used during routines and transitions. Laura, because of the nature of her disability, often received assistance by being carried, repositioned, and/or seated in the lap of an adult for support during an activity.

*Influence of learning objectives on adult-child interactions.* The interactions Laura, Nick, and John had with adults reflected the child’s learning objectives. That is, one of Laura’s goals was to increase social initiations and responses. After assistance/help and directions/teaching, the next social interactions categories in which Laura and adults participated to the greatest degree was affiliative comments and attention seeking. Affiliative comments were directed at Laura by the teacher and attention seeking was directed at the adult by Laura. Both of these types of social interactions would serve to provide opportunities for Laura to increase her social responsiveness.

Two of John’s goals included engaging in more socially interactive play with peers (i.e., engaging in turn-taking with peers and moving from parallel to associative play). The higher rates of engaging in the social interaction category of play with adults in which peers were included served to increase John’s social interactions with peers. In addition, much of the adult directions/teaching with John was focused on teaching John to meet his educational goals.
Nick was learning to use play materials and language in functional ways. High rates of play interactions with adults and affiliative comments would assist in reaching these goals. Further, much of the adult directions/teaching directed toward Nick was focused on his learning to interact with play materials in a more functional manner.

Influence of child characteristics on adult-child interactions. Although the tone of the adult-child interactions was positive, as evidenced by the high rates of affiliative comments between adults and Laura, Nick, and John, the nature of the interactions seemed to be influenced by the child’s characteristics. That is, Nick required higher rates of discipline and adults engaged in less conversation with him. The occurrence of conversation and interactions as a result of attention-seeking was much higher with Laura and John, who were more socially interactive than Nick. The ability of Nick and John to manipulate play materials may have resulted in higher rates of play interactions with adults than with Laura. Further, John had the most interactions with adults, a function of his high rates of attention seeking combined with his requests for assistance.

In addition, the tone of the social interactions between Laura, Nick, and John and the adults was somewhat different. That is, interactions with Laura were of a more playful nature and frequently involved kissing, tickling, and other affectionate physical contact. As example recorded through observations, during a reading circle follows:

Laura is in the lap of an adult who is reading a book about baby chickens to a group of children seated on the floor in a semi-circle in front of the adult and Laura. The adult tickles Laura’s cheek and says, “Cheep, cheep.” Laura smiles.

Adult interactions with John and Nick (while affectionate, responsive, and positive) were less playful in nature. For example, the following was observed to occur:

John is one of 8 children seated around a child-size table for a cooking activity. The teacher is breaking eggs into a mixing bowl. John is rocking in his chair. He stops rocking, watches the teacher, and stands to be able to see better. The teacher says to John, “Can you sit down and stir 10 times? Ready? Stir. Scoot up a bit—1, 2, 3, . . . , 10. Ten! Good job. You did a good job, John!”

Adults made efforts to communicate with Nick, Laura, and John at each child’s level. John would often walk up to adults and verbalize, but his verbalizations were often unintelligible. When the adults did not understand John, they maintained the conversation until they did understand. Laura’s movements and verbalizations were responded to with touch and talking.

The adults used interactions with the children to increase language/communication skills in a manner similar to their interactions with the children without disabilities. As evidence:

“OK, John. Where do you want to go play? I see a puzzle. Want to go make a cake of mud? Yeah? OK.” The adult then takes John’s hand, walks him to the mud, and puts a smock on him. “OK, now, here’s your smock.”

Nature of Interactions between Children with Severe Disabilities and Peers

Nick and John’s interactions with peers were predominantly in the social interaction category of play. Typically, an adult was present and encouraging Nick and John to engage socially with peers in support of learning objectives for each of the boys. John was the only child who required conflict resolution in the context of playing with peers. This was needed in all instances in response to John taking the toy of a peer. John also engaged in a relatively high number of attention-seeking behaviors with peers. This was usually in the form of attempting to have peers look at his toys as he stood next to a peer or group of peers engaged in play activities. An example of a typical peer interaction with John is:

John walks up next to a girl playing at a sand table. He picks up and waves a wooden spoon to the girl and says, “Mmmmm.” He then waves the spoon to another peer who just came to the sand table, “Mmmmm.” The peer makes eye contact. John drops the spoon and begins to stack cups. The peer begins to stack cups next to John.

Outside of peer interactions in the category of play which were facilitated by adults, Nick had
only 4 additional peer interactions, all in the category of peers providing assistance/help. All instances of assistance occurred during transitions when Nick received help from a peer to move to another activity in the form of a verbal request such as, “Nick, come with me,” followed by the peer taking Nick’s hand and leading him to the next activity.

Laura’s interactions with peers were centered around her seeking attention. This was accomplished by verbalizations and body movements. The ability to gain attention from peers resulted in high rates of conversations. The turn-taking with peers often involved the peers tickling or touching Laura in an affectionate manner. Laura maintained the conversation by moving or verbalizing in response to her friends’ touches. Peers were eager to assist Laura and to play with her, as evidenced by high rates of interactions in the categories of play and assistance/help.

Influence of child characteristics on peer-peer interactions. Similar to interactions with adults, the interactions with peers seemed to be influenced by the behaviors of Laura, John, and Nick. That is, John had the largest number of interactions with peers, a result of his attention-seeking behaviors. Nick had the fewest interactions with peers and was the child with the least ability to socially interact. In addition, the tone of interactions between Laura and her peers was more playful and affectionate in nature than with John and Nick. Laura was responsive and, in responding, laughed and smiled and showed pleasure in interacting with her peers.

Strategies used by Adults to Promote Social Interactions

In the interviews, the adults were asked to identify strategies used to facilitate opportunities for social interactions with Nick, Laura, and John. Three approaches emerged in the analysis: 1) the full participation of all children in activities, 2) modeling appropriate social interaction behaviors, and 3) enlisting the help of the children without disabilities.

Full participation. The strategy most commonly mentioned was having Nick, Laura, and John participate in all the different activities for all the children throughout the day. One adult in her interview explained the practice in this way:

“We go around the table and talk about what we did at home the night before . . . Everybody is expected to contribute even though he’s—he’ll say things that are really off the wall. That’s still his contribution, so he feels like he’s part of the group.”

While the adults recognized that the children with disabilities were not able to do everything the way children without disabilities could do them, the expectation was that they would be part of the activities and meet expectations appropriate for their abilities. In reference to building block structures, one teacher said:

“I know that a child who is developmentally five can build a block structure that’s high. Whereas this child—although he’s 5 chronologically, developmentally he’s only 2—his structure isn’t going to be as big, but he’s still expected to build it.”

Modeling. Another approach used to facilitate interactions identified by adults was to model for peers the appropriate way to interact with Nick, Laura, and John. Adults were well aware that their behavior was modeled by the children. They were also aware that interacting appropriately with the children with disabilities was something that peers needed to learn.

Enlisting helpers. A third approach to facilitate social interactions between Nick, Laura, and John and the other children was to enlist peers to act as “ helpers” to the children with disabilities. Adults spoke of the peers participating in therapy with Nick, Laura, and John, peers participating in the recording of the words in Laura’s AAC system, peers holding the hands of Nick and John when walking to new activities, and peers getting materials for Laura.

Perceptions of Peers in Relation to Social Interactions with the Children with Severe Disabilities

In the interviews, peers were asked to identify their friends and the activities in which they participated with friends. When discussing the activities in which they engaged with friends,
they typically identified an area in the preschool in which they played, rather than specific activities. For example, one child identified Miss Suzi’s outdoor deck that included micro- and macro-dramatic play activities.

None of the peers independently identified Nick, Laura, or John as their friend in the interview. Therefore, the children were asked to identify activities in which they participated with Nick, Laura, and John. Activities the peers enjoyed with Nick and John included outdoor games, gross motor play, and more quiet activities available indoors and outdoors. Children spoke of playing tag and riding tricycles with John and Nick and of playing on the deck, slides, and tires in the outdoor area of the preschool.

Peers identified their interactions with Laura differently. Most interactions discussed by peers involved affectionate exchanges. When asked what they do with Laura, some of the responses were:

“Um, I play with her with um legs.” “Um, I kiss them . . . And that’s mostly all I do . . . Oh, yea. I like to talk to Laura.”; “I hold her hand . . . What I do with Laura is I start with talk, and I start talking about silly things like ‘Bugging your head’ or ‘Kissing your eggies.’ She always laughs when I say silly things.”

Peers recognized that Nick, Laura, and John required assistance and additional help from teachers and from friends. As two peers stated,

“Because they have special needs, and I think it’s fun playing with them because they don’t know how to do as much interesting things that we can do. So I think we make it better by playing with them.” “I like the therapy I do with him. Miss Becky does the therapy and the therapy helps.”

They identified therapy as an activity in which they participated with Nick, John, and Laura. When asked to discuss what happens in therapy, children responded:

“Well, at the one Laura goes to, they help her walk and all, and at this one I help her say Hello and Goodbye and Good Morning and that kind of stuff . . . And with Nick I like doing therapy with him, and doing the bear walk with him.”

“And we go on the ball . . . I like the bouncy one. And, we sometimes, and we do the puzzle on the ball.”

The peers spoke of assisting their friends with disabilities in daily activities, talking about holding Nick’s hand to help him get to an activity, taking toys to Laura, and helping John talk.

Discussion

The purpose of this qualitative study was to explore the nature of adult-child and peer-peer social experiences of preschoolers with severe disabilities in an inclusive early education setting, the strategies used to facilitate peer-peer social interactions, and the experiences of the peers without disabilities when interacting with the children with disabilities. Teachers and paraprofessionals were interviewed and asked about the strategies used to facilitate peer social interactions and inclusion of children with disabilities. Peers without disabilities were also interviewed and asked their ideas of friendships and activities shared with the children with disabilities who participated in this study. The children and adults were observed in daily routines of the preschool. The behaviors observed in the naturalistic observations corroborated information discussed in interviews.

The type of social interaction and the context in which they occurred showed that the adults were providing interactions to promote accomplishment of each child’s individual learning goals. As example, both Nick and John had learning goals centered on increasing play skills and using language within play. A large number of adult-child interactions occurred within the context of play activities and were centered on promoting more sophisticated play skills and/or interactions with peers.

Findings of this study also suggest that the nature of adult-child and peer-peer social experiences (i.e., what is happening in the interactions) of Nick, Laura, and John were essentially assistance/help and direction/teaching provided by adults. Most interactions were with adults and were initiated by adults. While adults spoke about and were observed using strategies to facilitate social interactions of
Nick, Laura, and John, rates of peer-peer interactions were low. The percent of social interactions of Nick, Laura, and John with peers occurred at very low rates, i.e., 16.7%, 32.3%, and 20.3%, respectively. This finding has been seen in previous research studying social interactions of older children with severe disabilities in inclusive settings; i.e., that students with disabilities are more likely to be more dependent on adults, teachers and/or para-professionals for social interaction (e.g., Correa-Torres, 2008a,b).

The peers interviewed expressed pleasure in interacting with Nick, Laura, and John; as well as sensitivity towards and acceptance of their peers with disabilities. They engaged in social interactions and other activities that demonstrated an understanding of each child’s unique needs. For example, the peers spoke of enjoying accompanying John and Nick to therapy. The peers’ interactions with Laura were affectionate and playful and provided an opportunity to engage in reciprocal interactions. These findings are similar to those of Hanline (1993) who observed spontaneous peer interactions in a preschool that included three children with severe disabilities.

**Limitations**

While this study offers information to better understand the social experiences of preschoolers with severe disabilities in inclusive settings, there are limitations. The data were collected in one site, limiting the generalizability of the results. In addition, the familiarity of the first author with the teachers and the known bias of the first author toward inclusion may have influenced behaviors while being observed, as well as interview responses of the adults. Further, the information gathered from the preschool children in interviews must be interpreted with caution, given the difficulty of interviewing young children with confidence of obtaining valid and reliable information (Ceci & Huffman, 1987). However, the interviews were designed with consideration of factors known to influence preschoolers’ behavior in interviews. That is, a familiar person was present, the questions were not biased or leading, and the interviewer did not attempt to influence the children’s responses.

**Implications for the Field**

One of the interesting findings of this study was the way both adults and peers interacted with Nick, Laura, and John based on the social behaviors of the children with disabilities. That is, Laura (who expressed clear enjoyment of interacting with others and was consistent in responding to others) had more social interactions with peers than John and Nick. This finding highlights the importance of young children with disabilities learning to engage in turn-taking within the context of social interactions. As shown in this study, the ability of children with disabilities to engage in reciprocal social interactions provides motivation for the children without disabilities to engage socially with them. The increased social interaction increases opportunity for learning. Previous research has demonstrated the importance of providing social skills instruction to young children with a variety of disabilities in inclusive preschools (e.g., D’Allura, 2002; Frea, Craig-Unkefer, Odom, & Johnson, 1999; Kohler, Anthony, Steighner, & Hoyson, 2001).

A second interesting finding of this study was how the children without disabilities tended to mimic the adult style of interaction with the Nick, Laura, and John. The adults interacted with Laura in a more playful manner, often of a nature more appropriate for interactions with infants. Peers were also observed to be more playful with Laura than with Nick and John. However, the peer interactions with Laura were not age-appropriate and did not provide opportunities for Laura to learn more advanced communication or social skills. This finding suggests that adults must model the type of interactions with children with disabilities that are also appropriate for peer-peer interactions. The finding also shows the need for children with severe disabilities to learn to use augmentative and alternative communication (AAC) systems when appropriate and possible. For example, Laura could learn motor responses that meant “yes” and “no.” Her peers could then have interacted with her by asking yes-no questions - a type of interaction more age-appropriate than tickling.

The need for alternative communication systems in inclusive settings is also supported.
by the overall low rates of peer interactions of John and Nick. A simple picture card communication system might have provided them with a method of asking for entry into a play activity in which peers were already engaged. Based on the findings from the peer interviews, children in the preschool in this study would most likely have responded positively to the AAC systems. Adults in the preschool, however, would have had to educate peers about the purpose of the communication system and support the use of such a system by John and Nick.

Conclusions

The philosophy and practice of the preschool in which this study took place has been one of inclusion for over 45 years, creating a culture of positive attitudes and caring behaviors toward meeting the needs of all children. Teachers and paraprofessionals are educated “in-house” to follow the philosophy of providing equal opportunity by meeting individual needs. Further, what adults and peers learned through these practices was reflected in behavior and expressed in words. The children with severe disabilities in this study were full participants in all program activities, but had individualized and alternative expectations for development and learning. This program, therefore, accomplished the defining feature of inclusion as defined by DEC/NAEYC (2009) i.e., it provided access, participation, and supports for Nick, Laura, and John.

A challenge for future research is to determine why some early childhood programs can successfully include children with disabilities, while others are unable to do this. Although this study (and others) provide evidence that preschoolers with and without disabilities can benefit from inclusion, national statistics indicate that few young children with disabilities are educated in inclusive settings (33.1%). What are the factors that contribute to success—Child characteristics? Teacher knowledge? Philosophy of the program? Values in the community? Future research should also explore how age-appropriate peer interactions with children with severe disabilities can be supported in inclusive early childhood settings. Of further interest is how these interactions affect learning of all children in the preschools. This knowledge will expand opportunities for children with severe disabilities to be educated in inclusive settings.

References


Received: 9 October 2010
Initial Acceptance: 22 December 2010
Final Acceptance: 10 April 2011