**Overview**

**Young children** with significant disabilities CAN make developmental and social gains when they are served in inclusive community settings. This paper describes what we learned from our study of the practices implemented to successfully include young children with significant disabilities. We interviewed and observed early intervention (EI), early childhood special education (ECSE), and early childhood education (ECE) providers, and parents.

**Adaptations** are a key element of the practices that lead to the successful inclusion of young children. Adaptation is defined as the process of adjusting or modifying materials, environment, interactions, or teaching methods to support the *individual child*. Adaptation also refers to the adjustment or modification, for example the pencil grip that enables a child to use the pencil.

**Adaptations: From the Research**

Each child deserves the opportunity to learn as much as possible from the experiences, activities, and routines of the inclusive early childhood setting. Adaptation is a factor that influences whether a child takes part in and learns from all aspects of the setting. Research studies cited by McWilliam, Wolery, and Odom, clearly demonstrate the benefits of adaptations for children, including the use of simple non-slip place mats, visual schedules, and Velcro wristbands that enable toy usage (2001). Sullivan and Lewis conducted research which found that infants and toddlers with severe disabilities learned to activate toys and music boxes through pulling, patting, or pushing switches (2000). In another study, preschoolers with multiple disorders and pervasive developmental disorders began to interact with others, acquire social skills and display early literacy skills by using computers as an adaptive communication and interaction device (Hutinger & Johanson, 2000).
Adaptations: Results of the Study

The children in this study had significant disabilities and many adaptations were implemented to increase their success. The study interviews and observations yielded information about the purposes for making adaptations and the practices used to implement them.

Purposes for Making Adaptations

Adaptations were made for three purposes.

- Adaptations to Enable Safe and Independent Function
  One reason that adaptations were made was to assure that children’s basic needs were met. These have been labeled functional adaptations since they relate to children’s most basic needs for health and safety, communication, positioning, and mobility. Functional adaptations increase independence and reduce the need for one-on-one assistance. An occupational therapist said, “A lot of what we do is potty training, putting on hats and coats and gloves. . . . He’ll be expected to be as independent as possible when he gets to the upper grades, and self-esteem-wise he needs to be as independent as possible.”

- Adaptations to Promote Play, Learning, and Accomplish Individual Goals and Outcomes
  Many adaptations were made to help children engage with the learning environment through play activities and more formal teacher-directed learning activities. The most frequent adaptations were the use of hand-over-hand to physically guide or support movement, and verbal prompts to encourage children’s verbal or motor responses. Adults also encouraged peers to help children with hand-over-hand assistance. “Different children will go over and do different things with him, like a peer today who was helping with his paintbrush and talking to him.” Other adaptations included simplifying activities, offering toys with larger handles or wrist straps, and positioning a child with hearing problems near the teacher.

- Adaptations to Promote Socialization
  The development of social skills and friendships is an important part of early learning experiences. Adaptations were implemented to ensure interaction with other children during play, learning activities, and daily routines. Adaptations encouraged membership by positioning child within the circle on the floor with supports rather than outside the circle in the wheelchair. Strategies were implemented to promote self-esteem by providing opportunities, means of communication, and additional time to be leader in the same activities as their peers. Staff involved one of the children in circle time and when his turn came to request an action for a song, staff helped him to choose an action for everyone to do.

Practices in Developing and Implementing Adaptations

Early intervention, early childhood special education, and early childhood education providers, and parents tended to take on particular roles in making adaptations for the children with significant disabilities.

Who: Therapists and Early Childhood Special Education (ECSE) Teachers

<table>
<thead>
<tr>
<th>What Role: Planning and implementing functional adaptations for the child</th>
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<tr>
<td>When: On entrance to the EI or ECSE system; On changes in child’s development, health, or other needs</td>
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<tr>
<td>Why: To get major pieces of equipment for mobility, positioning, and communication in place before the child begins to attend the community setting; To respond to child’s needs to ensure continued development and learning</td>
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<td>How: In response to team decisions; therapists’ observations or annual assessment</td>
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Examples:

**Functional Adaptations**
- A weighted cup with handles for drinking without spills
- Communication cards with photos or drawings of activities like drinking or places like the bathroom
- Bolsters to help with sitting positions and non-slip drawer material to keep child from sliding off of a chair

**Adaptations for Play, Learning, and Accomplishing Goals and Outcomes**
- Adult hand-over-child’s hand to turn page
- Prompts from adults or peers remind child of how to put away toys
- A tray keeps objects like Duplos within reach

**Adaptations for Socialization**
- Provide support and a suggested play activity to a peer who would like to interact with child
- Use placemats with children’s names and arrange them to seat child next to his preferred peers
Adaptations are an essential element of the practices that support young children in inclusive settings. They are made to help children function safely and as independently as possible in their settings, play and learn in typical activities and routines, and socialize with peers and adults. Adaptations are developed and implemented by the therapists and all of the teachers, with the support of the parents.

**Communication** was recognized as essential to developing and implementing adaptations. Though not always successful, everyone tried to communicate their ideas about ways to support children and to resolve problems.

One administrator said, “They’ve developed good relationships and are figuring out how to best communicate with each other. If [the early childhood special education teacher] wants to implement something, how to best bring that up or if there are concerns about things, how to bring that up without [hurting feelings]. They’re figuring out how to best communicate with each other. That’s one of the big keys.”

**Summary**

Adaptations are an essential element of the practices that support young children in inclusive settings. They are made to help children function safely and as independently as possible in their settings, play and learn in typical activities and routines, and socialize with peers and adults. Adaptations are developed and implemented by the therapists and all of the teachers, with the support of the parents.

**Acknowledgments**

We would like to thank each person who participated in this study – parents and children, teachers, assistants, therapists and administrators. The time and knowledge they generously contributed to this project is greatly appreciated.
In 2002-2003, staff at the Indiana Institute on Disability and Community’s Early Childhood Center conducted in-depth qualitative research in six inclusive community settings across Indiana. Our team of researchers wanted to find out what contributed to the successful inclusion of young children with significant disabilities. The study design called for identifying children who were served in community settings. We expected to see children who were full participants in their settings and receiving all services within the classroom environment.

Seven children were identified in settings that included community preschools and child care programs. Data was gathered over a six-month period from the cluster of people associated with each child. More than thirty early intervention (EI) and early childhood special education (ECSE) therapists and teachers, early childhood education (ECE) staff, and parents participated. The data was collected through interviews, observations, and review of children's individual family service plans or individualized education programs. Qualitative study methods were used to analyze the data to discover essential elements that were present across the settings.

Key elements were identified which support children in inclusive settings. While all of the settings had features of each element, some were stronger in one aspect than another. The key elements were a) attitudes, b) parent-provider relationships, c) therapeutic interventions utilized within typical community settings, and d) adaptations to support children in the everyday routines and learning activities provided for all children.

The topics in this Inclusion Research Series address our findings around these key elements.