

USING ADAPTATIONS AS AN INTERVENTION

Several studies report that EI providers do not widely use adaptations in their work with children and families and, when they are used, it is likely to be after the child's second birthday. Before this time, providers seem to focus on teaching children to perform the developmental skills that they are unable to do. When their focus is on creating opportunities for children to learn developmental skills, EI providers are more likely to use hands-on interventions directed to the child. For example, strategies such as hand-over-hand guidance, movement facilitation, modeling, exposure to different sensations, or oral-motor exercises are likely to be selected to teach children to be developmentally competent.

What are Adaptation Interventions?

Adaptation interventions are a type of intervention where therapists and teachers assist in the identification, design, fabrication, and monitoring of non-hands-on interventions that are used by caregivers within the context of typical activities and routines. These interventions include things such as:

- Room arrangement: moving the coffee table closer to the sofa so that a child who is learning to pull to stand can do so independently or keeping the furniture in a child care classroom in the same place so that a child with visual impairment can get around independently.
- Positioning equipment or adjustments to furniture: adapting a commercial highchair by rolling up towels to support a child's trunk for straighter sitting so that arms and hands can be used for self-feeding; using a commercially available infant bath seat so that a child is safer in the tub and can play with toys; a wheelchair, stander, or other equipment designed specially for children with disabilities so that they can be positioned in ways that allow them to participate with other children.
- Toys or materials: using puzzles with knobs with a child who has difficulty grasping, switch-operated battery toys when children are unable to hold or manipulate toys; putting materials like plates and bowls or toys on a piece of rubberized shelf liner to stabilize the objects so that a child can use them.

Adaptation interventions function as a "bridge" or a mediator between the skills that a child can currently perform and the requirements or expectations of an activity. When there is a mismatch between a child's current abilities and the requirements of an activity, adaptation interventions may allow a child to participate fully without any adult assistance beyond what would be expected for a child of the same chronological age. In other words, the adaptations may allow a child to participate without being able to perform the required skills. For example, a toddler without any delays in development participates more easily during mealtimes when sitting in a high chair because the child does not yet have sufficient size or balance skills to sit on a regular chair. However, when a child is unable to sit because of a physical disability, a high chair with positioning adaptations may be essential to successful participation in family mealtimes.


The Adaptation Hierarchy:

Some adaptation interventions may be more intrusive than others. For example, positioning a toddler in an off-the-shelf bath seat (purchased at a local store and available for all children) is less intrusive than a specially-designed bath seat from a company that designs and markets equipment for people with disabilities. In terms of all types of interventions (adaptation, special therapy, adult-directed, etc.), adaptations are the least intrusive because with an adaptation, a child is often able to function without any extra assistance from adults. As a simple example, a child may be able to eat relatively independently with adapted utensils and dishes but without these, would require adult assistance either to be fed or for hand-over-hand instruction.

Specialized teaching or therapy strategies are another type of intervention used to teach children to perform skills naturally or without extensive use of adaptations or devices. These skill-building interventions are traditionally provided via one-on-one interactions between children and adults, either early intervention personnel or children's caregivers. In preschool and child care, children may receive one-on-one interactions with therapists or teachers via a "pull out" model. Or, those therapists or teachers may show the child's caregivers how to teach children using these specialized strategies. Services provided through one-on-one interaction between a child and an adult are generally described as a direct intervention because of their dependence on specially-designed contrived activities and intense adult intervention.

The hierarchy below illustrates a range of interventions from least intrusive (e.g., environment) to most intrusive (e.g., individual adult assistance). Intervening through environmental accommodations, schedule adaptations, or adaptations of activities, materials, or requirements, or having another child provide assistance are examples of types of adaptations. Adaptations avoid adult assistance (the bottom of the chart) and allow children to participate without an adult.

Adaptation Hierarchy: Facilitating Children's Participation and Learning

- Environmental Accommodations
 - Adapt Room Set-Up
 - Adapt/Select Classroom Equipment
 - Equipment/Adaptations for Positioning
 - Adapt Schedule
 - Select or Adapt Activity
 - Adapt Materials
 - Adapt Requirements or Instructions
 - Have Another Child Help --
 - Peer Assistance/Tutoring
 - Cooperative Learning
 - Have an Individual Child Do Something Different
 - Have an Adult Help a Child Do the Activity
 - Have an Individual Child Do Something Outside of the Room (with an Adult)
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What is the Difference Between An Adaptation and Assistive Technology?

Assistive Technology (AT) devices are a type of adaptation. Adaptation interventions include materials frequently labeled as “assistive technology” but all adaptations do not necessarily fit definitions of AT. For example, most people would see that using rubberized shelf liner to stabilize objects would be helpful for some children but might not identify this as either an adaptation intervention or as AT. However, IDEA defines AT devices so broadly that rubberized shelf liner actually meets the IDEA definition of an AT device. Whether a particular material or device is (or is not) defined as AT is not as important as using AT with infants and toddlers to help them participate successfully in routines and activities or, when combined with other types of interventions, to help them learn to perform a new skill independently.

Why are Adaptations Important?

Adaptation interventions, including environmental accommodations (such as ramps) and Assistive Technology (AT), are used to help children participate in typical activities and routines within the everyday settings where they spend time. Adaptations can be used with children with a wide range of developmental concerns ranging from mild delays in development to children with severe or multiple disabilities. Using adaptations may both promote participation and help children with functional skill limitations achieve mobility, communication, play, or self-care skills.

When promoting participation, the focus of intervention shifts from skill-building to include strategies that ensure maximal participation as quickly as possible. Adaptation interventions include use of both low and high tech AT devices that allow children to participate in the absence of being able to perform skills required in the activity or routine. For example, a child may be unable to participate in art activities at the child care center because she is unable to grasp objects such as art materials, brushes, or crayons without adult assistance. The requirement of an adult to help the child hold and manipulate objects may alter the child’s participation by isolating the child from other children, thereby limiting natural opportunities for peer interaction, communication, or other group expectations. Providing the child with adapted brushes, crayons, or other materials and having the child care program choose art activities that do not require high levels of manipulation of objects may allow the child to participate without adult assistance, thereby providing natural opportunities for communication and social interaction.

When activities or routines in which the child needs to participate are not going well, a primary focus in intervention is to get them to go better as soon as possible. A parent who is giving a screaming child a bath because the child is not well positioned cannot wait for the child to learn to sit up so that bath time goes better. Or, a parent who needs to take the child to the park to play because she is taking her other children, needs to have ways for the child to participate successfully as quickly as possible. Adaptation interventions are ideal in this situation because well-designed adaptations can dramatically improve a situation very quickly.

How to Use Adaptations

Many effective adaptations, especially with infants and toddlers, are designed on the basis of creativity. No one discipline has been assigned the responsibility for adaptations and no one discipline is likely to know all possible adaptations that might be used. Many times, caregivers and providers brainstorm together to figure out a way to address a particular issue of a child's participation.

The Adaptation Hierarchy provides a framework for identifying and thinking about adaptations. If used systematically, providers-caregivers start with saying "what can we do to modify the environment to promote the child's participation?" and then work down the chart to think of simple to use adaptation interventions. Many adaptations that are helpful for children with disabilities are useful, also, for typical infants and toddlers and these are often available off-the-shelf in discount and children's stores. An adaptation is a "solution" to a problem. If the child has a problem sitting, for example, in a routine that requires sitting, then a positioning adaptation is the most likely "solution." Similarly, if a child cannot hold onto an object for a reasonable length of time and this prevents the child from participating in, for example, mealtimes or toy play, then modifications of the objects/materials needed in those activities are the most likely solutions.