Peer-Mediated Intervention

An Effective, Inclusive Strategy for All Young Children

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Another active day begins in an early childhood classroom. Preschoolers in the housekeeping center prepare for a tea party. Children in the block area are discussing what types of blocks they need to build a fire station. Another small group of children examines textures of different colored leaves under a magnifying glass. Two 4-year-olds sift sand at the hands-on sensory center. A girl smiles and nods as she shows her friend the letter *K* for *Kara* and repeats its sound. At another table two children set up snack; a boy places cups and a girl puts a napkin next to each. At the computer center a child who is familiar with the software shows friends how to select an activity.

Interactions like those described above occur daily in many preschool programs serving young children. Early childhood settings—public and private preschools, Head Start programs, prekindergarten classrooms, and family child care homes—increasingly serve diverse groups of young children, particularly children with disabilities such as autism, Down syndrome, or visual impairment (Grisham-

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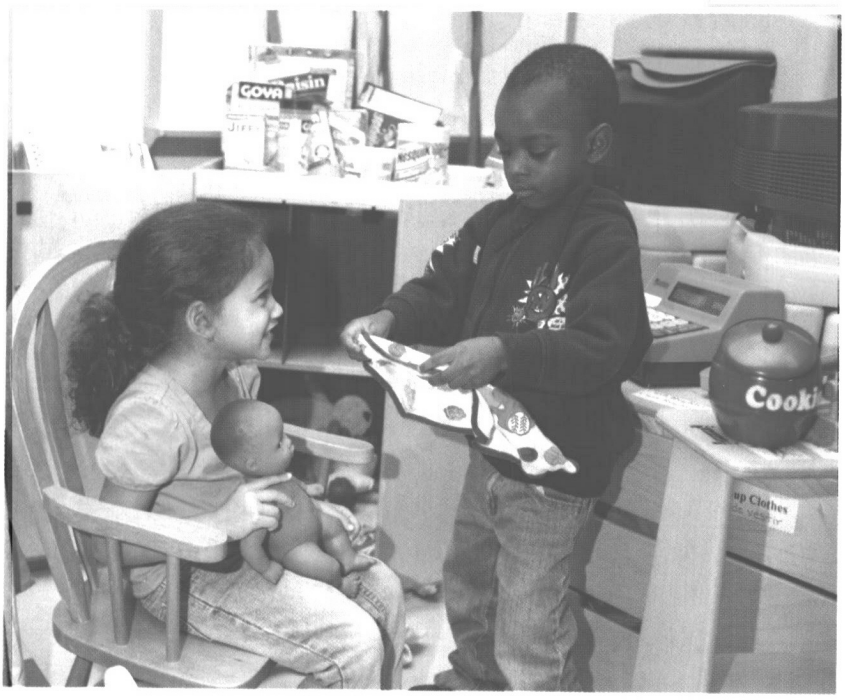
Brown, Hemmeter, & Pretti-Frontczak 2005). Including children with disabilities in early childhood settings, commonly referred to as *inclusive* or *blended programming*, is widely accepted as best practice (Sandall et al. 2005).

Inclusive programs benefit all young children. For example, typically developing children offer peers with disabilities relevant and appropriate models for learning new skills and information (Bricker 2000; Guralnick 2001; Odom 2002). All children can learn to accept and appreciate differences as they interact with each other (Widerstrom 2005). Inclusion is about participating and belonging in a diverse society. Creating, adapting, and modifying learning environments and curriculum to allow *all* children to participate, learn, and develop a sense of belonging is at the heart of early childhood education (NAEYC & NAECS/SDE 2003). The goal of inclusive programming is to build a community that meets the needs of all learners.

Peer-mediated Intervention

Inclusive programs are dynamic and complex environments that require teachers to address several challenges (for example, responding to cultural and linguistic differences and promoting peer-to-peer interactions). In classrooms serving young children with disabilities, early childhood teachers assume new responsibilities to meet individual needs (Fleming et al. 1991; Grisham-Brown et al. 2002). For example, they may need to implement specific instructional strategies and supports that ensure that all children benefit from the naturally occurring learning opportunities (Sandall & Schwartz 2002).



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Peer-mediated intervention ensures individualized and targeted learning opportunities across daily routines and encourages all children to be active and engaged learners.

Advantages of Peer-Mediated Intervention

Children with disabilities

- learn play skills by observing and interacting with children who are typically developing (Guralnick 1990);
- increase assisting, turn taking, and sharing with peers during play (Odom & Watts 1991);
- increase requesting, commenting, and asking for toys and materials during play (Goldstein & Ferrell 1987; Mathur & Rutherford 1991);
- gain independence during daily classroom routines and transitions (Strain 1987);
- increase initiating play, asking to play, and answering friends when spoken to (McHale & Gamble 1986; Egel & Gradel 1988; Kamps et al. 2002).

Children who are typically developing

- increase social and language skills (Goldstein & Wickstrom 1986; Strain, Danko, & Kohler 1995);
- learn to accept and appreciate individual differences among peers (Widerstrom 2005);
- increase self-confidence by being positive role models (Pretti-Frontczak & Bricker 2004);
- build character by providing praise and encouragement to children with disabilities when they are participating in daily play activities (Morrison et al. 2001);
- develop leadership skills by taking greater initiative in planning and leading play activities and helping teachers by supporting children with disabilities in learning or practicing self-help skills (Wolfberg & Schuler 1993; Sandall & Schwartz 2002).

One such strategy, peer-mediated intervention (PMI), is designed to support the development and learning of all children in inclusive learning environments. PMI creates opportunities for peers who are typically developing or who have a particular set of competencies that another child may be working on to take a peer-to-peer instructional role in promoting learning, particularly in the areas of social and communication development.

Peer-mediated intervention can occur anytime during daily preschool activities. For example, one child demonstrates how to cut out a square—saying, "Cut it like this," to a child who can cut paper in half and is ready to learn how to cut out shapes. In another example, two children are threading beads on necklaces. One holds the string while the other threads the beads on the string. Peer-mediated intervention ensures individualized and targeted learning opportunities across daily routines (Robertson et al. 2003) and encourages all children to be active and engaged learners.

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Advantages

Implementing peer-mediated intervention offers several advantages. Specifically, using PMI in inclusive classrooms has the potential to provide multiple learning opportunities and promote experiences for spontaneous interactions between children, even at a very young age. All young children can benefit from the strategy (see "Advantages to Peer-Mediated Intervention").

PMI may involve a peer prompting a desired or targeted behavior from another child (often a child with a disability) by modeling or initiating social interactions. For example, while singing a circle time song, a child can demonstrate how to shake a maraca by saying, "Shake it up and down." In other instances, children can provide help, guidance, support, or care for another child. During story time, for example, a classmate could point to the top of a page as a cue for another child to turn the page. Regardless of how PMI is used, the child learning a new skill is an active classroom participant and part of a learning community.

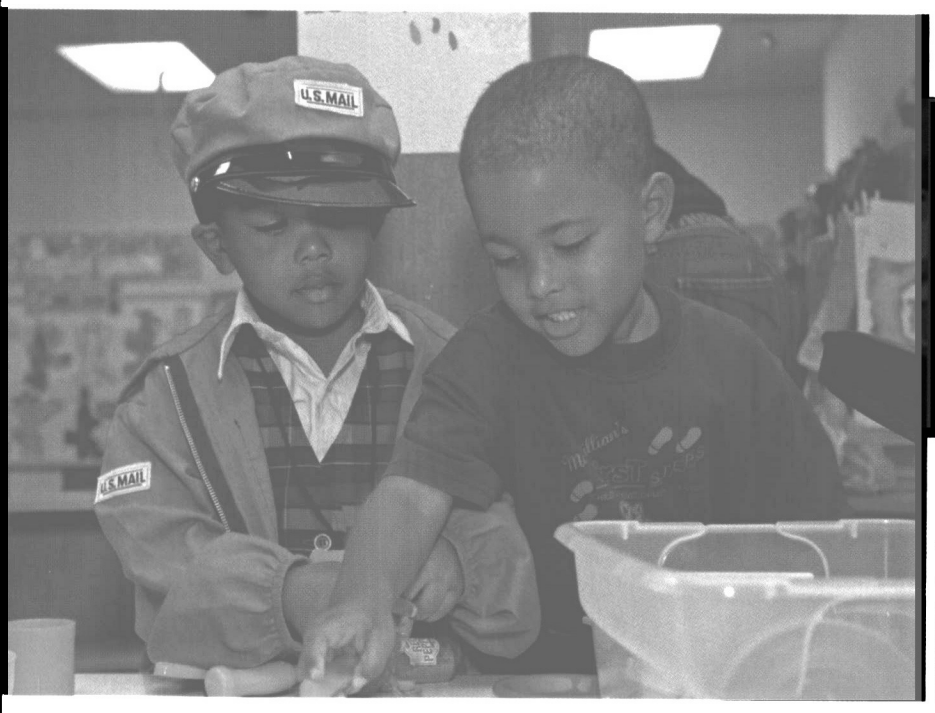
Characteristics

PMI generally consists of four characteristics that create supportive and mutually beneficial relationships. These interventions

- address a comprehensive set of target skills across classroom activities and routines,
- are intense, providing a sufficient number of learning opportunities,
- serve as a practical tool for teachers, and
- increase a child's active involvement during daily activities.

The first characteristic is PMI's *comprehensiveness*—addressing not only the full range of skills that young children with disabilities are expected to perform throughout daily activities but also enhancing the skills of their typically developing peers. For example, classmates can assist other children with counting dinosaurs, matching patterns, and stacking blocks. In addition to modeling specific social behaviors, such as saying or signing "Please" and "Thank you," peers can prompt actions, for example, by asking a child to hold the food for the pet hamster as they change the water. PMI can also promote communication when teachers pair children to do class-helper activities or to share skills with others; one child can model how to select the next song the group will sing or point to the icon picture or the CD for the morning hello song.

The second PMI characteristic is its use to promote the *intensity* of instruction. For children with disabilities to benefit from an instructional approach, the methods must provide multiple and repeated opportunities to practice



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emerging skills (Pretti-Frontcak & Bricker 2004). There is general consensus that intervention must be intensive in order to make an impact on children's development (Dawson & Osterling 1997). To optimize positive outcomes, PMI implementation must take place over an extended period of time and promote a high level of child engagement. For example, two young children with disabilities are playing with a peer. During free play one child may receive 25 peer prompts while the other child only 10. Both of these intensities may be appropriate, based on the teacher's assessment of each child's needs and capabilities.

The third component of PMI is its *practicality.* Peer-mediated intervention can be used in a wide variety of classroom activities, including circle time, dramatic play, transitions, and snack time. For example, during circle time the teacher might ask a child with a disability to choose a song for the class to sing. A peer can assist by pointing to picture cards naming different songs, which are attached to a flannel board. If needed, the peer can help the child select the song for the day. If a child appears hesitant to join in playing restaurant, a peer can suggest a specific activity, such as writing a menu, to encourage play and interaction.

The fourth characteristic of PMI is *active involvement.* For example, when a child has difficulty manipulating small objects (such as Legos, beads, or puzzles), the teacher can pair her with an enthusiastic peer who can hold or steady the materials or encourage the partner to try again. Teachers can foster active participation by giving a child an opportunity to be a leader. For example, the peer can hand the child a toy or material—a drum, for instance—and suggest that he play it. Such an interaction encourages other children to join in with more musical instruments. Active participation is possible in many situations. For instance, a peer could offer a young child with vision impairment simple verbal instructions on block building and guide the child's hands to a particular block.

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Types

Odom and Strain (1984) identified three types of peer-mediated intervention: peer proximity, peer prompting and reinforcement, and peer initiation.

Peer proximity refers to when a child considered typically developing remains close to a child with a disability as they attempt a particular skill or set of tasks. For example, the peer can sit next to the child to demonstrate rolling playdough into balls, ask others for different colors of dough, and label various colors/objects. Opportunities for positive interactions and for new learning experiences occur for both children. Peer proximity can lead to the development of new play skills. For example, a peer shows a child who enjoys dressing dolls other ways to play, such as feeding or bathing the doll or holding a tea party for several dolls.

Peer prompting and reinforcement involves teaching peers to prompt and reinforce the desired response of the child with a disability. As children head for snack, for example, the peer could say, "Remember to wash your hands," model hand-washing, and then comment when the child does one or all of the steps correctly. If the child with a disability is learning to use words or signs to make requests, a peer could hold out a plate of apple slices and when the child asks for one, confirm, "You're right! We are having apples for snack today."

Peer initiation is used to promote social interaction skills. For example, peers may take initiative in planning and carrying out play activities and modeling more elaborate play sequences for children with disabilities (Widerstrom 2005). For instance, the peer may gently take a child by the hand to a play area, such as the blocks. Together the children construct a tower with blocks of various sizes and shapes. The peer can demonstrate how to build a higher tower or suggest new ways to use the blocks. Teaching gestures like holding hands, waving hello/goodbye, or giving a high five are other ways to promote social interactions.

The teacher's supporting role

When using PMI, teachers should consider a number of factors. First, they have to determine which children can serve as peers, often referred to as *peer mediators.* A primary consideration is finding a child who has already mastered or can learn the target skill. Second, teachers should consider the peer's interest in mediating a learning opportunity. It can be difficult and inappropriate to get some young children to participate in activities that may not be of their choosing. Third, teachers need to plan engaging and fun activities for modeling targeted skills.

Teachers should schedule time for teaching the peer mediators how to implement PMI. It is important for teachers to remember that the peers need time and opportunities to develop their own skills, and they should not be called on to carry out PMI too frequently. Appropriate planning can set the stage for building children's self-confidence, leadership, and social-emotional skills. Creating a community sharing board with familiar picture icons encourages social interaction in learning centers among all children.

Lastly, teachers should discourage peer mediators from doing everything for their partner, allowing them instead to develop independence or learn a new skill. Teachers must observe children's interactions to be sure the children meet their target goals.

Conclusion

Extensive research shows that children's peer-mediated intervention can be a useful daily practice in a variety of settings and ways and be integrated in classroom routines. This makes PMI a viable and valuable teaching strategy for early educators. (See "Preparing for Peer-Mediated Intervention in Your Classroom," p. 48.)

An increasing number of programs serve young children with disabilities in a variety of settings, and peer-mediated intervention can help teachers provide multiple learning opportunities and promote spontaneous interactions between peers (Strain, Danko & Kohler 1995). Using PMI as a socialization strategy, teachers can anticipate creating more opportunities for development of new peer friendships, increasing children's self-confidence and building a stronger classroom community. In addition, peer-mediated intervention emphasizes children's individual strengths, interests, and needs.

Preparing for Peer-Mediated Intervention in Preschool Classrooms

1. Identify the needs of a child and select a target skill (such as making requests or comments, or learning to share) in collaboration with families and specialists.
2. Consider children who can model and prompt the targeted skill to serve as peer mediators. Pair partners daily, matching children according to shared or similar interests. Choose a variety of peers. Relying on only one child all the time can lead to boredom and lack of enthusiasm.
3. Explain to the peers what they specifically need to do to help another child. Teach them how to model, assist, and/or prompt the child to practice the target skill. For example, encourage a peer to offer a desired toy, thereby creating an opportunity for the other child to ask for it. In the block corner, a peer could offer running commentary on a partner child's construction of a building—simultaneously modeling how to play with blocks and encouraging dialogue. Another peer may invite a child to work on a puzzle, then together they select the puzzle, share the pieces, and complete the activity. Teachers need to emphasize that peers should give assistance only when the child asks or cannot do a part of a skill or activity alone.
4. Make sure the peer has the necessary supports—such as scripts (written texts), social stories (stories with pictures about topics such as classroom activities or social skills), toys, and other materials. Provide a play script or suggest what the peer could say to introduce an activity to a partner. Peer-mediated interventions require sufficient toys and learning materials to facilitate full participation. For example, if a child has difficulty using and listening to books on tape, connect two pairs of earphones to the tape recorder so both partners can listen together.
5. Identify daily activities and interactions during which the peer can model, assist, and/or prompt the other child to practice the target skill. Encourage the peer and support the child learning the target skill as needed. For example, at the playdough table, ask peers to model patting, pushing, and rolling the dough. Some good examples of skills learned better from peers than from teachers are spreading cheese on a cracker or taking turns during a board game. Dramatic play, sensory activities, block building, circle time, reading books, and daily transitions are all appropriate opportunities for initiating and supporting peer relationships.
6. Reinforce and acknowledge positive behavior in all children. In particular, peers need to know they are valued for their assistance. Be sure to acknowledge their partners and their successes, even when progress may be incremental.
7. Observe and document each child's performance during PMI to acknowledge success and also identify when a child needs more or different kinds of support.

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The advantages of PMI outweigh concerns or questions teachers may face while facilitating the approach. Peer-mediated intervention helps teachers create a more caring, supportive, and nurturing learning environment for all young children.

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