



for Early
Childhood
Education

TIPS FOR TEACHERS



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Learning to Move and Moving to Learn

Integrating movement into the everyday
curriculum to promote learning

A principal walks by the preschool classroom in her elementary school and hears a great uproar. Concerned, she peers in. Every child is crawling around on the floor in a “crabwalk,” talking and laughing. Then the teacher, Mr. Smith, calls out, “Seven!” The children quickly cluster around one of several hula hoops lying around the room. They squeeze together, all trying to place themselves—at least an arm or a leg—into the ring that is marked in the middle with a number seven. “You found it,” Mr. Smith says. “That’s seven. Let’s try another one.” The children begin to crawl once more as another number is called. The principal quietly moves away, satisfied with Mr. Smith’s innovative approach to teaching an important content area.

Teachers, administrators, and parents usually recognize the physical benefits of motor play. What is less obvious is the way that active play promotes learning. In the story above, Mr. Smith is supporting children’s academic success through play. Engaging his class in movement promotes attention, memory, and overall brain development. The activity also teaches an important mathematical ability: recognizing numerals.

Motor play, thinking, and learning

Children’s motor abilities in preschool are related to their intellectual skills when they reach elementary school. Why? One theory is that movement in the early years helps the brain to develop and become better organized. Synapses—the microscopic connections between one brain cell and another—are formed when children spend time in active play. This explains why research has found motor abilities and play to be related to important learning processes, such as attention, memory, self-regulation, and overall academic achievement throughout childhood.



A good example of how learning and moving are connected relates to paying attention. Studies have found that right after active motor play, children are more attentive in the classroom than they are when they have been sitting for a long period of time. This may be because children have been able to expend pent-up energy and are now ready to learn—this is the “getting the wiggles out” theory. Another view is that during motor play, children learn to regulate their behavior. They must control their own body movements and inhibit impulses on the playground, and these skills transfer to the classroom to help them better focus on learning tasks.

Planning active play to support learning

Teachers, parents, and other family members can plan outdoor, active play time to help children focus on learning once they come back inside.

- **Ensure adequate active play:** Adults should make sure that children have an opportunity to spend at least 60 minutes engaged in active play outside every day. If weather does not permit going outside, adults can plan indoor activities such as dancing to music, active games, obstacle courses, and motor challenges, such as, “How many times can you jump before I say stop?” Provide squeeze toys that cause varying sounds and visual reactions (e.g., a car that both honks and lights up).
- **Strategically schedule outdoor time:** Scheduling outdoor play time just prior to group time or shared reading periods can help children to pay attention. While it may take children a few extra minutes to calm down and focus, many teachers find that children can maintain their attention for much longer if they have just been outside.
- **Play self-regulation games involving movement:** Adults can use games such as “Stop and Go,” “Red Light, Green Light” freeze races, or Simon Says to encourage children to learn to control and inhibit movements. These games should be adapted to ensure that all children can participate the entire time, so that children remain active throughout the game—children should not be “eliminated” when they make a mistake.
- **Plan motor challenges:** Adults can challenge children to incorporate movement throughout the day by planning a daily movement theme. An adult might say, “Each time you stand up today, touch your head, shoulders, knees and toes two times before moving to the next activity.” Such activities are great for transitions throughout the day. In addition, planning play experiences that are both intellectually and physically challenging can further support children’s self-regulation skills. For example, adults can pose problems that children must solve with their bodies, such as, “How can we use our bodies to create a bridge that Jordan can go under?”
- **Schedule frequent “movement breaks”:** Encouraging children to get up and move frequently throughout the day provides additional opportunities for children to engage in motor activity, and may help to facilitate transitions between activities. Quick breaks could include having children make two marching or skipping laps of the classroom before sitting down for snack, or use their arms to fly like a bird to line up, or swim like a fish to the circle time area. If children show signs of inattention during lessons or shared reading periods, adults can spontaneously incorporate a quick movement experience. For example, ask, “Can everyone stand up and stretch like the tree in our story?”

Motor play in the curriculum



Mr. Smith in the opening story uses motor play to promote learning in a second way—he directly teaches academic skills through movement. Research has shown that children can more easily acquire academic knowledge when they are moving rather than sitting still. For example, preschool-aged children were found to better learn the names of letters when they were allowed to move around, play with plastic letters, write stories with different writing materials, and talk to their peers. By monitoring children’s brain activity, these researchers learned that more parts of their brains were activated when they were moving, compared to when they just listened to the teacher.

Children also learn new words and form complex sentences when actively playing. This is partly because motor play often includes much communication with peers. Children speak more often and in longer sentences in play. Also, motor activity affords adults opportunities to teach new words and concepts. When an adult states aloud the prepositions that describe children’s actions—“You’re crawling under the climber,” “You climbed all the way up there,” or “You went all the way around”—she is teaching language.

Ideas for integrating movement into academic areas

- **Use movement to reinforce literacy concepts:** Teachers can encourage children to demonstrate aspects of a story during book reading (“Let’s all stomp like the angry bear!”) or ask children to reenact the story to check on listening comprehension by stating, “Show us what the rabbit did next.” A teacher could also ask a volunteer to pretend to be a character and have the other children guess which character he is based on the child’s movements. To reinforce alphabet recognition, teachers can give children long pieces of rope to shape into large letters on the floor, ask children to find the letter that their name starts with on the rug and hop on it five times, or ask children to partner up and use their bodies to make a letter.
- **Use active games to teach math:** Teachers can plan physically active games that get children counting and moving at the same time. Children can count steps as they climb, or play games where they try to stand with three, four, or even five body parts touching the ground. Children can also measure the distance that they’ve jumped (or how far they’ve thrown something), or they can toss a bean bag onto a number and then jump the same number of times as the number their bean bag landed on.

- **Teach new words and concepts through movement:** Teachers can help children to understand new vocabulary by asking children to physically demonstrate the words. Examples include saying, “Walk as if it is a gusty day,” or “Show me how the baker goes out for a stroll.” When teaching a lesson about a specific animal, teachers can spend time discussing how the animal moves and encourage children to try it out. For example, “Let’s lumber to lunch like big old bears.”
- **Include movement in science activities:** When teaching about plants, teachers can use movement and dance to have children act out growing from a curled up seed into a taller and taller plant: “I’m so small, you can’t see me at all, then I grow and grow and grow, until I am tall.” When learning about the transformation of a caterpillar, children can demonstrate what it would be like to crawl like a caterpillar, be confined to a cocoon, and burst out and fly like a butterfly.

Teachers, parents, and caregivers can use movement to promote both young children’s general thinking and learning and to teach academic skills. Simply playing in a park or on the playground will promote attention, self-regulation, and memory. Integrating movement into the curriculum will get children’s brains working more fully and enhance learning outcomes.

Additional Resources

For more information about supporting children’s physical play, including videos with ideas you can try in your own classroom, visit www.easternct.edu/cece.

For **references** for this tip sheet, visit: www.easternct.edu/center-for-early-childhood-education/about-us/publications.html.



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