Home Moves Family Letter Number 7

Dear Family,

Today in class, we practiced doing Figure 8's. Ask me to show you how to do them. This activity helps improve the communication between the two hemispheres of my brain and improves my vision. This makes learning easier for me.

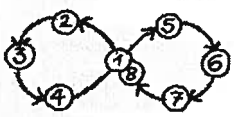
Home Moves

S'cool Moves for Everyone!

- ☑ Figure 8's can be done in many different ways. They improve reading speed and make learning easier overall.
- ☑ Children love making Figure 8's, with chalk on the sidewalk. After they make their Figure 8's they can create drawings out of them. Making Figure 8's with ribbon wands is a blast, too!
- ☑ In the tub, while bathing, spray shaving cream on the tile and let children make Figure 8's. Encourage using the right hand, left hand, and both hands together.
- ☑ Children and grown ups love the calming effect of Figure 8's. Try doing Figure 8's on the back of someone who is upset or stressed out. Be sure to go up the middle of the back and not down. Going up the middle is calming. Going down the middle can be irritating because it goes against the natural energy flow of the body.
- ☑ While playing or dancing with children, place your palms together and do Figure 8's to the music. What a fun time that will be.
- ☑ Figure 8's are a great warm-up for homework and tests.

Figure 8's

Figure 8's are drawn sideways, like the infinity symbol. Be sure to go up the middle like the arrows show. It doesn't matter if you start to the right or to the left. Figure 8's are done slowly, with the eyes looking at the hands. This helps children cross the invisible midline of the body, essential for reading and writing.



Partner 8's are performed with palms pressing against one another. Don't interlock fingers, because this can become a power struggle instead of a cooperative activity.

Academic/Behavior Link

- brain integration
- reading fluency
- vision skills
- learning with ease

Home Moves Family Letter Number 1

Dear Family,

Today in class, we learned about deep pressure. Ask me to show you how to do Dots and Squeezies, a form of deep pressure.

Home Moves

S'cool Moves for Everyone!

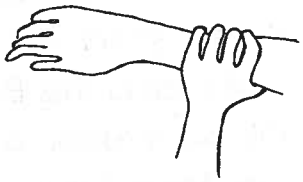
- Dots and Squeezies are done any time children need to calm down. These moves are called "deep pressure" in the field of occupational therapy.
- If baby brother or sister is crying and colicky, Dots and Squeezies calm and help with sleep.
- Dots and Squeezies are done on the hands, arms, legs, and feet.
- Tumbling classes are filled with activities that provide children with deep pressure, such as pushing up from mats, curling into tight spaces, performing cartwheels, and doing handstands. All these activities increase joint pressure and body awareness–the ultimate goals of deep pressure.

- Moms, dads, grandmas, and grandpas enjoy Dots and Squeezies, too. Not too sure about the handstands, tho'!
- Placing babies on their tummies during awake times creates a balanced sensory system. Babies will cry sometimes because tummy time is hard work! Baby will love for you to get down on the floor and play. Babies love playing with appropriate toys while lying on their tummies. Belly time play is how babies receive "deep pressure" naturally.

Dots & Squeezies

Gently but firmly press your thumb into the palm of the opposite hand. Do not press into the fingers, just all around the palm. Dots can be done on the feet also.

Gently but firmly squeeze up the arms and legs. Squeezies feel good and shouldn't hurt in any way. When your child needs additional calming, firm pressure with the palms of the hands to the shoulders usually has an immediate quieting effect.



Academic/Behavior Link

- calming
- self-regulating
- focus control
- writing legibility
- body awareness

Brain Games

by Deborah A. Stevens-Smith

Physical educators have known for decades that movement can greatly impact a child's ability to learn. What has been missing is the research to support this belief. During the last 10 years, however, there has been an increase in brain research that provides a link connecting movement with the enhancement of learning (King, 1999; NASPE, 2002; Hillman, Castelli, & Buck, 2005).

Support for increased movement and physical activity has come from pediatricians, kinesiologists, and neuroscientists. Hannaford (1995) and Jenson (2000) found evidence in brain scans that shows children learn best when they are moving. Other studies show that physical fitness and physical activity each have an effect on cognition and academic performance (Sibley & Etnier, 2003; Dwyer, Sallis, Blizzard, Lazarus, & Dean, 2001; Etnier et al., 1997). Movement stimulates the neurons and electrical wiring that facilitate a child's ability to take in information and learn. Part of this important link was established when researchers traced a pathway from the cerebellum to parts of the brain involved in memory, attention, and spatial perception (Jenson, 2000). Researchers found that the part of the brain that processes movement is the same part of the brain that processes learning.

Dennison and Dennison (1994) described brain functioning in terms of three dimensions: (1) laterality—the ability to coordinate the left and right side of the brain, which is fundamental to a child's ability to read, write, listen, or speak; (2) centering—the ability to coordinate the top and bottom areas of the brain, which is related to feelings and the expression of emotions, clear responses, and organization; and (3) focus—the ability to coordinate the back and front areas of the brain. Focus affects comprehension, which includes the ability to blend details so that children have meaning and the ability to understand new information in terms of previous experience.

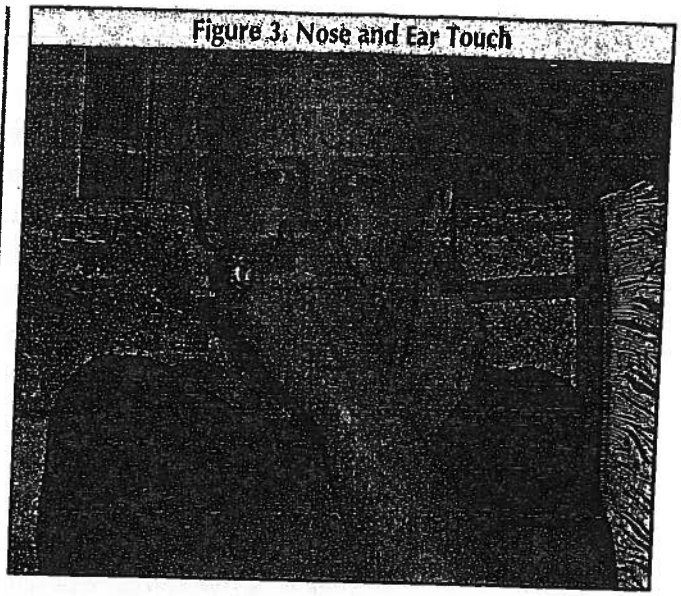
The eyes play a very important role in the development of the brain dimensions. How the eyes perceive the information that is processed by the brain is fundamental to how the brain uses the information. Research shows that students who work to strengthen eye muscles demonstrate more efficient eye teaming. Eye teaming is a process whereby the child is able to coordinate his or her eye movements together as a team, which enhances tracking, focus, and concentration during visual tasks (Albalos & Dennison, 1995). People without the ability to focus are often labeled with attention disorders and an inability to comprehend. Normal brain function requires efficient communication between the many functional centers located throughout the brain. Learning disabilities occur when information does not flow freely between these centers of the brain.

Physical educators and classroom teachers can use brain games to aid children in developing the neural connections that assist in learning. The neurons in a child's brain make many connections as they grow toward adulthood and absorb the environment in which they live. A study by Rhodes and Courneya (2003) found that exercise activity increases neuronal growth, which positively correlates with improved learning. Children who are exposed to an environment that is rich with various activities and learning opportunities at a young age can experience greater stimulation and a greater number of interconnections in the brain. The process of establishing these interconnections is greatest between the ages of 2 and 11. As a child approaches puberty, connections that the brain finds useful become permanent, while those that are not useful are eliminated. All neural stimulation takes place in response to movement (Hannaford, 1995). One way to enhance learning is to create more of these synaptic connections in the brain. The more connections one has, the better and faster he or she becomes at using the information, solving problems, and thinking.

Another important aspect of learning involves crossing the midline of the body, which is called bihemispheric lateralization. The midline divides the body and the brain into two equal halves. Each hemisphere of the brain is responsible for multiple functions, which control the opposite side

Figure 2. Star and Octopus

Figure 3. Nose and Ear Touch



How the brain works from front to back: (focus)

(1) Pencil Top. Choose a partner and hold a pencil between yourself and your partner. Move the pencil toward your partner's nose at eye level. Your partner needs to focus on the end of the pencil, as you begin to slowly move the pencil toward your partner's face until it is almost touching his or her nose. Slowly move the pencil backwards. Watch to see the response of the eyes as the pencil moves closer to the face.

(2) Star and Octopus: See figure 2. Hold one hand out in front of you so that you can look through your fingers at the wall. Look at the palm of the extended hand and pretend that there is a starfish in the palm of that hand. When the teacher says "octopus," look through your fingers at the wall beyond the hand. Wait a few seconds and then look at the starfish again. In both of these exercises you can quickly feel the pull on the eye muscles that results. Focusing on the star and the pencil top is the same focus that is necessary to focus on letters and words on a page. Teachers can begin to understand the strain that occurs when a child is asked to look at a paper on his or her desk and then up at the board. Eyestrain is very prevalent if children are required to switch views for an extended period of time.

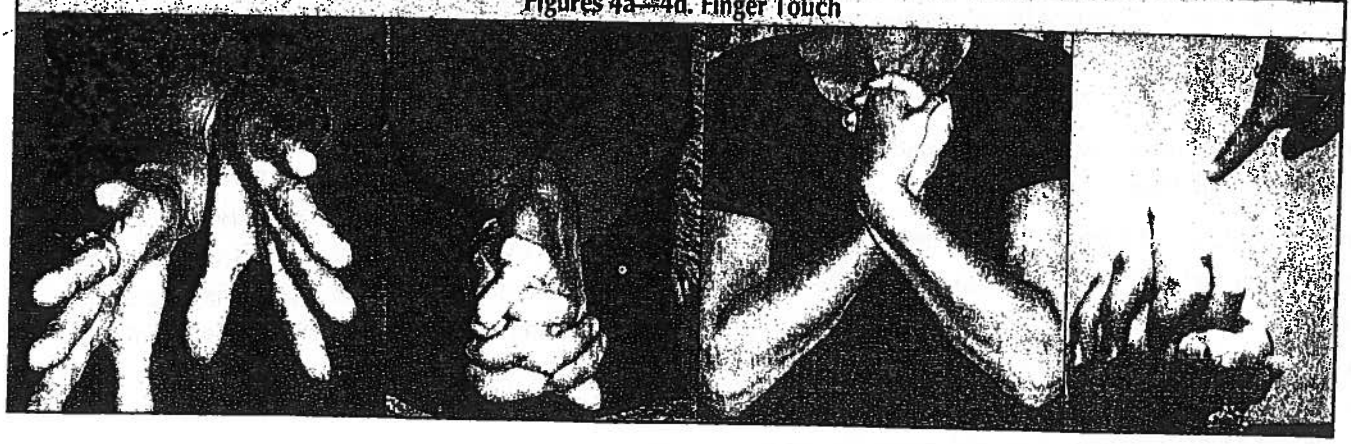
Additional movement activities. "Pencil Top" and "Star and Octopus" can be used when students are working on eye-hand coordination or eye strengthening activities (can also use a small ball or manipulative, like the end of a wand or bat).

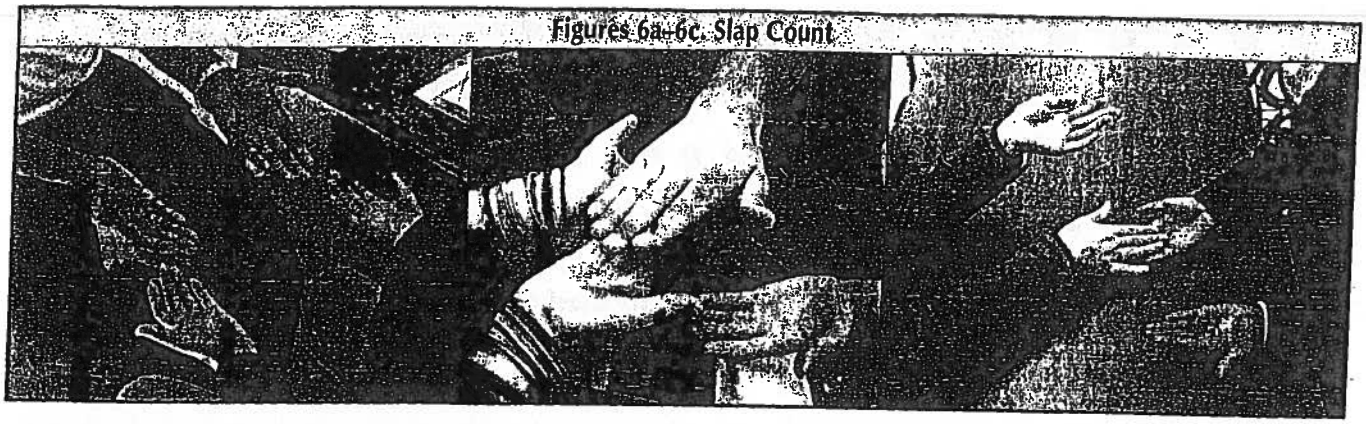
Cross Lateralization Activities: (bihemispheric lateralization)

(1) Nose and Ear Touch (Promislow, 1998): See figure 3. Hold your nose, reach over or under with your other arm, and grab your ear. Switch. This activity is difficult because the students are required to cross the midline of the body. Students will learn that with a little practice they can do the switch without any difficulty. Once the neural pathways are developed, the brain can process across both sides.

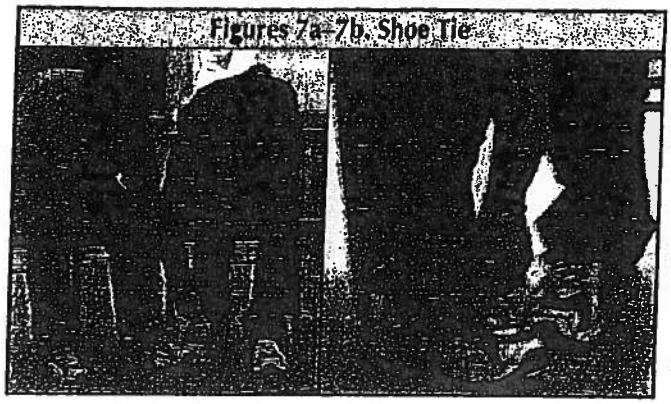
(2) Finger Touch (Blaydes, 2000): See figures 4a-4d. Get a partner. To get into the proper hand position for this

Figures 4a–4d. Finger Touch





Figures 6a–6c. Slap Count



Figures 7a–7b. Shoe Tie

start a lesson, aerobic or fitness routines, rhythmic activities, and integrated spelling and math lessons.

Conclusion

Movement experiences help children connect learning with academic concepts. Brain games can be used to help children understand how the brain works and to enhance the development of neural connections across the brain. Current brain research continues to support the importance and impact that movement activities can have on developing learning skills. Jeannerod (1997) emphasizes the importance of using movement to enhance learning when he states that "...intelligence is not merely a mental phenomenon" and that "the mind cannot be educated without the participation of the body."

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