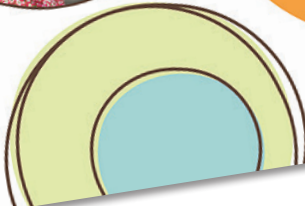


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Preparing Children

for Success in School and Life

20 WAYS TO INCREASE
YOUR CHILD'S BRAIN POWER



Foreword by
Eric Jensen

Thank you

FOR YOUR
INTEREST IN
CORWIN

Please enjoy this complimentary excerpt from
Preparing Children for Success in School and Life.

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CORWIN



Strengthen Your Child's Kinesthetic Mode of Learning

Tell me, I forget!

Show me, I remember!

Involve me, I understand!

—Old Chinese Proverb

WHAT DOES THAT MEAN?

I have very good news! Mostly anything you learned while you were physically involved or moving is more likely to end up in long-term memory. Even the Chinese knew this fact thousands of years ago; thus, the proverb above. This memory system in the brain can also be referred to as procedural or muscle memory. Why do you think people seldom forget how to ride a bike, how to type, how to play the piano, or how to drive a car with a standard transmission even though they have driven an automatic for years? I was teaching one of my classes when a participant related

this story. Her mother has dementia and no longer recognizes her children or grandchildren. However, her mother is a pianist and still remembers how to play any selection she ever once played. That is the power of procedural memory, one of the strongest memory systems in the brain!

Here's another example. Did you see 2009 United States National Spelling Bee champion Kavya Shivashankar? She pretended to write each word on her hand before she spelled it for the judges. Not only did imaginary writing help to put the words in her procedural memory, but she was able to visualize the words as well. In the movie *Akela and the Bee*, Akela's ability to spell was enhanced by the procedural memory created as she jumped rope. Why do you think people love to sing the song "YMCA"? They get to do the movements that go along with the lyrics and it's tons of fun. When content is coupled with movement, not only does long-term memory improve, but learning also becomes engaging!

Seven action research projects were conducted, and all of them related that kinesthetic activities, such as movement, have the following advantages: (1) increase the brain's level of motivation; (2) create a positive state of learning; (3) raise test scores; (4) prepare the body and brain to learn; (5) increase the level of children's attention, engagement, and participation; and (6) assist children in more easily retaining and recalling information (Lengel & Kuczala, 2010). In fact, the person who is the most actively engaged in the learning is the one growing the most brain cells. Other researchers believe that real learning does not take place without movement since movement provides opportunity for the cerebellum to practice making the connections it will need for higher-level thinking (Hannaford, 2005).

Two brain-compatible strategies based on the body's ability to move are *role play* and the strategy of *movement* itself.

Role Play

When students act out or dramatize what they are learning, they are using role play. Role plays in the real world are used in many

Role play enhances enthusiasm, helps the brain recall information, and stores information in the body as well as the brain (E. Jensen, 2007).

professional fields, such as counseling or psychiatry. A friend of mine related that on one job interview with a major company, he had to role play how he would deal with an

irate customer. The person conducting the interview pretended that she was going to take her business away and he had to convince her to stay. He did it and, as a result, got the job! Have your children act out the steps in a math word problem or the definition of a vocabulary word. Have them make change or take measurements in math, which are additional role plays used to reinforce learning (Sprenger, 2007a).

Movement

I was teaching in Wiley, Texas, years ago when, during a discussion on procedural memory, a football coach experienced a revelation. He had always wondered why the very football players who were having difficulty retaining their content in class had no difficulty remembering every play on the field. He realized that in class, those students were sitting still watching the teacher do all the work, while at football practice, they were actively engaged in the exercises and the plays being taught. In fact, one research study found that when students participated in aerobic exercise vigorous enough to raise the heart rate at least three times per week, their performance on classroom assignments actually improved (Rodriguez, 2007).

The brain and body are made for movement. We are designed to stand, sit, stoop, squat, dance, hop, skip, and jump. Yet in many classrooms, students are made to sit for long periods of time devoid of activity, and then teachers wonder why some of those students are up and out of their seats at inappropriate times. Movement not only helps with procedural memory, but it assists with reading, gets more glucose and blood to the brain, changes the mood of the brain, and provides tons of fun during learning (Sprenger, 2007b). The book *Brain Gym* by Paul and Gail Dennison (1992) contains numerous physical activities that enable the child to cross the midline of the body. Research has shown that this technique increases memory since when the midline of the body is crossed, the left and right hemispheres work together better than ever. Get your children up and moving when doing homework and watch their memory for content improve. Learning with boys especially is most productive when a great deal of *doing* and

The only known cognitive activity that uses 100% of the brain is probably physical performance (Jensen, 2008).

competition are involved rather than just listening and observing (Nagel, 2006). Not only will test scores and grades improve for all students, but homework time can also be more fun than drudgery.

HOW CAN I MAKE IT HAPPEN?

○ Use the book *A, My Name Is Alice* by Jane Bayer (1984) to teach beginning consonant sounds in words. The illustrations in the book are also wonderful. Read the story aloud to your children and notice the language pattern. For example, the second verse is:

B, My name is Barbara.

And my husband's name is Bob.

We come from Brazil.

And we sell balloons.

Barbara is a BEAR.

Bob is a BABOON.

Once they understand the pattern, have your children make up rhymes using the beginning sounds of their own names. I even created the following rhyme from my name:

M, My name is Marcia.

And my husband's name is Marvin.

We come from Maryland.

And we sell macaroni.

Marcia is a mackerel.

Marvin is a Maltese.

The book enlarges vocabulary by exposing children to animals that they may not already know. It is also a lot of fun to go outside and have your children jump rope to the rhyming pattern in the book (Tate, 2010).

○ Put some movement into homework practice. For example, to help your children distinguish between common and proper

nouns, have them stand if you read a proper noun (such as *Wal-Mart*, *Mrs. Williams*, or *Florida*) and sit down if you read a common noun (such as *door*, *chair*, or *pencil*).

- Have students jump rope or clap while skip-counting during math homework. Have them count by 2s, 3s, 5s, 10s, or 20s as they jump or clap.

- When helping your children review vocabulary words in any content area, have them get up and act out, or role play, the word. Obviously, verbs would work better with role play, but many other parts of speech can be acted out as well. For example, to show you that they know the definition of the word *petrified*, your child could look extremely scared.

- Have your children role play, or act out, each step in an appropriate multistep mathematics word problem.

- Take abstract concepts taught in school and make them more concrete by having your children act them out in the real world. For example, when my daughter Jennifer was having a difficult time remembering the quantities of measurement for cups, pints, quarts, and gallons, I took her into the kitchen and had her actually pour water from one size container to another. All of a sudden, the concept made sense and she made an *A* on the test several days later.

- Teach students to use their bodies to *body-spell* vocabulary words. They will make a good grade on every spelling test and their spelling should improve when writing as well. To *body-spell*, either write the word on a piece of paper as a visual or have them visualize the word, or see it in their mind. Have them move their bodies according to the placement of the letters in the word. For example, let's *body-spell* the word *play*. The lowercase *p* in *play* falls below the line, so to *body-spell* it, your child should bend toward the floor from the waist with the arms extended as if to touch the toes. The *l* in *play* extends above the line, so to *body-spell* it, have your child put both arms up and reach for the sky. The *a* in *play* falls on the line, so your child should extend both arms out to the sides. Finally, the *y* in *play* falls below the line (just like the *p*), so have your child position the arms once again to touch the toes. Now put it all together and have him or her *body-spell* the entire word *play*. Have them say each letter of the word as they *spell* it. Once your children know the technique,

they can spell any word, including *photosynthesis*. Have them spell the word faster and faster. What they don't realize is that the spellings are being placed in one of their strongest memory systems, and their spelling grades should improve (Tate, 2010).

- When reviewing vocabulary words with your children, play the game of Charades. Write the words to be reviewed on separate index cards. Have each child select a card at random and then act out, or role play, the definition. Your child cannot speak but can only use gestures to get you to say the word. Once the word is guessed, it becomes your turn to act out the next word while your child guesses. Continue until all the words have been reviewed several times. Repetition is good for the brain!

- Have your children dramatize part of a story that you have previously read to them or that they have read themselves. If the plot calls for more than one character, have family members help in the role play.

- It is crucial that stimuli be changed for students because the amount of time a student can focus is equal to the age of the student in minutes (DeFina, 2003). Therefore, when your children are doing homework that takes a great deal of time, allow them to take stretch breaks. You can even put on slow- or fast-paced music and lead them in a series of stretches or exercises periodically between study sessions.

ACTION PLAN

What will I commit to do to strengthen my child(ren)'s kinesthetic mode of learning?

What am I already doing that I should continue to do?

1. _____

_____.
2. _____

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3. _____

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4. _____

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What new habits will I commit to developing?

1. _____

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2. _____

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3. _____

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4. _____

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