

# WAKE UP YOUR BRAIN!

## Sources

1. Jean Blaydes-Action Based Learning, Richardson TX. Jeanblaydes.com
2. Smart Moves-Why Learning is Not All in Your Head by Carla Hannaford. PH.D.
3. Multiple Intelligences by Howard Gardner
4. Movina with the Brain in Mind by Eric Jensen

Brain research confirms that physical activity-moving, stretching, walking -can actually enhance the learning process.(4)

The hippocampus of the brain organizes, sorts, and processes the incoming information before routing it to various areas of the cortex for long term memory. (4)

Overloading this structure results in no new learning; Movement gives learners a break. Movement brings more oxygen to key brain areas, the eyes relax, which prevents eye strain, and the body gets a break from musculoskeletal tensions. (4)

Gross motor repetitive movements produce dopamine-a natural, neurotransmitter producing good feelings. Students learn better when they feel better. (4)

New research is showing that the brain continues to generate new brain cells throughout life through certain types of physical activity. (1)

Crossing the midline wakes up and organizes the brain for reading, writing, and math.(1)

The effects of exercise and movement last 30-60 minutes depending on the child. The best time to teach is 30-60 minutes after P.E. (1)

87% of children are natural kinesthetic learners. (Henslo, Sweden)(1)

Stress: shallow breathing = less oxygen = eyes trouble focusing = vision decreases by 30%. (2)

Cross lateralization-improves reading mechanics, benefits symbol recognition for decoding language, increases nerve connections (3)

The brain learns through patterns. Specific patterns force blood flow into both sides of the brain to activate the brain for learning. (3)

"Cross lateral movements, like a baby's crawling, activate both hemispheres of the brain in a balanced way. These activities work both sides of the body evenly and involve coordinated movements of eyes, ears, hands and feet, therefore the corpus callosum (the brain structure connecting the left and right sides of the brain) orchestrating these processes between the two hemispheres becomes more fully developed. Because both hemispheres are activated, cognitive function is heightened and the ease of learning increases". (2)

Teaching time tables by putting the facts to rhythm (rap) combines the logical (left) side of the brain (the numbers and beat) with the Gestalt (right) side of the brain (rhythm and image) providing easier learning. (2)

The brain makes up only one fiftieth of the body's weight and yet it uses one fifth of the body's oxygen. The first artery out of the heart carrying oxygen to the brain is the carotid artery. It takes a physically fit body to supply the massive oxygen needs of the brain. Movement is not only essential for nerve net development and thought, but also for adequate heart and lung development to support brain function. (2)