Brain Gym

What is Brain Gym?

Brain Gym is a series of quick, fun and energising activities. These activities are effective in preparing any learner for specific thinking and co-ordination skills. Sometimes Brain Gym activities are taught in the context of action balances so that they become easy, automatic and personal. Brain Gym and balances are part of a comprehensive personal development program called Educational Kinesiology (Edu-K). Edu-K brings movement and learning together. Edu-K allows us to challenge any learning block and move forward toward any appropriate goal.

Where Does It Come From?

Paul E. Dennison Ph.D. is a professional educator and innovator. A pioneer in the field of applied brain research, he is the author of the system known as Edu-Kinesthetics. His discoveries are based upon an understanding of the interdependence of physical development, language acquisition and scholastic achievement. This paradigm grew out of his background in curriculum development and experimental psychology at the University of Southern California where he was granted a Doctorate in Education for his research in beginning reading achievement and its relationship to brain development. For 19 years Dr. Dennison directed the Valley Remedial Group Learning Centres, helping children and adults turn their difficulties into successes. He is the author of seven books and manuals, including “Whole Brain Learning for the Whole Person.”

If Integration Is Natural, Why Do We Need Brain Gym?

Infants are natural learners. They are flexible and relaxed in their surroundings and know instinctively how to learn, taking in tremendous amounts of information and transforming it into action in a remarkably short period of time. If the infant is free to explore, see and make sounds, learning occurs to the extent that the child receives the love and feedback which reward its efforts. The infant's brain is in an open and receptive state of learning. From this gestalt (whole to parts) context, discriminations can be made, modified and internalised.

When learning is acquired under stress, the lateralised brain recalls only the one-sided (low gear) aspects of that learning. When this situation is repeated and reinforced, the learning is anchored to stress, and the 'teachable moment" for integration is lost. Brain Gym movements re-establish the natural learning pattern and return automatic, integrated movement to a 'high gear" state.

Why Children Switch Off

The human being is uniquely designed to be either bilaterally integrated (two-sided) or homolaterally specialised (one-sided). Our species has evolved to be two-sided for most movement skills. Our two-sidedness (for vision, hearing, hand-eye coordination and whole-body movement) allows us to compensate with one side when the other side is lost or injured. If we rely too much on
one side alone, instead of two sides together, we place unnecessary and stressful demands upon our whole system. We call this the 'switched-off' state. One of the most common reasons that children switch-off is excessive involvement in two-

dimensional activities (those that involve a flat surface, like TV, video games, reading). If these activities occur before the child has developed the visual skills necessary to shift back to the three-dimensional vision of everyday living, or if they, lull him into ignoring his, depth perception skills, chronic stress may result. Even under such stress learning continues. Once this switched-off pattern is learned, it becomes difficult to 'unlearn.' The child becomes stuck in a one-sided response.

Physical or emotional trauma, lack of water or nourishing foods and excessive exposure to environmental pollutants are among other causes of switching-off. Excessive sitting, which interferes with the natural use of back and leg muscles, is another modern challenge to integration. Both activity and relaxation are natural states for muscles. When we cannot access either activity or relaxation, stress results.

Brain Gym activities can help us to switch back on the muscles and movement reflexes that make learning easy.

Noticing High and Low Gear States

In order to approach the natural learning state of the infant, adults must anchor learning to both the **high gear** (learned) and **low gear** (not yet, learned) states. The ability to move freely from one state to the other promotes integrated learning. In Brain Gym, we anchor learning to high gear by providing familiar structures and movement. We anchor to low gear through noticing, goal setting, and pre-activities that emphasise new possibilities.

When we are assimilating information by comparison and association, we are relating each new experience to what we already know. We are cruising comfortably in familiar territory. We feel certain and sure of ourselves. This is the **high gear** state. If we only experience this state, however, we would be capable of conditioned reflex only, unable to discriminate or make new distinctions.

When we anchor an activity to the **high gear** state, we make it automatic, freeing our conscious attention for focus on the details of new learning. **High gear** is in balance only if we can still access the **low gear** to stop to think when we choose. The **high gear** of whole brain learning must be an automatic strategy for ease and speed of thought and movement processes.

We are in **low gear** whenever we must stop to think in unfamiliar, foreign territory. The **low gear** state is necessary in order to make discriminations and restore order to the system. If we were to anchor only to this state, we would be forced to make too many choices at once without a familiar frame of reference in which to place the new learning. **Low gear** is in balance only when we can rely on the ease and efficiency of our **high gear,** automatic, whole brain responses. The **low gear** must be available, yet not an automatic strategy; otherwise, we cannot integrate new learning with prior experience.

Stress occurs when the nervous system loses its flexibility; we experience one state all of the time and are unable to shift from **high gear** to **low gear** to **high gear.** Being able to move freely **or** automatically from one state to the other is the very key to integrated learning.

More information: http://www.braingym.org.uk/

Recommended reading: “Smart Moves” by Carla Hannaford Ph.D.