



Education in Motion

A Practical Guide to Whole-Brain Integration for Everyone

What Is Brain Gym®?

Brain Gym is a program that enables students of all ages to practice and master the skills required to learn. The program uses a simple teaching format that encourages self-directed learning. It includes stress-free language of learning and integrated movements. All learners can successfully apply the integrating Brain Gym movements, no matter what their learning style or potential.

Brain Gym is a part of the Educational Kinesiology (Edu-K) system. Educational Kinesiology is based on the idea that all learning occurs through movement, and that we can facilitate students' realization of their learning potential by providing them with movements that prepare them to be active learners. The learners' natural curiosity takes care of the rest, attracting them to experiences where they can apply the new learning.

The Brain Gym program is unique in its approach to the physical components of learning. According to Dennison and Dennison¹⁻⁴, movement is our first teacher. Before we learn language, we explore our environment through touch, sound, eye contact we give and receive energy through movement. The newborn coos and gurgles, exploring the world again and again with eyes, ears, hands and feet. The infant traces the outline of mother's or father's forehead, nose, lips like an artist, sculpting them forever into the recesses of his kinesthetic sense. The child imitates surrounding sounds, playing with the full, satisfying feeling of expressing the self with breath, tongue and voice. Such early movements plant the seeds of enjoyment for a full sense of self and a basic understanding of the world. We build on these primary movements later when we move our eyes to read, turn our heads to listen, or engage our whole bodies in any physical activity. When healthy movement is inhibited by physical, mental or emotional constraints, we learn incorrectly that such movement is not safe. We may suppress that desire to reach out and explore the very thing that allows us to experience the joy of lifelong growth and learning. Learning compensations result from the inability to move through the stress and uncertainty of any new learning. All of us are learning-blocked to the extent to which we have learned not to move. Such compensatory learning strategies can be released through simple, developmentally specific body movements, such as those used in Brain Gym.

What Is Balance?

The Dennisons¹⁻⁴ have stated that we balance ourselves as we walk by shifting our weight from the left foot to the right; we balance our chemistry by such timing as inhalation and exhalation, eating and elimination. We balance activity with relaxation, wakefulness with sleep. Balance is the place of counterpoise between two dynamics. Since the underlying principle for balance is movement, the first sensory organs to develop fully are the balancing mechanisms in the inner ear.

Brain Gym activities use balance “to ready the system for learning”¹.

Human postural balance depends upon movement for its stability. Such equilibrium requires the connection of left-and-right, upper-and-lower, and back-and-front movements. It requires muscles to engage equally in contraction and expansion. Stability is the foundation for flexibility; flexibility reinforces stability.

A balance achieved by whole-brain integration is necessary for learning. Intelligence requires the ability to move easily between specialization and generalization. Human motivation is free from stress only when it integrates individual needs with the needs of the community. Habituated response and conscious choice must both be available for effective learning to occur.

A great deal of energy is required to assimilate information that is perceived to be new. If learning is stressful in any way, information is perceived as unfamiliar and the system reacts rather than reasons. In this situation, only a small part of the brain functions, thereby decreasing the learning potential.

Educators have tried to remedy failure in our schools by devising programs to motivate, entice, reinforce, drill, and "stamp in" learning. These programs are only partially successful; some children do well and others do not. Through the research conducted in Edu-K¹⁻⁴, we have seen that these approaches cause some children to try too hard. Thus the brain's integration mechanism, indispensable for complete learning, is "switched off".

New learning happens most easily when it is in some way related to the familiar. Brain Gym activities allow for the integration of the new and unfamiliar (the abstract) with the known, the familiar (the concrete kinesthetic). Brain Gym is physiologically designed to activate this balance between all parts of the brain, with specific emphasis on the frontal lobes and on integration between the left and right hemispheres.

| Left Hemisphere (parts to whole) | Integrated Function | Right Hemisphere (whole to parts) |
|-------------------------------------|---------------------|--------------------------------------|
| alphabet, words, syntax | written language | shape, symbol, metaphor |
| numbers | math | mass, quantity, spatial relationship |
| logic, analysis, sequences | reasoning | whole concept, intuition |
| planning, timing, technique | sports and dance | form, movement, spatial awareness |
| detail, perspective, use of medium | art | shape, image, emotion |
| pitch, melody, pattern of notes | music | tone, harmony, rhythm |

Creativity: A Whole-Brain, Integrated Function

Brain Gym activities stimulate both hemispheres of the neocortex for thought and ideas, the limbic system for motivation and memory, and the brain stem for the action required to follow through and express the new learning. With Brain Gym, learning becomes easy, free of stress, and enlivened with natural curiosity and the drive to learn.

Brain Gym is a self-directed program, and as such, it teaches students techniques of learning that are easily applied to any situation. It also validates the learners' natural abilities, without judging some abilities to be better than others, thus emphasizing support and cooperation rather than competition.

How Did Brain Gym Get Started?

Brain Gym was developed in the 1970s by Dr. Paul Dennison¹⁻⁴ in his Valley Remedial Group Learning Center in California, where for nineteen years he helped children and adults turn their difficulties into successful growth. Dr. Dennison has been an educator all of his professional life. His discoveries are based on an understanding of the interdependence of physical development, language acquisition, and academic achievement. Brain Gym grew out of his background in curriculum development and experimental psychology at the University of Southern California, where he was awarded his Ph.D. for his research in beginning-reading achievement and its relationship to covert speech skills.

For more than fifty years, pioneers in developmental optometry and sensorimotor training had provided statistical research relating the effects of movement on learning. Dr. Dennison used this research in his work with those having specific language disabilities. He later broadened the information to develop simple, task-specific movements that benefit every learner.

Brain Gym Is Used Throughout the World

The Educational Kinesiology books have been translated into 50 languages and are being used throughout the world. The Brain Gym movements have been introduced in homes, businesses and places of learning in more than 80 countries on all seven continents. The Brain Gym program is used in many educational systems, including schools dedicated to addressing specific learning disabilities, such as mental retardation, cerebral palsy, special education, emotional handicaps and fetal alcohol syndrome. The program is also used in such varied fields as psychology, medicine, physical therapy, business, sports and the arts.

How to Use Brain Gym and *Education in Motion*:

You can use PACE (positive, active, clear, and energetic) activities at any time. The other exercises are especially useful for specific academic tasks or situations. Students soon learn which Brain Gym movements are most suited to their needs of the moment. Some suggestions follow:

Reading: Brain Buttons, The Cross Crawl, Lazy 8s
Oral Reading: The Energy Yawn, The Cross Crawl, Neck Rolls
Reading Comprehension: The Cross Crawl, The Calf Pump
Speed Reading: Lazy 8s, The Cross Crawl, The Owl, The Calf Pump
Spelling: The Thinking Cap, The Owl
Listening and Speaking: The Thinking Cap, The Cross Crawl, Hook-ups
Math: The Cross Crawl, The Owl, The Calf Pump, Neck Rolls
Penmanship: Lazy 8s, Alphabet 8s, The Double Doodle
Creative Writing: The Calf Pump, The Energy Yawn, The Owl
Taking Tests: Sipping Water, the Cross Crawl, Lazy 8s, Hook-ups, Earth Buttons, Space Buttons
Memorization: The Cross Crawl, The Positive Points, Balance Buttons, Neck Rolls, The Thinking Cap
Sports and Play: The Cross Crawl, Balance Buttons, Space Buttons
Confidence and Self-Esteem: Hook-ups, The Positive Points, Balance Buttons

The movements also significantly increase the body's energy level. Using Brain Gym movements to develop or augment a specific skill allows the learner to enhance positive behavior or performance immediately. Using the program daily will also have long-term life-changing benefits.

Before Beginning:

The Dennisons have stated³ that “No one should ever be required to move in a way that feels unnatural or uncomfortable. Ideally, students will work within their own abilities and be encouraged to do these activities of their own volition. Those who have learned the activities often do them automatically, intuitively knowing when they will benefit from the different exercises. When learners are gently led to Brain Gym, they seem to love it, request it, teach it to their friends, and integrate it into their lives, without any coaching or supervision. The skilled teacher who enjoys movement will convey that motivation without effort”.

▪ Note: It is advisable to consult a licensed medical practitioner before beginning any exercise program.

Benefits of Using Brain Gym:

- activates learning readiness
- increases focus and attention
- improves confidence and self-esteem
- builds critical thinking skills
- enhances communication skills
- promotes stress-free learning and increased motivation
- increases awareness of and respect for one's own intelligence, body and personal space
- includes specific strategies for improving reading
- activates learning readiness for writing, spelling, math, and organizational skills
- greatly enhances creative potential
- reduces discipline problems
- can be done in less than five minutes
- does not require special equipment or space
- adapts well to any curriculum or teaching style
- immediate, long-term, demonstrable results
- highly effective for specific learning difficulties

References:

- ¹ Dennison, P. & Dennison, G., Personalized Whole Brain Integration. Ventura CA: Edu-Kinesthetics, Inc. 1985.
- ² Dennison, P. & Dennison, G., Brain Gym. Ventura CA: Edu-Kinesthetics, Inc. 1986.
- ³ Dennison, P. & Dennison, G., Edu-K for Kids. Ventura CA: Edu-Kinesthetics, Inc. 1987.
- ⁴ Dennison, P. & Dennison, G., Creative Vision. Ventura CA: Edu-Kinesthetics, Inc. 1993.

Education in Motion, a video prepared by educational consultants Carla Hannaford, Ph.D., Cherokee Shaner, B.A., and Sandra Zachary, M.A., and distributed by Zephyr Press, is a sampler of the Brain Gym® program. To order the DVD, contact Edu-Kinesthetics, Inc. (www.braingym.com).

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Carla Hannaford, Ph.D., is a neurophysiologist and international education consultant. She was guest educator with the AHP-Soviet Project, was listed in *Who's Who in American Education*, and was an international faculty member of the Educational Kinesiology Foundation. She is author of Smart Moves: Why Learning Is Not All in Your Head (1995) and Dominance Factor: How Knowing Your Dominant Eye, Ear, Brain, Hand & Foot Can Improve Your Learning (1997).

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Edu-K and Brain Gym:

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Education in Motion DVD:

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This information is made available here at Partners in Excellence 2010, the Kansas Reading Conference, in Junction City, by licensed Brain Gym® Instructor/Consultant, Judy Metcalf. For information on available workshops provided locally or to schedule an in-service for your staff,

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