

BrainDance developed by Anne Green Gilbert

Excerpted from the book Brain-Compatible Dance Education, Anne Green Gilbert

Each Creative Movement class we offer begins with a version of the BrainDance. We sing, rhyme, dance, and connect mind and body as we move through the 8 fundamental movement patterns of development. Below is detailed information about the BrainDance and a few of the rhyming activities.

The BrainDance is composed of eight fundamental movement patterns human beings are programmed to move through from 0 - 12 months that wire the central nervous system.

Breath, Tactile, Head/Tail, Core/Distal, Upper/Lower, Body Side, Cross Lateral, Vestibular

As babies, we did these movements on our tummies on the floor. However, cycling through these patterns standing up has also been found to be beneficial. This "dance" is an excellent full body and brain warm-up for children and adults. By moving through these fundamental patterns, children and adults reorganize their brains. This helps prepare them for learning and helps with appropriate behavior and social skills. All eight patterns should be done each time and in the order outlined above.

How the Patterns Developed

The baby does his or her own BrainDance very naturally in the first twelve months of life if put on a smooth, non-carpeted surface on his or her tummy. Baby's first **breath** starts the wires growing from the brain cells. **Tactile** stimulation begins with the first touch of skin on skin and is essential for promoting appropriate behavior and emotional and social intelligence. In the first two months of life the baby will reach into space in order to connect with her environment and curl back into the womb position, demonstrating the **core-distal** pattern. At two months the baby has better head control and will lift and turn the head in both directions continuing the **head-tail** pattern begun at birth. Discovering the **upper and lower** body halves is next as the baby pushes with the arms and hands and then with feet and knees. Between five and seven months, the baby reaches with **one side of the body**, moving the left half of the body as one unit and then the right half. As the baby crawls on her belly she will develop horizontal eye tracking. Between seven to nine months, baby pushes herself up onto hands and knees and begins a **cross-lateral** reach from the upper body. Vertical eye tracking is part of the growth triggered by creeping on hands and knees. The convergence of horizontal and vertical eye tracking is essential for reading. From one year onward cross-lateral patterns appear in walking, running and eventually skipping. The **vestibular** system begins developing in utero and continues to be very active through the first 15 months. The vestibular system analyzes movements through the whole body, helps us know where we are in space and links up to all forms of sensory information. This very important system is used when we read, hear, speak, touch, balance and move.

BrainDance for Body Connectivity and Alignment:

The BrainDance reviews for us the early baby patterns that lay down structure in the neuromuscular system, influence brain development, and help us cope with the world in an embodied way. These patterns, done in an orderly progression, help us remember the parts of our visceral and muscular system that support our body structure. Each pattern underlies and supports the next pattern and when done in succession bring a wholeness, aliveness and connectivity to our use of the body, which reflects an **integration of body and mind**. By separating the eight patterns we become more aware of each pattern. This allows us to discover when it might be helpful to focus fully on a particular pattern to help us with ease of movement or blocked body/mind areas. By doing the patterns in succession we connect and align all parts of the body. This leads to wholeness and integration. The BrainDance patterns are the foundation for all dance techniques and styles.

BrainDance for Broad Assessment:

When doing the BrainDance with your students, you will see individuals who may have trouble performing one or two patterns smoothly. These individuals may appear to move in a less integrated way than many of their peers. This lack of integration may indicate one or more missing gaps in the wiring of the central nervous system that may cause problems in behavior, social skills, attention, or reading. These individuals may show improvement in these areas over time by doing more work in all the patterns on a daily basis. Instead of focusing on students who are having difficulties, present the BrainDance to the whole class, giving constructive feedback to the entire group.

A student, who has a problem with a specific pattern, needs to strengthen the earlier patterns before the problem pattern may improve. I find that, as a dance educator, I can help my students most by presenting different variations of the whole

BrainDance at the beginning of every class and then work on individual patterns at different times during the class. An individual with severe problems should work with a movement therapist or somatic educator who is familiar with sensory integration, neuro-developmental patterning, or vision therapy.

BrainDance for Neurological Re-patterning:

Humans are programmed to move through certain movement tasks in the first year of life. These fundamental movement patterns wire the central nervous system laying a foundation for appropriate behavior and attention, eye convergence necessary for reading, sensory-motor development and more. When patterns are missed due to birth trauma, illness, environment, head injury, or not enough "tummy time" on a non-carpeted surface there may be missing gaps in a person's neurological development. These gaps can cause neurological dysfunction that may later appear as learning disabilities, behavior disorders, memory problems, sleep disorders, speech, balance or filtering problems, and a host of other difficulties that may disrupt the flow of normal childhood development.

Cycling through these patterns on a daily basis may correct flaws in a person's perceptual process and reorganize or re-pattern the central nervous system.

Benefits of Each BrainDance Pattern

A few specific benefits of each pattern are listed below. For more detail, refer to Peggy Hackney's *Making Connections: Total Body Integration through Bartenieff Fundamentals* or CreativeDance.org

Breath: Deep breathing is essential for a fully functioning brain and body. The brain consumes one fifth of the body's oxygen. All movements and rhythms are based on breath. "Oneness – cellular breathing, flowing in and flowing out."

Tactile: A variety of touch leads to bonding, sensory integration, proprioception (knowing where the body is in space), and appropriate behavior. "Tension masks sensation - tight muscles can't feel."

Core-Distal: Reaching out with distal ends (fingers, toes, head, and tail) connects us to the world beyond ourselves (interpersonal intelligence) and creates full body extension, establishing our kinesphere. Curling back to the core (pelvis and trunk) returns us to our own self (intrapersonal intelligence) and creates an awareness of core support for correct alignment and a sense of aliveness. "Twoness – self and others."

Head-Tail: Being aware of the interactive relationship between the head and tail (pelvis) leads to a full use of both ends of our spine for propelling us through space with ease, both on and off balance. Release of the head and tail creates an open path for our central nervous system to fully function. This pattern also strengthens back, neck, and shoulder muscles used in sitting, writing, and focusing on book, screen, or blackboard. "Lively Spine – body attitude is determined at a spinal level."

Upper-Lower: Grounding the lower half, by yielding the weight of the body into the earth, allows the upper one to reach into space and relate with other people. Grounding the upper half allows the lower to shift weight and travel through space toward someone or away from danger. Grounding and articulating body halves lead to emotional stability. We learn to reach for goals and set boundaries. "Mobility/Stability – function and expression work together."

Body-Side: Grounding the right side allows the left side to be fully expressive, and vice versa. Development and musculature become balanced on both sides of the body. Right or left dominance is felt and left and right brain hemispheres are strengthened. Body-side movements develop horizontal eye tracking necessary for reading. "Polarities – clarifying issues and making choices."

Cross-Lateral: Connecting body parts from opposite quadrants creates complex, three-dimensional movements such as spirals. Crossing the midline of the body connects both sides of the brain through the corpus collosum and is necessary for reading and writing. Cross-lateral movements develop vertical eye tracking necessary for reading. "Robust Thinking."

Vestibular: Moving off balance develops our balance (vestibular) system, providing us with necessary information about motion and gravity. Stimulating the vestibular system strengthens eye tracking, hearing, proprioception, balance, and coordination. "The First Sense."