



# BrainDance

Developed by Anne Green Gilbert, the **BrainDance** is a series of exercises that she uses in all of her classes at the Creative Dance Center. It is comprised of eight fundamental movement patterns that we move through in the first year of life. Research has shown that these patterns are crucial to the wiring of our central nervous system. As babies, we did these movements on our tummies on the floor. However, cycling through these patterns sitting or standing has been found to be beneficial. This "dance" is an excellent full body and brain warm-up for children and adults in all settings.

The **BrainDance** can be done at the beginning of class; before tests, performances, and presentations; and during computer work and TV watching for brain reorganization, oxygenation, and recuperation.

**The benefits for children and adults in cycling through these patterns include:**

**Reorganization of the neurological system:** The fundamental movement patterns wire the central nervous system laying the foundation for sensory-motor development and life long learning. Cycling through these patterns on a daily basis may correct flaws in a person's perceptual process and reorganize the central nervous system so to develop better proprioception, balance, attention, memory, eye-tracking, behavior, sensory integration, and motor skills.

**Increased blood and oxygen flow to the respiratory system and brain:** The brain consumes one-fifth of the body's oxygen. Deep breathing is essential for a fully functioning body and brain. All movements and rhythms are based on breath.

**Enhanced core support, connectivity, and alignment:** Becoming aware of the visceral and muscular systems that support the body leads to correct use of body structures and helps children and adults to be injury free and move with ease and coordination. Each pattern underlies and supports the next pattern and when done in succession brings connectivity to our use of the body, reflecting an integration of body and mind.

**Deeper understanding of the elements of dance technique:** The fundamental movement patterns are an integral part of dance technique. Whether taking a Ballet, Modern, Jazz, or Creative Dance class, students are able to integrate and apply the patterns of the **BrainDance** to their technical skill development. Dancers acquire and practice skills with more ease when they are aware that a particular pattern underlies the movement. Movement intent becomes clearer as dancers embody the **BrainDance** patterns.

## **Background Information**

### **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** comes 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 and 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 fifteen 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 ages 5 - Adults** ©2000 Anne Green Gilbert 2000

Movements in the eight patterns may be done standing, sitting on the floor or a chair, lying down, or traveling through space. The *BrainDance* should be done sequentially and holistically, following the order below. Many variations for toddlers through adults may be viewed on the *BrainDance* DVD, which may be purchased at [www.sensorystreet.com](http://www.sensorystreet.com).

1. **Breath:** take four to five deep breaths through the nose and out the mouth filling the belly, diaphragm, and lungs.
2. **Tactile:** With your hands, squeeze strongly each arm, each leg and the torso, back, and head (whole body). Then tap lightly whole body, then slap sharply whole body and then brush smoothly whole body. Explore a variety of other tactile movements such as scratching, rubbing, soft pinching, tapping, etc.
3. **Core-Distal:** Move from the center out, through and beyond the fingers, toes, head, and tail. Then curl back to torso while engaging core muscles. Movement that grows and shrinks, stretches and curls into big "X"s and little "o"s is great!
4. **Head-Tail:** Move the head and tail (lowest part of spine or coccyx) in different directions and pathways. Play with movement that brings head and tail/pelvis together curving forward and backward and side-to-side. Keeping the knees bent helps to release the pelvis. Wiggle the spine like a snake.
5. **Upper-Lower:** Ground the lower half of body by pressing legs into floor with a slight knee bend. Swing arms in different directions and stretch and dance upper body (arms, head, spine) in different ways. Ground upper half by reaching arms out into space with energy as though you were hugging the earth. Dance with lower half - try marching in place, simple knee bends, jumps, leg brushes, and other actions.
6. **Body-Side:** Make a big X with your body. Dance with the left side of your body while keeping the right side stabile (still). Then keep the left stabile and dance with the right side. With knees and elbows slightly bent like a "W" bring the left half of the body over to meet the right half and vice versa (like a book opening and closing). Follow your thumb with your eyes as it moves right to left and left to right. Do the lizard crawl with arms and legs open to the sides - reach left arm and knee up then right arm and knee up like a lizard crawling up a wall. Move your eyes right to left and left to right (looking at the thumb near your mouth helps) to develop horizontal eye tracking.
7. **Cross-Lateral:** Do a parallel standing crawl with knees and hands in front of you. Let your eyes travel up and down looking at one thumb as it reaches high and low for vertical eye tracking. Do a cross-lateral boogie dance finding as many ways of moving cross-laterally as possible such as touching right knee to left elbow, left hand to right foot, right hand to left knee, left hand to right hip, skipping, walking, crawling, etc.

8. **Vestibular:** This pattern may be done at the beginning of the *BrainDance*. Choose a movement that takes you off balance and makes you dizzy. Vary the movements you do each week. Swing upper body forward and backward and side-to-side. Make sure head is "upside down." Tip, sway, roll, and rock in different directions (any movement that makes you dizzy). Spin 15 seconds one direction, breathe and rest 15 seconds, then spin 15 seconds the other direction. Take three to four deep breaths to center yourself after spinning!

### Helpful Hints

- Perform the BrainDance for 5-20 minutes (may be extended to 30-60 minutes). Do shorter BrainDances with higher energy for a more aerobic exercise.
- Do all eight parts, at least once a day, in the developmental order from Breath to Vestibular. (Vestibular pattern may be placed first).
- Any movements that fit within each pattern are appropriate. Be creative! Integrate dance technique if applicable.
- Start the day or class with the BrainDance. Do before tests and during long periods of sitting.
- Select several patterns throughout the day to do as quick movement moments or transitions between subjects or spaces.
- BrainDance can be done standing, sitting on the floor, sitting in a chair, and even lying down. It can be performed in one spot or traveling around the room. It can be done mirroring or shadowing a partner or partners. Some variation is important. Music may be motivating.