## **Brain Dance**

http://creativedance.org/about/braindance/

Developed by Anne Green Gilbert, the **BrainDance** is a series of exercises that we use in all CDC classes. It is comprised of eight developmental movement patterns that healthy human beings naturally move through in the first year of life. As babies, we did these movements on our tummies and back on the floor. However, cycling through these patterns at any age, daily or weekly while sitting or standing, has been found to be beneficial in reorganizing our central nervous system. Repeating these patterns over time may help us fill in any missing gaps in our neurological system due to birth trauma, illness, environment, head injury or not enough tummy time as a baby.

This "dance" is an excellent full body and brain warm-up for children and adults and can be done in any setting. The **BrainDance** may be used as a warm-up for any physical or cognitive activity; before tests, performances, and presentations; after sitting for long periods of time; as a break during computer work and TV watching; and to increase energy and reduce stress. It is a centering body/brain movement tool for brain reorganization, oxygenation, and recuperation. The BrainDance prepares us for learning and helps with appropriate behavior and social skills.

## Benefits of the BrainDance

Reorganization of the neurological system: The developmental movement patterns wire the central nervous system laying the foundation for sensory-motor development and life long learning. When patterns are missed or disrupted 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 development. Cycling through the BrainDance patterns on a daily basis may correct flaws in a person's perceptual process and reorganize the central nervous system to better develop proprioception, balance, attention, memory, eye-tracking, behavior, sensory integration, and motor skills. Neurological repatterning coordinates all parts of the brain and body for emotional, social, and cognitive balance.

Increased blood and oxygen flow to the respiratory system and brain: Because oxygen and blood are food for the brain, deep breathing and aerobic exercise are essential for a fully functioning brain and body.

Oxygenation reduces stress and brings flow and ease to all movement. Blood and oxygen in the brain improves ability to stay focused during class.

Enhanced core support, 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. When done in succession, they 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 focus on a particular pattern to ease blocked body/mind areas. The developmental patterns are the foundation for all movement. Patterns establish internal and external

gradated rotation in proximal joints, laying foundation for correct and clear alignment in the upper and lower body and correct use of scapula and arms and turn-out and rotation in the hip socket. Awareness of body mechanics and inner connectivity develops stronger technique, physical balance, and coordination needed for complex sequences of movements, choreography, etc.

Deeper understanding of the elements of dance technique: Focusing on BrainDance patterns at the beginning of class helps dancers become more articulate and expressive as the developmental movement patterns are an integral part of every dance style. The first four patterns of the BrainDance are fundamental to performing any form of dance. The last four patterns dancers practice daily: pliés and port de bras (Upper-Lower), tendus, battements, (Body Side), center work (Cross Lateral), turns and springs (Vestibular). Whether taking a Ballet, Modern, Jazz, African, or Creative Dance class, students who have warmed-up with the BrainDance are able to integrate and apply the patterns to their technical skill development. Movement intent becomes clearer as dancers embody the BrainDance patterns. Dancers gain a new vocabulary that allows them to be more articulate physically and verbally. The BrainDance patterns provide a new entry point for teaching mechanics of steps and movement (e.g. chainé turns use the Body Side pattern).

## **BrainDance Patterns**

Breath

Tactile

No one part of the central nervous system works alone. Messages must go back

Core-Distal

Head-Tail

balance, balance can aid body awareness, body awareness can aid movement,

Upper-Lower movement can aid learning, and so forth.

Body Side ~Carol Stock Kranowitz, M.A.

Cross Lateral Vestibular

These patterns are explored in class integrating dance concepts and utilizing a variety of movements, dance styles, music, and props allowing for a balance of repetition and novelty.

## **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 as baby rolls, crawls, creeps, sits up, and walks. 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. Every movement stimulates the vestibular system which stimulates the brain.

If you are interested in learning more about the BrainDance, Anne Green Gilbert's BrainDance DVD and Eric Chappelle's BrainDance Music CD are available through our website in the <u>Store</u>. Get in-depth information and experience with the BrainDance through one of our <u>Educator/Community Workshops</u> offered throughout the year. The <u>Summer Dance Institute for Teachers</u> offers an immersion in BrainDance and Brain-Compatible teaching methods. Our <u>Resources page</u> has a wealth of information and links which will connect you to the fascinating world of somatics, child development, neuroplasticity, and more!