

ADTA 2014

Brain Dance- Developmental Movement in Education and Therapy

Goals:

1. Improve and expand your understanding and use of developmental movement patterns
2. Create sound neuro-developmental warm-ups for dance, fitness, and therapy groups
3. Learn the value of sensory input in observation and planning movement strategies

Abstract

Current brain research promotes the critical importance of movement in our early years. Developmental movement follows a progressive natural flow that reflects and evokes motor patterns normally unfolding in the first year of life. Understanding these movement tasks inform our work as movement therapists and educators and are like the bones that support our ability to observe, connect, and create movement interventions for our students and clients. “Brain Dance” movement activities include heavy duty stretch fabrics for proprioception and tactile feedback that increase body awareness, receptivity, and ability to process new information.

Description

As our culture encourages more and more sedentary television, video and computer game activities, research continues to emphasize the importance of movement for learning especially for children. Current brain research promotes the critical importance of movement in our early years as it influences memory, receptivity, and ability to process new information. Developmental movement follows a progressive natural flow that reflects and evokes motor patterns normally unfolding in the first year of life, i.e., Breath; Touch; Core-Distal; Head-Tail; Upper/Lower/; Laterality; Cross Laterality; and Vestibular. (Green-Gilbert, A. 2003. Bainbridge-Cohen, B. 1989). As Dance/Movement therapists we understand that moving through these patterns can assist in re-patterning movement habits that may be inhibiting freedom of movement and personal movement expression. Benefits can be seen in working with children of all abilities and adults in various settings.

In this workshop we will revisit, renew, and expand our understanding of how moving through early patterns are foundational for movement education and development of a healthy body image and self. Published author of “Brain- Compatible Dance Education”, Anne Green Gilbert, and Kimberly Dye, designer of several award-winning sensory movement tools, collaborate to present an amalgam of their work.

PAPER

Brain Dance- Developmental Movement in Education and Therapy
2014 Joint Conference of American Dance Therapy and Dance Educators Chicago
Kimberly Dye and Anne Green Gilbert

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“BrainDance”, (Green-Gilbert, 2003), an amalgam of developmental movement and effort shape patterns (Laban, 1971) was created by a dance educator as a way to provide sound structure for dance and movement warm-ups and ideas for creative movement that are developmentally inspired. These movements also integrate primary reflexes that contribute to healthy whole brain development including- brain stem, mid-brain/limbic system, and cortex. Benefits can be seen in working with children of all abilities and adults in various settings.

As infants we did these brain-developing movements on the floor. As children and adults, we continue to review the following patterns in a variety of ways to keep our brains and bodies strong.

Breath: Deep diaphragmatic breathing begins the firing of brain to body response; increases flow of oxygen to the brain; reduces stress and increases flow of movement and connection to core or to the essential self.

Tactile: Use of balls and bands to squeeze, tap, press, scratch, roll. This strengthens capacity for bonding; develops appropriate sense of touch; increases sensory integration and feeling of body boundary

Core-Distal: Growing and shrinking movement towards and away from core that involves the whole body. Strengthens ability to connect to self and other; core support for correct alignment and self-preservation. Movement within individual resistance stretchy sacks accelerates whole body awareness. Curl in like a flower closing and opening up to full height. The ability to reach out from a solid center is experienced through imagery, and tactile/proprioceptive input.

Head-Tail: Gently bend, twist and stretch the spine from head to tail in different directions and pathways. Circle and swing the head and hips. Wiggle, undulate, and twist spine gently. Use flexible resistance against spine or in pairs to create more head-tail movement. This increases spine flexibility and neck and shoulder strength; helps one move through space with ease; creates connectivity between lower and upper body and fosters alertness and ability to pay attention as well as explore new options

Upper-Lower: Ground the legs and feet by pressing and stretching feet into the elastic resistance. Reach, bend, and kick legs into resistance while keeping upper body stable. Do the

same with hands, arms and torso while stabilizing legs, pelvis, and feet. Articulating body halves increases the dynamic relationship between mobility and stability, function and expression; develops sense of self, intention, and emotional stability through connection to ground

Body-Side: Stretch, twist, and reach with one side of body while keeping other side stable. Alternate moving right and left sides by doing belly creeping, belly side crawling and rolling. In circle hold on to elastic bungee with one hand while pushing and pulling towards and away from center. (Krueger and Coleman, 2008) Articulating body halves strengthens and balances both sides of the body and brain hemispheres; develops side dominance, horizontal eye-tracking necessary for reading, clarifies intention

Contra-Lateral: Move upper right and lower left towards and away from each other, cross midline with spinal rotation, crawl, and climb. Use looped elastic over one shoulder and under opposite foot for increased awareness of how upper right and lower left quadrants work together. This is particularly beneficial for cross midline movement often challenging for SPD children. Cross lateral movement integrates brain hemispheres; strengthens vertical eye-tracking; develops frontal brain function for complex thinking and inspires creativity for problem solving

Vestibular: Swinging, spinning rocking, rolling, hanging upside down challenge the balance in relation to gravity. Resulting slight dizziness followed by stabilization stimulates and strengthens the balance system, develops spatial awareness, and coordination

By separating each pattern we become more aware of each pattern and how it supports our sensory-motor learning and mind body development. When done in succession they bring a wholeness, aliveness, and connectivity in our movement and sense of being. Lamont (1991),

further likens this neurological re-patterning work to spiritual practice in that clients feel “grounded, in touch with (their) wholeness or holiness.”

Children in educational and therapy settings can be seen with a variety of sensory processing disorders (SPD). (Kranowitz, 2005). Mild to severe cases can be seen in those with attention deficit disorders, (ADD), attention deficit hyperactivity disorder, (ADHD), Asperger’s syndrome, autism, and eating disorders. Studies have shown, (Fisher, A.G., 1991) that whole body, deep pressure enhances dopamine receptors in the brain that results in better focus, motivation, impulse control, and ease in groups. Temple Grandin, renowned author, lecturer, and recovered autistic, created the “squeeze machine” a deep pressure device that she swore by every day since it helped her overcome her sensitivity to touch and allayed her general anxiety. (Grandin, 1992). Pressing into or being supported by the walls of heavy spandex during a dance/movement therapy session can address a multitude of symptoms exhibited by the SPD child: sensitivity to touch, hypo or hyper mobility, poor co-ordination, spatial awareness, and anxiety in groups.

BrainDance movement using springy resistance challenges one’s relationship to gravity, a vestibular function responsible for balance, coordination, and healthy eye tracking. Adding tactile, proprioception, and vestibular input can be an effective form of SPD treatment. (Ayers, 1972). Children sit against walls of a large group stretch band. Breathe as one being like a large sea urchin. Press out enough to feel tactile support and proprioceptive resistance. Grab top edge of fabric and stretch over towards the feet with legs extended. Use visual imagery of the sea urchin closing up to protect itself from a shark. Homologous movement of the upper lower phase is accomplished with increased sensory input and an added group co-operative dynamic.

We will deepen physical and emotional understanding of phase specific tasks through practice, movement observation, and direct experience. Methods for exploration include guided improvisations, mirroring and shadowing, varying levels, efforts, and use of space, BrainDance Stations, Chacian circles and choreography. As we sharpen our ability to remember our early movement patterning we become better educators and therapists, ready to provide sound structure for best learning and treatment practice.

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