

STORIES IN MOTION NEUROSCIENCE INTEGRATION

Workshop: Stories in Motion: Movement, Memory, and Connection

Focus: Creative dance, embodied storytelling, neuro-supportive movement practices, and sacred presence.

What Is BrainDance?

BrainDance (developed by Anne Green Gilbert) is an eight-pattern movement sequence based on fundamental neurological development. These patterns support focus, emotional regulation, coordination, and overall brain integration.



Teaching Artist Toolkit: Stories in Motion Brain Dance Integration

Welcome & Grounding

What happens in the brain:

- Prefrontal Cortex (PFC) activates to support focus, decision-making, and present-moment attention.
- Anterior Cingulate Cortex (ACC) regulates emotional tone and increases intentional awareness.
- Insular Cortex heightens interoception (internal body awareness), improving mind-body connection.
- Parasympathetic Nervous System activation (via the vagus nerve) lowers heart rate and promotes calm.
- Amygdala down-regulation reduces stress reactivity and prepares the brain for learning and creativity.

Effect: Calms and organizes the nervous system, increases presence, and creates a spiritually grounded beginning.

Physical Warm-Up

What happens in the brain:

- Motor Cortex (primary + supplementary) plans and initiates movement.
- Basal Ganglia refine coordination, rhythm, and motor sequencing.
- Cerebellum enhances balance, timing, and fluidity.
- Parietal Lobe (somatosensory cortex) strengthens proprioception and spatial orientation.
- Vestibular System (inner ear + brainstem pathways) activates equilibrium and orientation in space.
- Corpus Callosum increases interhemispheric communication during coordinated movement.

Effect: Develops safe alignment and mobility while preparing the entire neuromuscular system for expressive and technical work.

Memory In Motion

What happens in the brain:

- Hippocampus engages in autobiographical memory retrieval and organizes narrative sequences.
- Medial Prefrontal Cortex (mPFC) integrates personal meaning and self-referential thinking.
- Temporal Lobes activate during sensory recall and emotional memory.
- Mirror Neuron System (premotor cortex + inferior parietal lobe) interprets gesture and meaning.
- Default Mode Network (DMN) supports imagination, inner imagery, and memory reconstruction.
- Neuroplasticity increases via synaptic strengthening when memories are paired with movement.

Effect: Amplifies memory recall, deepens expressive communication, and strengthens neural pathways through embodied meaning-making.

Community Sharing

What happens in the brain:

- Mirror Neuron Network (inferior frontal gyrus + parietal cortex) supports empathy, attunement, and intuitive understanding of others' movement.
- Orbitofrontal Cortex (OFC) processes social reward and connection.
- Superior Temporal Sulcus (STS) interprets intention, emotion, and relational cues.
- Oxytocin release strengthens feelings of belonging and trust.
- Ventral Striatum + Dopamine pathways activate through shared creativity and positive social interaction.
- Effect: Builds empathy, belonging, and shared understanding, making the communal experience feel sacred and bonded.