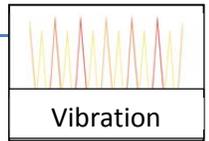


Softening the Brain for Learning: Somatosensory Patterns in the Classroom



Why? Some students arrive in the classroom with challenges in regulating basic physiological systems such as heart rate, and blood pressure. Teachers might see a student who is too lethargic, or too “keyed up.” Patterned movement activities that includes sound and vibration (i.e., somatosensory) can help form new neurological connections in these basic brain systems. Once lower level brain systems are regulated, brain systems connected to attachment, emotion and thinking can also become better organized.

How?

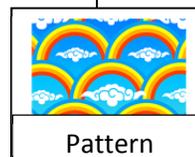
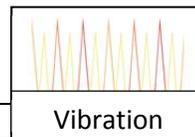
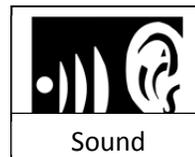
Research* shows that the brain is softened for learning for 10 minutes after these somatosensory activities. For optimal growth use somatosensory activities:

- ✓ for 7-8 minutes at a time
- ✓ many times throughout the day

In addition to forming new neural connections, these patterned activities have multiple uses, including:

- Reinforcing or Introducing Learning:** strengthening or adding key learning after the activity.
- Structuring Transitions:** coming into class, going out of class, waiting times, moving from one activity to another; moving from unstructured activities to a structured activity.
- Collecting Attention:** gathering the attention of the whole group.
- Building Community:** creating a sense of “group” by having all students engaging in the same low-risk activity.
- Shifting Physical Energy Levels:** moving class and individual physical energy levels from overly-stimulated to calmer; from lethargic to more alert.
- Expanding Modalities:** offering lessons in multiple modalities (sound, movement) to help students engage in learning as well as encode through auditory and kinaesthetic channels.
- Increasing Positive Feelings:** creating a sense of play and enjoyment between students and in the classroom.
- Engaging the Disengaged:** shifting the emotional tone and the level of engagement of the group.
- Reinforcing Key Learning:** using multiple ways of teaching key rote learning (e.g., basic literacy, math facts, etc.).

* Dr. Bruce Perry, NMT Case Studies, Fall 2011. See [Child Trauma Academy](#)



What? Somatosensory patterns include three factors: **sound, vibration and patterned movement**. The following suggestions incorporate some or all of the needed factors. Ensure that the activities include all three factors by adding in what is missing (e.g., adding in a chant, marching, bouncing a ball, etc.).

Strategy	Sample Resources	Sample
Movement in the Classroom (multiple strategies)	 The Kinesthetic Classroom: Teaching and Learning Through Movement . This text offers multiple strategies to incorporate movement into the classroom to create group unity, reinforce academic concepts, increase physical health, etc.	Toss-catch review. Have paired students toss a ball back and forth while reviewing content.
Brain Gym pattern + chant	 Brain Gym: Teacher's Edition and Brain Gym and Teaching ESL	Cross crawl: Use cross crawl pattern with spoken multiplication tables.
Tapping in the Classroom	 Body Beat Cards . This deck of 30 cards provides "do as I do" beats that use snapping fingers, clapping, stomping feet, hitting thighs, etc.	Teacher Leads, Students Follow: Teacher claps stomps, claps twice, stomps twice, claps three times Students follow teacher's lead. Pattern continues for multiple minutes.
Yoga + Audible Breathing	 Yogarilla . This classroom program offers simple-to-follow yoga positions. Match the yoga with breathing or humming.	Student and Teacher do specific stretch while standing at side of desk when switching from art to mathematics activity. Pair with audible breathing or humming.
Computer assisted regulated breathing	 HeartMath or  Wild Divine Computer programs with patterned breathing and sound.	Teacher uses HeartMath Coherence breathing graph on SMART board in the classroom at 10:30 to have students transition from recess to language arts.
Drumming	 Sounds True The Healing Drum Kit	Students drum every day after lunch.
Teaching Social Emotional Skills	 Songs for Teaching with matching actions	Students spend time after recess each day to learn the action friendship song. This song becomes part of their morning routine. The students then perform it to Kindergarten class, and then other classes in the Division.
In your school other key resources can include strategies from Occupational Therapists that focus on developing and integrating sensory systems, and strategies from Psychologists on Trauma Sensitive Schools Initiative.		