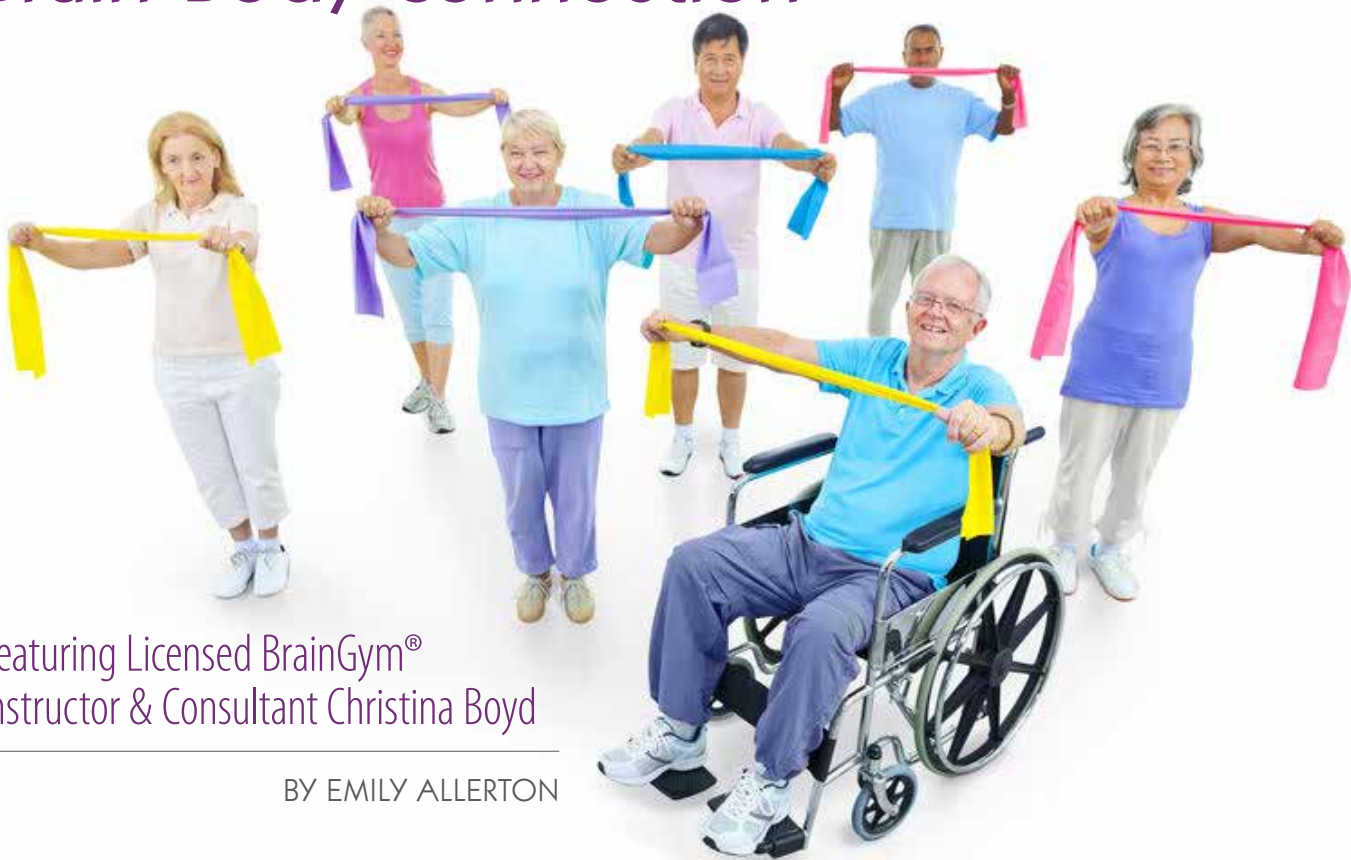


# Movement Therapy and the Brain-Body Connection



Featuring Licensed BrainGym®  
Instructor & Consultant Christina Boyd

BY EMILY ALLERTON



Christina Boyd, instructor for Brain Injury Alliance of Arizona’s “Think Tall, Don’t Fall” class, is a vibrant woman who helps those with neurological challenges achieve their goals through a program called BrainGym. For the past 26 years, she has utilized the program with both children and adults experiencing anything from learning disabilities to brain injuries.

As someone who took her classes while recovering from encephalitis, I was able to overcome nauseousness and headaches while reading—an essential skill for any student! Because of the personal, tremendous shift in my ability to read over the course of the practice, I was thrilled to interview Christina and learn more about what makes the BrainGym® program work.

## HISTORY OF BRAINGYM

Dr. Paul Dennison developed BrainGym while working as Director of the Valley Remedial Group Learning Center after seventeen years of research on the importance of physical movement in learning. It was first taught to schoolchildren to help in both academic and social realms. It evolved as it became

evident that the program helped those with a variety of neurological challenges. Dr. Dennison had learning problems himself in his school years and worked with several different movement modalities to understand how movement activates areas of the brain to help the entire body function together.

Christina learned about the BrainGym program early in her therapy practice, already understanding how movement could work as a form of therapy to help with learning, mood, and behavior. She was amazed by the simplicity and efficacy of BrainGym and quickly adopted it.

Christina explains the brain develops through movement. “As an infant lifts their head, crawls,

“If your movement is limited, even imagining doing a movement will activate the corresponding brain areas as if you were actually moving!”

Movement sends specific signals to the brain to activate certain areas.”

“If you are limited in your movement due to an injury,” Christina also notes, “even imagining doing these movements will activate the corresponding brain areas as if you were actually moving!”

## BRAINGYM SESSIONS

When I attended the Think Tall, Don’t Fall course in the Fall of 2020, we always performed a simple sensory challenge before doing a series of BrainGym movements. These movements are simple to do yet activate the brain and stimulate the growth of new neurons. That sensory challenge would be repeated at the end of class.

It was amazing to experience how much easier the challenge would be at the end of class. Some experienced better balance or better coordination. I often came away from it feeling like the sensory challenge was cognitively easier to perform. “Because it’s so simple, we don’t call it training,” Christina tells me, “it’s an experience.”

Christina says her private sessions are similar but personalized for the individual. For instance, a child

rolls, and walks, the brain develops. Without that movement, development is stunted. There are sensory pathways from the arms and legs going to the brain, and from the brain to the arms and legs. The brain activates the body, and the body activates the



Brain Gym introductions at the Flagstaff Library (2017).

who wants to improve their reading abilities might choose that as their focus during their session. Their sensory challenge would be related to that goal. Then they would perform BrainGym movements to activate the corresponding area of the brain and repeat the relevant sensory challenge at the end of the session. “If you point the mind and the brain in the direction you want to go, neural changes start happening right away,” Christina explains.

She recommends the program to all who are experiencing neurological challenges. For children, she especially advises it for those who have an Individualized Education Plan (IEP), learning disorders, anxiety, or social and behavioral issues. Even children who do not have a diagnosed challenge or IEP, but are falling through the cracks socially and academically, can benefit.

Christina’s Think Tall, Don’t Fall class is offered by The Brain Injury Alliance in conjunction with Dignity Health and Barrow Neurological Institute. Christina also offers similar classes with more movement called Stand Tall, Don’t Fall, and Brain Power for Brain Injuries.

All classes, as well as private sessions for adults and children, are currently offered over Zoom. Enrollment in the group sessions is ongoing. Since it takes time for neural changes to happen in the brain,

*continued next page*

she recommends giving it 5-8 sessions before you decide if it is working.

“The first class is always free because it doesn’t make logical sense at first; you have to experience it for yourself,” Christina says. “Anyone interested in private sessions can schedule a free half-hour consultation to meet me and ask questions.”

## SEAN’S STORY

When Sean was 10, he visited Christina to work on his low self-esteem, anxiety, and academic difficulties. With “Brain Buttons” and “Double Doodle” exercises, he was able to better coordinate his hands with his eyes. This enabled him to increase brain function, depth perception, and reading ability.

After his third session, math was no longer a problem. By his 11th session, he reported that his confidence in school was “way better!” Before Brain Gym, he needed to complete his homework with a tutor at home. Now he was completing it at school before coming home. After the 15th session, his teacher told his mother that he was a leader in the classroom. The next session was his last, as he had accomplished all his goals.

## HOW INTEGRATED MOVEMENT CAN UPLIFT YOUR MOOD

One example of how this works is through the vagus nerve, the largest nerve in the body. It connects from the cranium to the abdomen and spreads out. When we breathe, our diaphragm’s contraction activates it. Our Autonomic Nervous System, the functions of our nervous system that run without our needing to think about it, has two systems: the Sympathetic Nervous System, aka our “fight, flight, or freeze” system, and the Parasympathetic Nervous System, or our “rest and digest” system.

Sometimes we get stuck in “fight, flight, or freeze” due to trauma or stress. Deep belly breathing activates the vagus nerve and the Parasympathetic, relaxing us, changing our mood, and enabling us to connect better with others.

Christina also cites the importance of stretching the Psoas muscle, a large muscle connected to the spine that goes through the hips and legs. It tightens as a response to trauma, thus activating the Sympathetic Nervous System. We can physically hold on to our emotions in this muscle; by stretching it, we can release physical stress and relax the brain.

### BRAIN BUTTONS



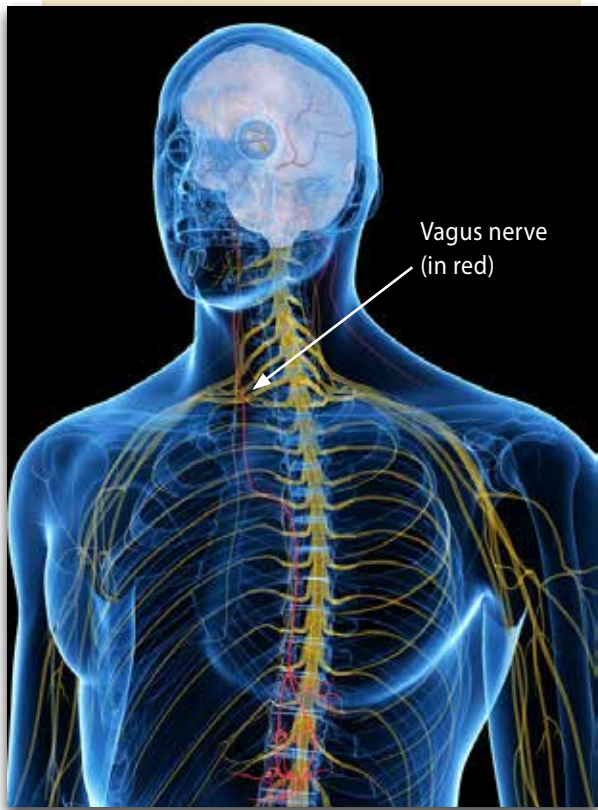
Christina shows Sean how to do “Brain Buttons” to help him with low self-esteem, anxiety, and academic difficulties.

### DOUBLE DOODLE



The “Double Doodle” activates areas of the brain associated with depth perception and reading.





## BRAIN HEALTHY HABITS

Here are four simple things anyone hoping to achieve a healthier brain can do every day:

1. **Breathe deeply from your belly. Deep breathing activates the vagus nerve, among other benefits.**
2. **Drink water. This activates and hydrates the brain.**
3. **Stretch. If you are in a wheelchair, focus on stretching and twisting as much as possible.**
4. **Eat well!**

## IT WORKS!

When asked to identify the most surprising thing about BrainGym®, Christina passionately replies, “that it works!” She explains that people experience immediate changes after only one session. They are amazed that they feel better. Relaxed but energized, grounded but lighter (something I experienced often!). It doesn’t take six months or a year to reap the benefits of the program.

“I still get excited each time I see it working. People have these real experiences, and they can’t ignore the change. It’s their neurological system either reconnecting or strengthening and they really feel it,” Christina says. She encourages people who are interested to give it a try. “It does not make intellectual sense, the changes people experience, but you are the one who can tell if something will work for you.”

She adds, “It’s so simple. You don’t need book learning. You don’t even need to understand it or believe in it. You just have to do the movements and you’ll start to see the changes.”



## Try This at Home

You can start feeling better even before enrolling in BrainGym. All it takes is this simple exercise:

Place your thumb and index finger in the soft depressions just below your collarbone on each side of your sternum. The palm of your hand is held away from your chest

to allow your fingers to massage these points more easily. Place your other hand on your navel, holding it still. As you gently rub the points under your collarbone, move your eyes from side to side horizontally. Switch hands and repeat.



### Think Tall—Don’t Fall Series

Now through June 24th, 2021

**REGISTER • LEARN MORE HERE**

[biaaz.org/events](https://biaaz.org/events)

**RIDDLE ME THIS #19:** A man rode into town on Tuesday and stayed in a hotel. Two nights later he rode home on Tuesday. How? (answer on page 31)