

Teacher Toolbox



Teacher Toolbox – March 2025

By Margaret Wood, Speech-Language Pathologist and TAP Consultant mwood@ces.org

Supporting Sensory Processing via Brain & Body Breaks:

A worthy investment of time and energy!

Sensory Integration (SI) is the process by which we receive information through our senses, how we organize this information, and the way in which we use this information to participate in everyday activities. According to the Journal of American Medical Association – Pediatrics, “*One in 6 children have sensory processing difficulties. In specific populations, the prevalence is estimated to be as high as 80% to 100% and includes children with autism spectrum disorder or who have a history of prematurity, fetal alcohol syndrome, or Down syndrome, just to name a few.*” (Kong M, Moreno MA. Sensory Processing in Children. *JAMA Pediatr.* 2018;172(12):1208. doi:10.1001/jamapediatrics.2018.3774). In addition, approximately 40% of individuals with attention deficit hyperactivity disorder also experience difficulties processing sensory information.

Research links autism-related sensory-processing challenges to decreased participation in social activities, play, academic tasks and self-care—and to compromised attention, an essential foundation for communication and language development. Sensory issues can also contribute to self-injurious and aggressive behaviors, especially in children who are unable to communicate their difficulties. Individuals with sensory processing difficulties may not be able to receive accurate information from their senses, which then impacts their ability to interpret, understand, and organize this information. In turn, they experience challenges with responding to this information in an expected, context-dependent manner.

Amanda Morin states the following in her article entitled “Classroom accommodations for sensory processing challenges” from www.understood.org, “*Students with sensory processing challenges have trouble managing everything their senses are taking in. At school, they often have to cope with sounds, smells, textures, and other sensations that get in the way of learning.*” Consider the following recommendations mentioned in the excerpt from their teacher handout:

Classroom planning, schedules, and routines	<ul style="list-style-type: none">• Have a consistent daily routine.• Give advance notice when the routine changes.• Use brain breaks throughout the day.• Set up a clear start and end time for tasks.• Post visual schedules, directions, to-do lists, and classroom rules where students can see them.• Use visuals with pictures of sensory input choices.
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Let us focus on the highlighted suggestion above: “Use brain breaks throughout the day.”

Research shows that periodic breaks throughout the school day provide multiple benefits including:

- Valuable downtime to calm and/or recharge the nervous system and emotions
- Boost productivity while giving students opportunities to develop their creativity and social skills
- Help students process what they've learned by consolidating memories and making connections to other ideas
- Short exercise breaks in the classroom or during recess also reduce stress and increase blood flow and oxygenation to the brain, helping to keep students' brains sharp, healthy, and active.
- Improve social-emotional development: When children play together, they learn how to take turns, resolve conflicts, and solve problems. They also learn how to manage their own emotions and behavior—fundamental skills for life.
- Improved focus and concentration. Taking short breaks helps to alleviate mental fatigue which improves student focus.
- Increased motivation and engagement.

Neurologist and classroom teacher Judy Willis writes based upon her conclusions regarding decades of research that, *"In the classroom, brain breaks should take place before fatigue, boredom, distraction, and inattention set in. As a general rule, concentrated study of 10 to 15 minutes for elementary school and 20 to 30 minutes for middle and high school students calls for a three- to five-minute break."* Research supports that taking a simple break from learning allows the brain to solidify the information that is learned, committing it to longer term memory for later retrieval, which increases test scores.

A brain break is simply a quick movement break or change from the repetition and an opportunity to recharge. Brain breaks help support emotional development, physical development, sensory and emotional self-regulation, and executive functioning skills. Cognitive fatigue can be avoided by many simple techniques to either alert or calm the nervous system. Consider the following brain break ideas, which are adaptable to ALL ages and developmental levels:

- **Movement breaks:** Schedule brain breaks or movement between activities, before written language activities (e.g., go to www.pickerwheel.com to create your own sensory activity choices such as jumping jacks, stretching, wall push-ups, or hand pushes/pulls).
- **Toss a ball or Balloon Volleyball:** When kids are answering questions, toss them a soft ball or hit a balloon. The student catches or hits it and then answers the question.
- **Head, Shoulders, Knees, and Toes:** The movement song "Head, Shoulders, Knees, and Toes" makes a great learning rhyme (words can easily be substituted for math facts, vocabulary words, or other terms that need to be memorized).
- **DIY fidget toys:** such as a paper clip chain (doubles as math and spelling manipulative)
- **Drink water with a straw:** The whole class can benefit from the calming oral motor benefits of sucking from a straw (ice water is even better!)
- **Alerting snacks:** Crunchy carrots and pretzel sticks, chewy fruit snacks or sugar free gum provide deep pressure to the jaws when chewed.
- **Quiet corner:** Create a quiet corner that students can climb into. Add blankets, soft pillows, a small bin of books, and a box of calming sensory tools.
- **Jumping Jack Spelling Words:** This is a whole-class exercise drill that gets the brain and the heart moving!

- **Dancing:** Play a 3–4-minute song (cue it up on your phone or computer). Check youtube or gonoodle for great brain break song ideas.
- **Simon Says:** Incorporate basic body parts vocabulary for younger kids, such as touch your head, knee, and belly button for younger kids. Challenge the older kids with medical vocabulary such as touch your cranium, patella, and navel!
- **School Stroll:** Take a walking tour around or outside the building
- **10-10-10:** 10 jumping jacks, 10 seconds running in place, 10 seconds of arm circles (or any other physical activity – let the students get creative and create their own 10-10-10 and let them take turns teaching/leading their peers)
- **Breathing:** Take a few minutes to teach and practice a breathing exercise such as square breathing or equal breathing.
- **Basketball:** Have students select a partner and have each pair create a “basketball” with a crushed piece of paper. Have them pass the ball back and forth a few times with right/left hands. End by letting each team shoot a “basket” into the recycling bin.
- **Countdown:** Give students a list of activities to perform starting with something with five steps or actions and then four and so on (e.g., Take 5 big steps in any direction, jump up and down 4 times, touch 3 walls..).
- **Shake on it:** Ask students to work with a partner (or two) and create a 4-step handshake.
- **Active Voting:** Ask students to stand up (instead of raising a hand) if they know the answer to a question. Alternatively, ask them to move to a corner or shrug their shoulders.
- **Beach Party:** Inflate 3 beach balls. Have students stand or sit in a circle. Put on some summer tunes. Have students pass the balls around the circle (like at game of hot potato). When the music stops, ask those holding the balls to share one thing they learned in the last lesson.
- **Jigsaw Jumble:** Put students into small groups and give them a handful of puzzle pieces. Without talking (using only nonverbal communication such as eye contact and gestures), have students work together to assemble the pieces.

The bottom line is, we all need breaks! Incorporating brain breaks into the school day is a simple yet powerful strategy to decrease challenging behaviors while increasing ALL your students' focus, memory retention, well-being, and overall academic performance. Be sure to attend the next **Autism Toolbox Series: Sensory Self-Regulation Supports** live virtual workshop on Thursday March 6th for in-depth training on more ways to support your students' needs.

Whew! I'm tired... think I'll take a **BRAIN BREAK!**

References and Resources

<https://classroombrainbreaks.com/>

<https://www.edutopia.org/article/we-dramatically-underestimate-importance-brain-breaks/>

<https://jamanetwork.com/journals/jamapediatrics/fullarticle/2707900>

<https://www.understood.org/en/articles/evidence-based-behavior-strategy-brain-breaks>

<https://www.understood.org/en/articles/classroom-accommodations-for-sensory-processing-challenges>

<https://www.understood.org/en/articles/understanding-sensory-processing-challenges>

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