Low-Cost/No-Cost Classroom Sensory Strategies

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As a teacher, I want to set my students up for success in the classroom. Where should I start? How do I meet my students' sensory needs without spending lots of money?

What Is Sensory Processing?

Our students are bombarded by sights, smells, sounds, and movement throughout the school day. *Sensory processing* refers to the brain's ability to receive, organize, and understand sensory information. This internal process helps us decide how to respond and react to various demands from the environment. Some of our students can self-regulate by filtering out competing stimuli. But many students, especially those with autism spectrum disorder (ASD), struggle with *sensory regulation*. Their bodies and brains react to the flickering lights, noisy pencil sharpeners, sitting on a hard chair, or people passing in the hallway. Their learning, behavior, and social world is affected. These students need our help.

How Does Sensory Processing Affect Behavior?

Sensory regulation is the body's reaction to sensory processing. Many students, both those with and without ASD, have sensory processing challenges. Many behaviors that students exhibit may be related to poor sensory processing and difficulty with sensory regulation. The student who is overactive, underactive, refuses to work, invades others' space, or shuts down may be showing us that he needs help with sensory regulation. It is important to note that behaviors that appear sensory-based may change in appearance as students get older. For example, a kindergarten student with auditory defensiveness (sensitivity to sound) may cry and put his hands over his ears while an older student with auditory sensitivities may remove himself from a situation and refuse to participate.

What Can a Teacher Do to Help?

Classroom teachers have the opportunity and the challenge to meet the needs of many diverse learners. In order for all students to be ready to learn and grow, teachers and parents need to provide a sensory-friendly learning environment, integrating sensory-based strategies. These strategies provide the foundation for learning. When the student's sensory needs are met, he will be at his optimal internal state of feeling calm, focused, and ready for learning and meeting the demands of everyday life.

In order for a student to do his best learning, he must be sensory regulated. The ultimate goal is for the student to be able to self-regulate (i.e., listen to what his body is telling him about his sensory world and react accordingly). However, the ability to self-regulate isn't something that happens all at once. Many of our students need help learning to recognize and address their own body's signals. Until the student has developed these self-regulation skills, he will need some support.

In the beginning, the student may need direct support to choose which sensory strategies are most meaningful for his success. As the student grows, he will increasingly be able to independently choose appropriate self-regulation strategies. Visual supports, reminding the student of his choices of sensory activities, can be helpful for any student.

Many effective sensory regulation strategies are free or inexpensive! As classrooms move toward universal design (flexible learning environments that accommodate individual learning differences), sensory regulation strategies can be a valuable support to many students. Here are some highly recommended suggestions. When in doubt, please consult an occupational therapist (OT) within your school district for intense individual sensory needs and challenges.

Modify Classroom Environment

Visual

* Use natural lighting and table lamps whenever possible. Fluorescent lighting has been reported to be painful for students with visual sensitivities. * Turn off lights when preparing for transitions.
* Declutter walls and ceiling. Have the workspace bare. Less visual stimuli may help the student regulate to achieve a sense of calm and focus.
* Display a visual poster of calming strategies. Examples might include deep breathing reminders, yoga positions, or movement strategies that promote calm.
* Provide sunglasses during recess on a sunny day.

Auditory

* Offer headphones or earplugs during homework/seatwork. Auditory defensiveness can be severe. Sounds that may not be perceived by others can cause extreme distraction and discomfort to a student with auditory defensiveness.
* Use carpeting, area rugs, or draperies to dampen sound.
* Split tennis balls and place them on the bottom of chair legs to reduce noise.
* Play soft classical music. At home, turn off the TV.
* Reduce extra noise such as telephone conversations, classmate/sibling conversation, instruction to another child.
* Place writing paper on top of a soft book or tablet to reduce noises when writing.

Olfactory (Smell)

* Be aware of sensory reactions to smell. One student may be sensitive to various smells in the environment while another student may seek out intense smells. The olfactory system is closely linked to the limbic (behavior) system. Watch to see if student behaviors are linked to certain individuals or times of the day (such as lunchtime). Behavior may be a response to smell. Adjust accordingly.
* If you often see the student smelling things, this may be a sign that this student might be calmed by certain smells.
* Try lavender, basil, chamomile, or marjoram to encourage calm and reduce stress.
* To promote concentration, try rosemary, eucalyptus, lemon, and orange. Some students find certain smells to help with organizing and calming.

Temperature

* Be aware that students with sensory processing challenges may experience temperature differently. They may need a reminder to put on a coat or to wear warm clothing in winter, or to take their coat off when inside.

* Avoid seating the student next to heating and cooling units in the classroom. A sudden blast of hot or cold air can be very distracting for a student with sensory regulation difficulties. add another tip here

Seating

* First take a look at the student's desk and chair. The student's feet should be able to comfortably touch the floor. The desk should be approximately two inches above his flexed elbow.
* Allow choices of how to sit in class (see Sitting Options sidebar). Encourage students to find what works best for them to feel calm and focused. Allow different seating positions for different work requirements. Standing or kneeling for some activities will encourage attention and focus.
* Consider what location is best for the student during instruction. Sitting where the teacher instructs is valuable for focus and filtering out sensory stimuli.
* Establish a quiet "office" for seatwork within the classroom. This can consist of a desk pushed against a wall, with a study carrel or other visual barrier to block distracting movement while the student works. It is important that this private office be established as a positive, private place to do one's best work— not as a timeout area!
* Provide a quiet calming corner with a beanbag chair (even cheaper, use donated couch pillows and a blanket) and music with headphones for proactive opportunities to support sensory regulation, as well as when a child just needs a break away from the busy classroom.

Sitting Options

* air cushion
* folded bubble wrap
* rolled-up sweatshirt, placed vertically on seat for added movement
* large therapy ball or rocking chair
* floor (to lie on)
* beanbag (to lie over)

Offer Movement and Break Opportunities

Research is increasingly pointing out the link between movement and learning. The research shows that aerobic exercise at target heart rate can increase learning, memory, attention, and mood while decreasing negative behaviors, depression, and absenteeism. Dr. John Ratey (2008), a Harvard Medical School psychiatrist, says, "Exercise is like taking a little Prozac and a little Ritalin…." Exercise breaks of five to fifteen minutes, two to three times per day is recommended.

Our favorite website that provides engaging aerobic exercise videos is www.movetolearn.org. Coach Calhoun, a PE teacher from Mississippi, has done a marvelous job producing free, fun, five-minute exercise to music videos set in a classroom.

Activities to support sensory needs are most effective when they include structured movement with heavy work activity including deep pressure touch. Big muscle activity (e.g.,

arms, legs, whole body) is extremely important because of the effect that it has in telling the student where his body is in space. Big muscle activities are also effective to calm and internally organize the nervous system. This may benefit the nervous system for approximately two hours, depending on the student. It is best to have three or four opportunities built into the school day that provide big muscle structured activities, including push, pull, lift, or carry. (See Big Muscle Activities sidebar for more ideas.)

Transitions between activities or locations are often problematic for students with sensory processing difficulties. One reason for this difficulty stems from challenges in sensory regulation. In a classroom setting, prior to transitions (e.g., lining up, walking in the hall, going to lunch, going home) students have been sitting and listening to instruction or doing seatwork. Their brains and bodies have regulated for one environment, but moving to a new environment requires a different sensory regulation. The transition period elicits a period of dysregulation for the student. This may be manifested by excessive movement, hands on others, disruptive behaviors, hands on walls while walking, talking out, or other inappropriate behaviors. Teachers and parents can significantly reduce this period of dysregulation by introducing movement. For example, before lining up for the transition, have the entire class jump up and down 15 times and perform 10 seat push-ups. By performing some structured big muscle movement prior to leaving the classroom, the students will wake up their systems and begin to regulate for a change. Transition will be much smoother with the students more regulated.

Big Muscle Activities

- Erase or wash blackboard or dry-erase board, stretching up high.
- Push trash cans or clean cafeteria tables.
- Carry a plastic crate with books to library, with 5 percent of child's body weight.
- Carry plastic water jugs to another classroom or to cafeteria.
- Push breakfast cart back to cafeteria.
- Hold an open gym time: run laps, shoot baskets.
- Squeeze, roll, pinch, or pull clay.
- Use a fanny pack to carry a weighted item.
- Carry a backpack (if the student does not have any back-related problems) with 5 percent of body weight. This is helpful also during transition when walking into class or from the bus to support regulation.
- Kick legs against a theraband (stretchy exercise band) or bungee cord, which is tied around the front of student's chair.
- Push chairs to a new location, with old telephone book fastened with heavy tape under seat of chair.
- Perform seat push-ups: while seated, student places hands on chair on each side, raises body and legs off the ground. Repeat 10 times.
- Do wall push-ups: like a push-up but standing with hands on wall and feet apart away from wall.
- Practice wall squats: stand with back against wall and slowly squat down, hold for five seconds, and stand back up. Repeat 10 times.
- Put chairs on top of desk at end of day, then take down chairs to start day.
- Drink from water bottles.

- Chew on sugarless chewing gum; it can be calming and organizing for many students.
- Munch on chewy snacks (e.g., raisins, pretzels).
- Rub a Velcro strip stuck under the desk.
- Squeeze fidget balls/objects from the dollar store for calming and self-regulation.
- Practice deep breathing.
- Perform yoga.
- Rub lotion on hands and arms, with a calming smell.
- Allow a daily recess. Please do not take recess away! Our children who frequently lose recess are particularly the ones who need purposeful, structured movement and play.

Each child is a unique individual and his sensory needs may also be unique. To address his needs, a sensory-friendly classroom is the best place to start. These low- to no-cost sensory strategies may be just enough to support the sensory-challenged student.

References

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