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Balancing Sensory Needs: Tools and Strategies to Support Sensory Regulation in the Classroom



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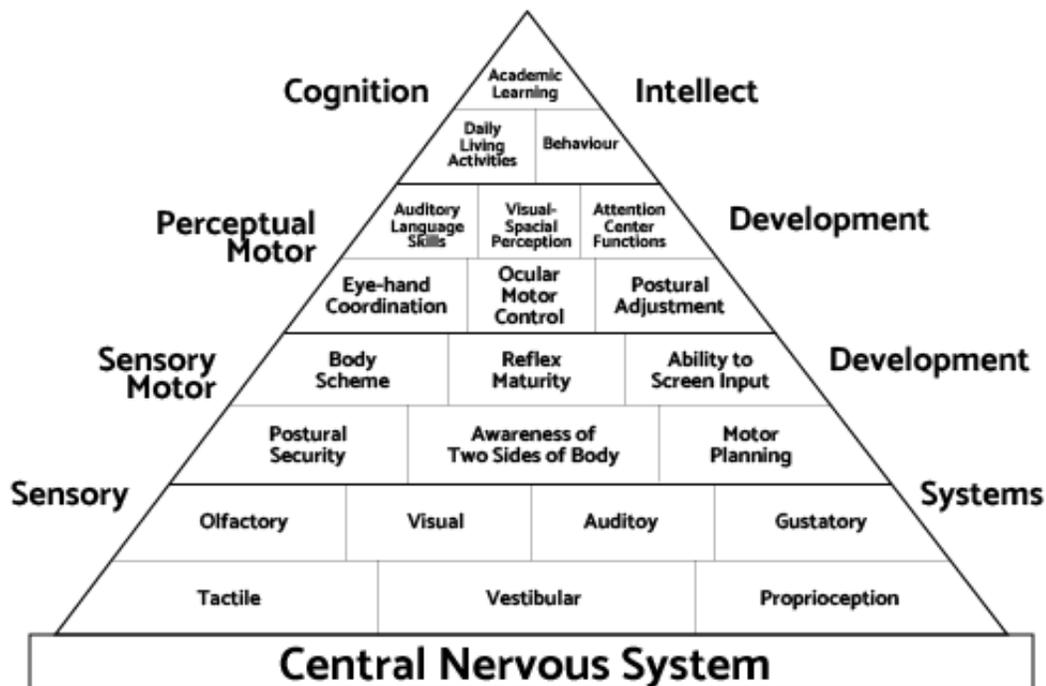
What is Sensory Integration?

Sensory integration refers to how a child takes in information from the environment, makes sense of it, and then responds to it.

There are 8 sensory systems:

Vision (Sight)	Gustatory (Taste)
Auditory (Hearing)	Proprioception (Body Awareness)
Tactile (Touch)	Vestibular (Movement)
Olfactory (Smell)	Interoception (hungry, tired...)

The Learning Pyramid



Trott and Taylor, 1991

How Does Sensory Integration Impact Student Success?

Sensory Integration lays the foundation for a child’s success throughout the day, including (*but not limited to*):

- Attention
- Self-regulation
- Behavior
- Motor coordination
- Playground access
- Organization of materials
- Social interactions
- Learning Readiness

What is Sensory Dysregulation?

When the sensory systems become overstimulated (or under stimulated), the brain can no longer process information in an adaptive manner. A dysregulated brain becomes *hyperresponsive* (overreacts) or *hyporesponsive* (under reacts) to any additional sensory information that comes in. Often, the system becomes “flooded” and stops functioning at an optimal state.

**Oftentimes, a dysregulated brain and body leads to “behavior challenges.”*

Sensory Modulation Challenges

<i>Over-responsive</i>	<i>Under-responsive</i>
<p style="text-align: center;"><u>Visual Input</u></p> <ul style="list-style-type: none"> • Difficulty with eye contact • Uncomfortable with bright lights • Easily distracted by visual stimuli 	<p style="text-align: center;"><u>Visual Input</u></p> <ul style="list-style-type: none"> • Ignore visual cues • Not notice changes in environment • Seeking stimulation (spinning objects, bright lights, etc.)
<p style="text-align: center;"><u>Auditory Input</u></p> <ul style="list-style-type: none"> • Exaggerated response to noise • Easily distracted by background noises • Cover ears, avoidance, anxiety 	<p style="text-align: center;"><u>Auditory Input</u></p> <ul style="list-style-type: none"> • Not responding when calling name out • Seemingly ignore instructions • Humming or other noises to help focus

<i>Over-responsive</i>	<i>Under-responsive</i>
<p data-bbox="354 359 673 394"><u>Proprioceptive Input</u></p> <ul data-bbox="253 432 779 646" style="list-style-type: none"> • Avoid climbing, jumping • Clinging to adults • Uncoordinated (difficulty with stairs) • Reluctant to participate in movement activities • Often mislabeled as “lazy” 	<p data-bbox="997 359 1317 394"><u>Proprioceptive Input</u></p> <ul data-bbox="896 432 1469 684" style="list-style-type: none"> • Crave deep pressure, movement • Rough and tumble play • Clumsy and uncoordinated • Self-stimulation (banging head, chewing objects) • Stomping, excess force • Poor personal space
<p data-bbox="386 747 641 783"><u>Vestibular Input</u></p> <ul data-bbox="253 821 760 1035" style="list-style-type: none"> • Avoid playground activities, sports, games • Nausea, vomiting, dizziness, car sickness • Poor balance, uncoordinated • Overly cautious 	<p data-bbox="1029 747 1284 783"><u>Vestibular Input</u></p> <ul data-bbox="896 821 1414 1035" style="list-style-type: none"> • Poor balance, falls often • Seeking behaviors <ul data-bbox="992 894 1414 999" style="list-style-type: none"> • Fidgeting, rocking • Spinning, swinging, jumping • Head in inverted positions • Decreased body awareness
<p data-bbox="412 1094 615 1129"><u>Tactile Input</u></p> <ul data-bbox="253 1167 743 1419" style="list-style-type: none"> • Tactile Defensiveness • Negative reaction to light touch or unexpected contact (aggressive) • Clothing sensitivity • Avoids messy play • Avoids large groups of people • Avoids certain food textures 	<p data-bbox="1055 1094 1258 1129"><u>Tactile Input</u></p> <ul data-bbox="896 1167 1463 1381" style="list-style-type: none"> • High pain threshold • Seeks intense sensory input (rough play, squeezing objects) • Unaware of touch input • Poor body awareness • Clumsy/bumps into things

Strategies to Support Sensory Processing and Modulation

General Organizing and Regulation Input

Deep Pressure Input

- Body squeezes, tight hugs
- Resistive squeeze ball
- Chewelry, crunchy/chewy foods
- Weighted lap pads, blankets
- Bean bag chairs, pillows
- Crash pillows

Heavy Work Activities

- Animal walks
- Yoga poses, stretching
- Theraband on chair
- Seat push-ups, wall push-ups
- Wheelbarrow walks
- Carrying heavy objects
- Hold door open for others
- Wiping tables, stacking chairs
- Pushing/pulling activities

Yard Activities

- Climbing, hanging, sliding
- Pedaling friends on tricycle
- Push/pull games
- Spinners, trampolines
- Obstacle courses

Sensory Regulating Tools

- Noise-dampening headphones
- Fidget tools
- Resistive objects (clothespins, putty)
- Weighted lap pads or other objects
- Flexible seating

Strategies to Support Sensory Processing and Modulation (cont.)

Visual Processing and Modulation

- Visual schedules
- Picture cue cards for steps of activity and/or sequence of activities
- Visual timers
- Decrease clutter on tables or other play spaces
- Use slanted surfaces or easels
- Seat away from major visual distractions (flexible seating)
- Use calming area with decreased stimuli

Auditory Processing and Modulation

- Noise-dampening headphones
- Utilize quiet zones
- Lower volume of your voice, slow pace
- Pair visual cue with auditory directions
- Advanced notice of loud activities
- Social stories for fire alarms, bell schedule, etc.

Vestibular Processing and Modulation: Linear and Rotary Input

- Boat rocking, blanket rides
- Swinging, spinning, rolling
- Toe touches
- Sensory cushion, spinning chair, wobble stools
- Standing to work

Tactile Processing and Modulation

- Allow personal space
- Gradual exposure to tactile input
- Modify art options (popsicle stick, paint brush for glue)
- Provide opportunities to engage in varied tactile play (sand, playdoh, fabric textures)
- Provide organizing sensory breaks
- Rubbing hands together, clapping, thumb presses into palm

Movement and Sensory-Based Strategies in the Classroom

To Calm the Body

- Movement breaks (structured, heavy work component)
- Deep pressure (arm squeezes, weighted objects)
- Heavy work/resistive exercises –carrying heavy objects (books, basket of water bottles), stacking chairs, moving furniture, seat/chair/wall push-ups, pedaling friends on 2-seater tricycle)
- Slow, linear rocking (“row your boat,” rocking puppy, rocking chair, swings)
- Yard activities (climbing, hanging, pushing tires, carrying heavy baskets/objects)
- Wheelbarrow walks, animal walks (bear, crab)
- Hand fidgets (squeeze balls, resistive cord bracelets, resistive putty, marble/mesh)
- Resistive toys (pulling apart Legos or Unifix cubes, putty, clay)
- Blowing activities (blow watercolor paint through straw, blowing cotton balls across the table or floor), Chewelry
- Sucking through straws and chewy foods at snack (water through a silly straw, applesauce or yogurt through straw, beef jerky, bagels, dried fruit)
- Low lighting, slow music
- Limit number of visual distractions (quiet space to work, relaxation cave)

To Alert the Body

- ❖ Fast starts/stops, rotary movement (log rolling, sit-n-spin)
- ❖ Jumping, bouncing on ball, crashing into pillows, chair push-ups
- ❖ Wheelbarrow walks, animal walks (frog, bear, crab)
- ❖ Light touch (feathers, tickles)
- ❖ Hand fidgets (different textures such as Koosh, beads, cord bracelets)
- ❖ Playground games (climbing, running, spinning)
- ❖ Movement games (Red Rover, Mr. Fox, Freeze Dance, etc.)
- ❖ Heavy work tasks (stacking chairs, carrying heavy objects, moving furniture, etc.)
- ❖ Inverting head in space (touching toes while standing)
- ❖ Blowing (bubbles, through straws), sucking (water through straw), chewy foods (beef jerky, bagels), crunchy foods at snack (pretzels, carrots, apples)
- ❖ Bright lighting, fast music (vary the rhythms)

Daily Calming Movement Descriptions

1. **Body Squeezes** – Have children use their hands to give firm squeezes up and down their arms, legs, and head.
2. **Seated Push-ups** – Children sit on the floor crisscross with their hands flat on the floor next to their knees. They then push their bottom off the ground using only their arms. Repeat 10 times.
3. **Wall Push-ups** – Have children stand with their arms shoulder width apart against the wall and feet 1-2 feet from the wall. Bend at elbows to bring whole body toward wall in push-up form. Repeat 10 times.
4. **Seat Walk** – Children sit on the floor and scoot across the floor using only their legs and bottom (no arms). Walk from one side of the room and back, to the center of the circle, etc.
5. **Crab Walk** – Starting from a seated position, children push up on their hands and feet to hold bottom off the ground. Walk across the room, during transitions, etc.
6. **Bear Walk** – Children walk across the floor on their hands and feet (keeping their knees off the ground). Walk from across the floor, during transitions, etc.
7. **Cross Crawls** – Children stand up and simultaneously lift one knee and touch it with the opposite hand (right hand touches left knee). Repeat alternating sides 10 times.
8. **Rocking Puppy** – Children start on hands and knees and then rock their body forward and backward to move their weight over their arms and then their legs. Repeat 10 times.
9. **Tables** – Starting from a seated position with legs extended out, children push up on their hands and feet to raise their bottom off the floor, lifting high enough to have a flat stomach (“table”). Hold for 10 seconds and then lower. Repeat 3 times.
10. **Downward Dog** – Stand with body in upside down “V” position with hands and feet on the floor, body bent at angle from waist. Hold for 10 seconds. Repeat for 2 sets.