

Self Regulation: Strategies Approach

Be Super!

Be Yourself!

Be Super Self!

Meeting your Needs

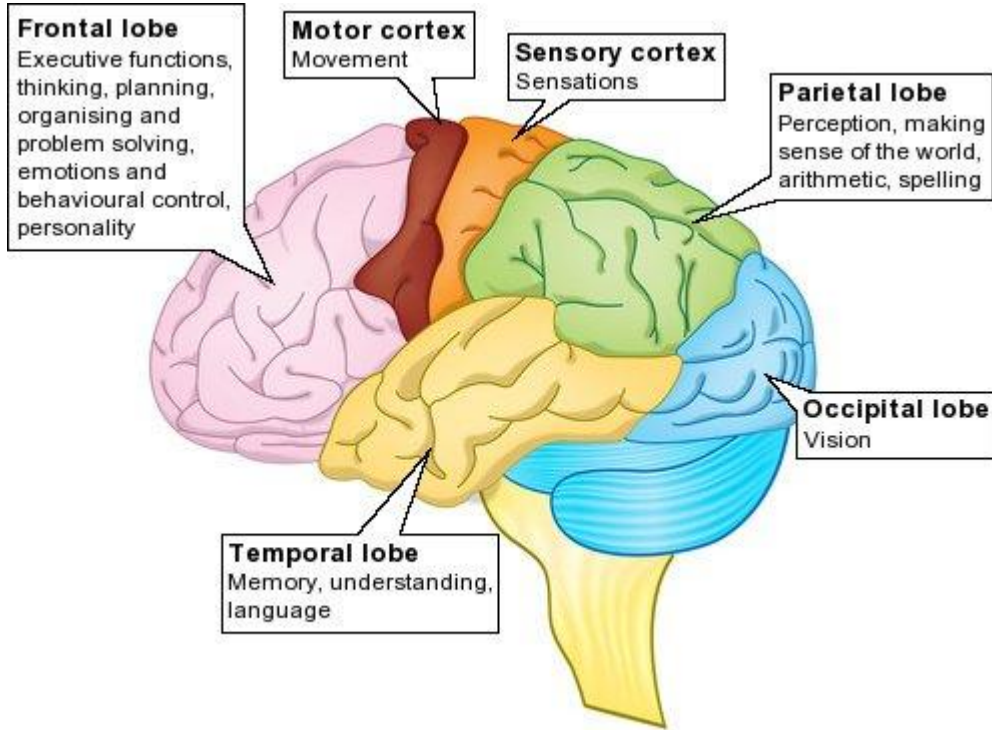
- What do you hope to achieve by implementing the Self Regulation Sensory Strategies?
- What issues do you hope that this self regulation sensory strategies will address?
- What are some of the frequent/target behaviors that would warrant the use of self regulation sensory strategies?
- On a scale of 1-10 (10 being the worst), rate the behaviors that you experience with your child.

Meeting the Whole Child

- **HEALTHY:**
 - Promote self-care/self-nurturance, resilience & recovery
- **SAFE:**
 - Help to create a safe space in the school environment
- **ENGAGED:**
 - Increase skill acquisition for social-emotional development
 - Improve communication
- **SUPPORTED:**
 - Provide opportunities for calming or alerting the nervous system
 - Facilitate prevention and de-escalation strategies
- **CHALLENGED:**
 - Promote increased independence & academic success

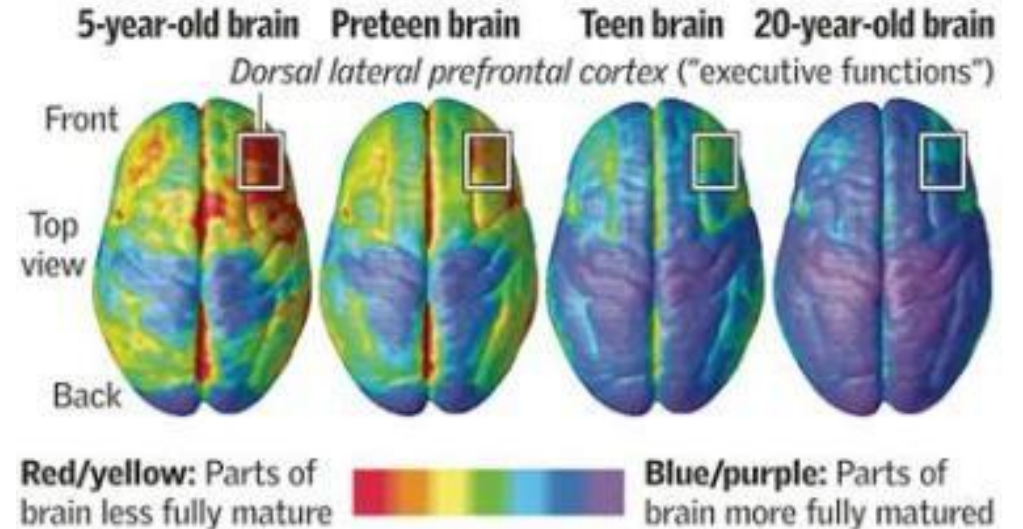
THE BRAIN

Adolescence is now defined as ages 10 -25



Judgment last to develop

The area of the brain that controls “executive functions” — including weighing long-term consequences and controlling impulses — is among the last to fully mature. Brain development from childhood to adulthood:



Sources: National Institute of Mental Health; Paul Thompson, Ph.D., UCLA Laboratory of Neuro Imaging

Thomas McKay | The Denver Post

What is Sensory Processing?

Sensory Processing is the brain's ability to interpret and organize information received from the environment or from the body's senses

- Allows us to make adaptive, appropriate, and functional responses
- Directly impacts development of motor control, behaviors, and emotional responses

Take in information through senses → process information → make purposeful response

Why are good Sensory Processing Skills important?

Attention and Focus	Time Management
Organization	Peer Interaction
Task Completion	Learning
Self-Regulation**	Emotional Health

What are the Sensory Systems?

The Sensory Systems:

- Visual, Auditory, Taste, Smell, Touch – **environmental** sensations that tell us what is coming from outside the body
- Proprioceptive, Vestibular and Interoceptive – **body** sensations that tell us about the body internally, in space and how it is moving

Visual System



- Sight
- Filtering visual information
- Visual scanning and discrimination

Auditory System

- Hearing
- Ability to filter sound
- Ability to organize and process what is heard



Oral - Gustatory



Not just taste:

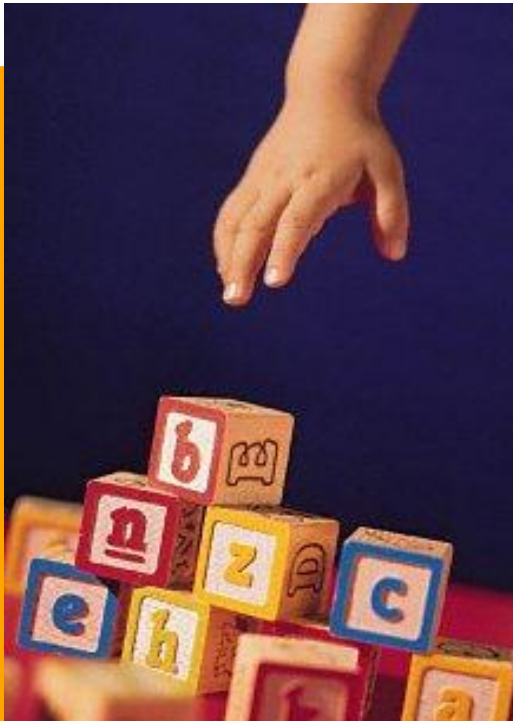
- Texture
- Tongue position
- Speech

Olfactory

- Smell
- Preferences and/or sensitivities to various scents



The Tactile System



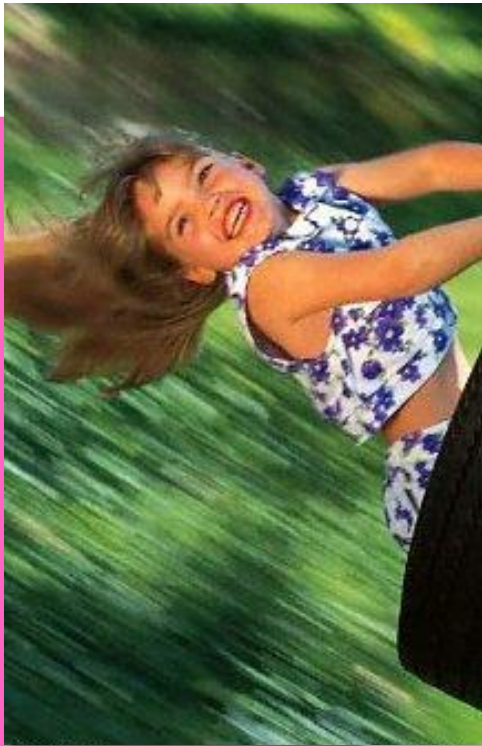
- Touch
- Recognizing an object by feel
- Information about shape, size, temperature, and pain

Proprioceptive System

- Awareness of position and movement of the body
- Sensation from muscles and joints
- Activities that engage this sense often involve pulling or lifting heavy objects
- This can have a calming or alerting effect on children who need this input



Vestibular System



- The sensation of any change in position, direction, or movement of the head
- You may be under- or over-responsive to movement which will impact your overall activity
- Linear and rhythmic movement is calming and organizing while rotary movement is alerting

Interoceptive System



- The sense of the physiological condition of the body.
- The primary interoceptive receptors in the cerebral cortex.
- Feelings from the body that include pain, temperature, muscular and visceral sensations, hunger, thirst.

What is Sensory Processing Disorder?

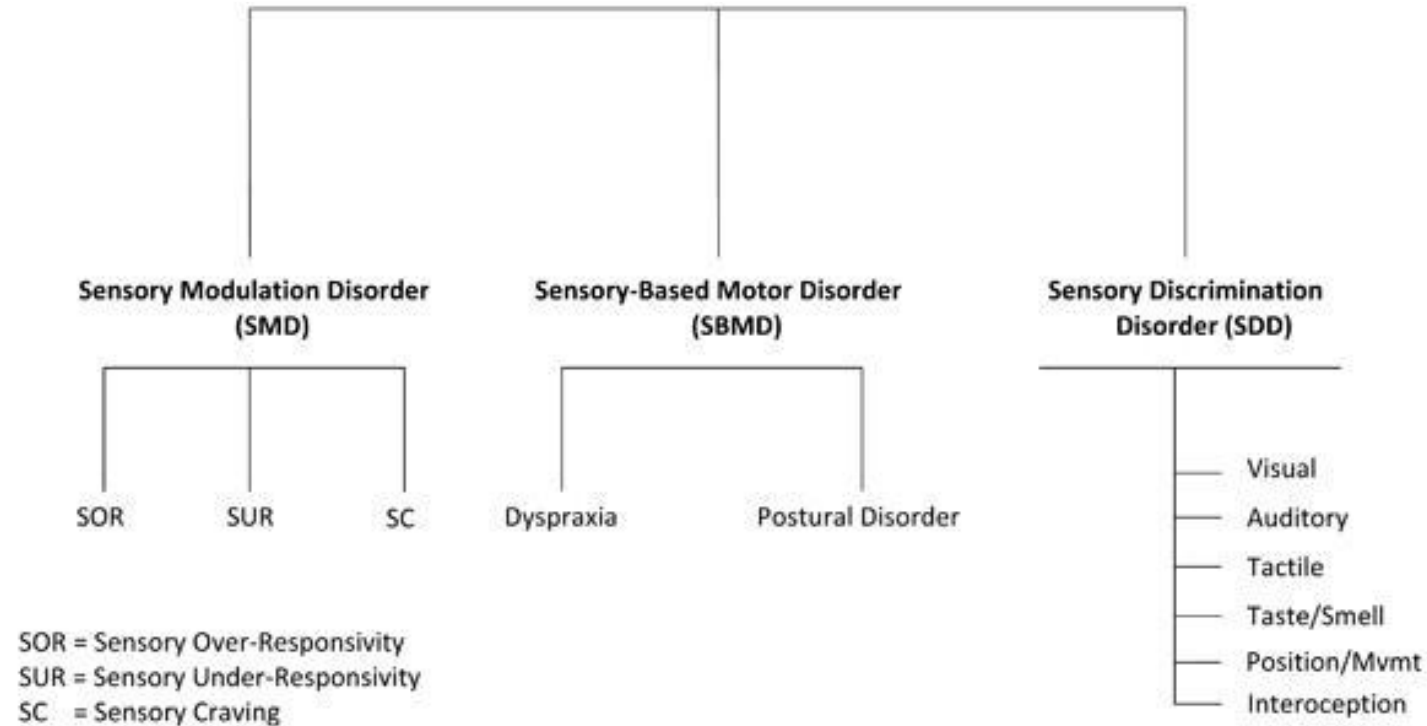
- A disruption in the process is called **Sensory Processing Disorder (SPD)**.
- Occurs when there is a glitch in the system that disrupts daily routines and activities.
- Can interfere with the ability to learn, interact with others, perform tasks and participate in activities.

Sensory Processing Disorder

- Sensory processing problems are commonly associated with disabilities such:
 - ADD
 - ADHD
 - Learning disabilities
 - Pervasive developmental disorder
 - Intellectual Disabilities
 - Autism
- Behaviors seen in children with Sensory Processing Disorders are most often seen during transitions, high stimulation situations, low stimulation situations, interruptions to routine, or when demands are placed.

Symptoms of Sensory Processing Disorder

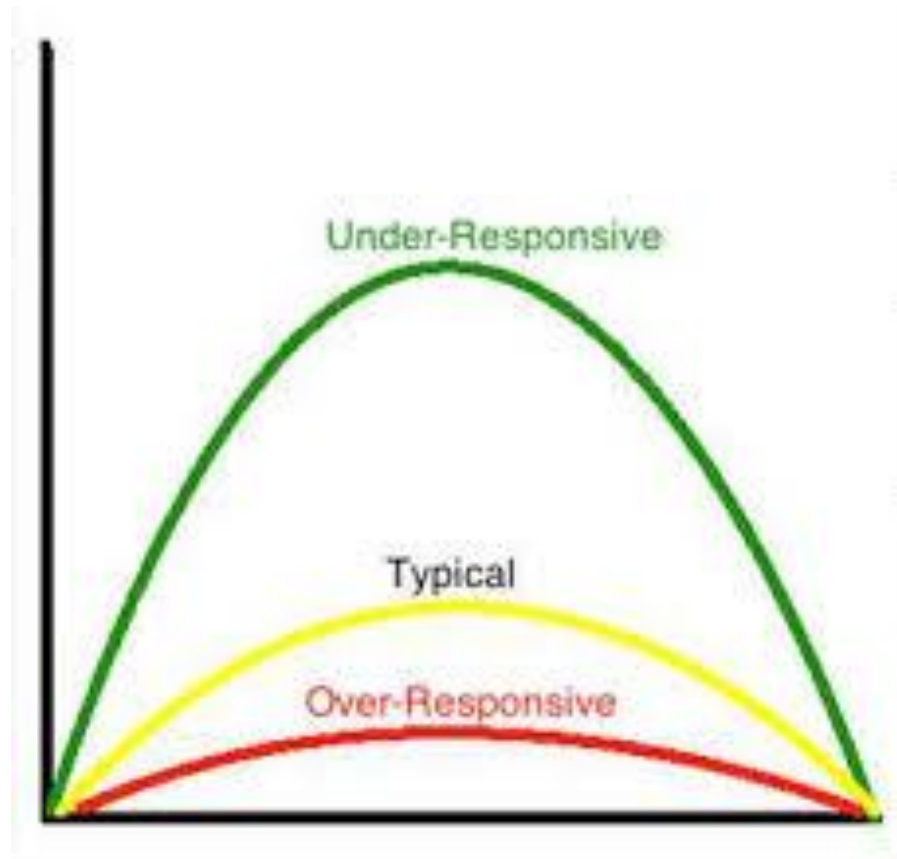
Sensory Processing Disorder (SPD)



What is Modulation/Regulation?

- The ability to take in sensations, organize and regulate the reactions to sensory input, AND produce a response in an adaptive manner that allows for optimal performance
- How successfully our sensory systems process the stimuli they receive affects how we feel and behave. When we're voluntarily managing our feelings and behaviors, we're self-regulating.
- Teaching sensory modulation and self-regulation results in improved focus, function, communication, and social emotional wellness

Response Threshold Curve



From Sensational Brain

Sensory Avoiders (over responsive)



Sensory – Based Behaviors:

- Maybe shy, quiet, withdrawn
- Overwhelmed in cafeteria or gym class
- Covers hands with ears with unexpected sound/startles easily
- Withdraw from touch
- Avoids getting messy in glue, sand, dirt, paint, tape, wet, and slimy textures
- Sensitive to bright lights
- Distressed with hands or face washed
- Sensitive to tags in clothes or certain fabrics
- Avoids swings on playground
- Intense reactions to minor injuries

3 Major Patterns of Sensory Modulation

OVER-responsive to sensory input (sensory avoider; hyper-reactive)

- Responds to sensory input more intensely, more quickly, and/or for a longer time
 - Notices stimuli more easily than others
 - May occur in one or more sensory systems

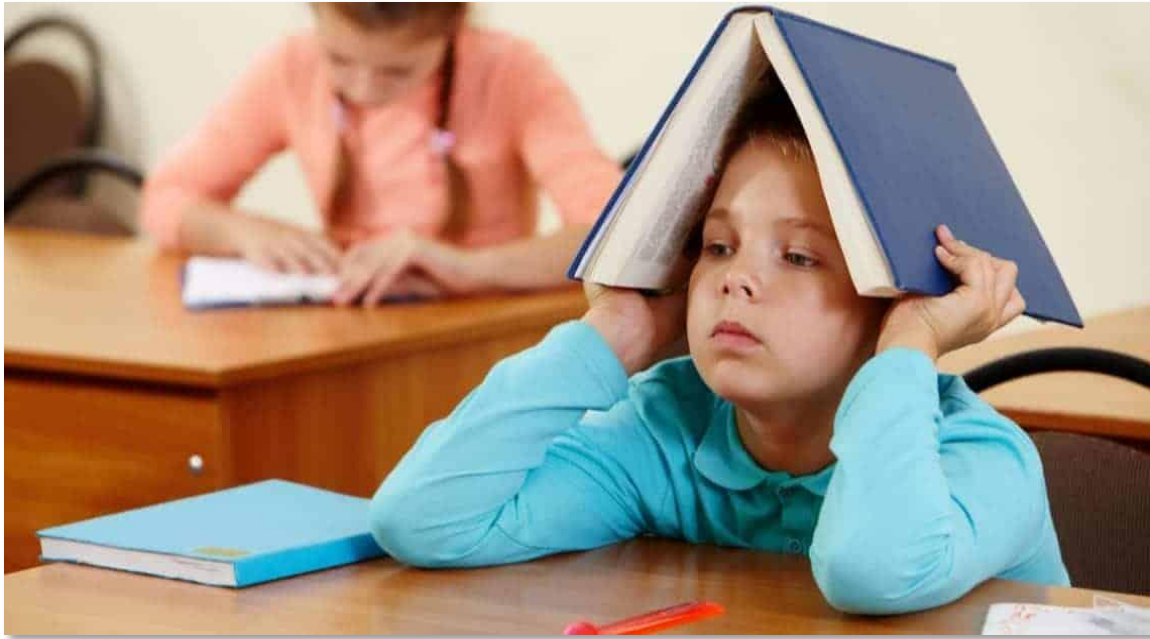
Appears:

- Sensory avoidant, shy or withdrawn
- Hyper-reactive to a non-noxious situation
- Brains working “Too Fast” (though body might not be)

Responds to:

- Calming activities
- Deep Pressure
- Reducing stimuli in environment

Passive/Withdrawn (under responsive)



Sensory – Based Behaviors:

- Quiet or passive, do not participate in class
- Withdrawn
- Difficult to engage
- Self-absorbed
- Poor body awareness / clumsy
- May not perceive objects that are too hot or cold
- May not notice pain in response to bumps, falls, cuts, or scrapes

3 Major Patterns of Sensory Modulation

UNDER-responsive to sensory input (passive/withdrawn)

- Responds less to sensory input; has a high-threshold
 - Misses stimuli that others notice easily
 - System needs stronger input to activate

Appears:

- Passive or withdrawn
- Appear “too slow”
- Not tuning in
- May also appear sensory seeking

Responds to:

- Stimulating activities to help alert/wake up the sensory systems

Sensory Seekers (sensory craving)



Sensory – Based Behaviors

- Rocking in seat
- Bouncing
- Rip paper when writing
- Sitting on knees or feet
- Difficulty standing in line or near other kids
- Constantly touching other people or objects
- Walks on toes
- Fidgeting
- In constant motion

3 Major Patterns of Sensory Modulation

Sensory Seekers (sensory seeking; passive/withdrawn)

- Has a high-threshold
- May miss stimuli that others notice easily because they are moving too fast
 - System needs more frequent and intense input to activate

Appears:

- Sensory seeking
- "Too Fast"

Responds to:

- Stimulating and alerting activities

Understanding Behavior

- A behavior is an observable and measurable action or response to stimulation that a person says or does
- Four functions of behavior:
 - regulation
 - escape/avoidance of a non-preferred task,
 - seeking positive or negative attention,
 - receiving a tangible item
- When a behavior is linked to self-regulation, it is important to acknowledge the behavior, address the regulation, and find appropriate alternatives for that child
- Seek additional consultation from a behavior specialist

Self Regulation Strategies

A multi-tiered approach to self-regulation that addresses the whole child

Multi-disciplinary (OT, Behavior, Speech, Special Ed, Reg Ed teachers) collaboration

Identify student concern

- Sensory
- Emotional
- Behavioral
- Executive function
- Academic needs

Protocol

- **A physically and emotionally safe and therapeutic spaces** to address sensory regulation needs and support a trauma-informed school community
- **Equipped with specific sensory equipment and activities** that are designed to benefit specific sensory processing difficulties

1 - Never

2 - Occasionally (1-3 times a week)

3 - Sometimes (daily)

4 - Frequently (multiple times in a day)

5 - Always (constant display of behavior)

Does Your Student Have Sensory Processing Challenges?

Review the key (left) and check the corresponding number that best represents your observations of the frequency/intensity of the behavior.

Student: _____

Filled Out By: _____

Date: _____

Tactile System

Over-responsive

- | | | | | | |
|---|----------------------------|---------------------------------------|---------------------------------------|----------------------------|----------------------------|
| 1. Difficulty standing in line or sitting beside other students | <input type="checkbox"/> 1 | <input checked="" type="checkbox"/> 2 | <input checked="" type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| 2. Dislikes games in playground or gym | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| 3. Avoids 'messy' play activities | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| 4. May react aggressively to unexpected touch, especially light touch | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| 5. Dislikes certain clothing, fabrics | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |

Under-responsive

- | | | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 1. Doesn't seem to notice when someone touches him or her | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| 2. Leaves clothes twisted on body | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| 3. Touches other students or objects frequently | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| 4. Uses too much pressure when writing | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |

Tactile Stimuli

- Do not force students to touch materials if they have an aversion
- Avoid sticky materials or present them in a Ziplock bag
- Do NOT say “yuck” or make a face when you touch the materials!
- Allow the use of fidgets
- Use weighted blankets, vests, or lap pads
- Teach with tactiles

Visual System

Over-responsive

- | | | | | | | | | | | |
|---|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|
| 1. Discomfort with bright light/ fluorescent lighting | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 2. Prefers dark environments, or prefers the lights turned off in the classroom | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 3. Difficulty making eye contact | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 4. Easily distracted by visual stimuli in the room; i.e., movement, decorations, toys, windows, doorways etc. | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 5. Loses place when copying from a book or the board, or when reading | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |

Under-responsive

- | | | | | | | | | | | |
|---|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|
| 1. Misses objects in competing backgrounds | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 2. Finds it difficult to name or match colors, shapes and sizes | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 3. Likes bright, reflective or spinning objects or lights | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 4. Difficulty writing e.g. spaces between words, letter formation, letter size etc. | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 5. Poor ball skills - catching or throwing | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |

Visual Stimuli

- Clear clutter
- Minimize visual stimuli on the walls and overhead
- Consider covering fluorescent lights with colored paper or light covers
- Use lamps or natural light when possible
- Use dividers and study carols to create separation of spaces
- Increase white space on pages
- Add visuals to labels and schedules
- Have a clearly defined area in the classroom

Auditory System

Over-responsive

1. Easily distracted by background noise
2. Seems to ignore instructions or is slow to follow instructions
3. Difficulty participating in group work
4. Dislikes noisy settings
5. Responds negatively to unexpected noise
6. Distracted by noises others do not notice

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
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<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Under-responsive

1. Appears to not hear what you say (e.g. when you call students name)
2. Makes noises (e.g. humming) to keep focused on task
3. Difficulty remembering or understanding what has been said (e.g. when given instructions for a task)
4. Speaking loud or having outbursts

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Auditory Stimuli

- Encourage quiet and calm most of the time
- Eliminate background noise when possible
- Keep phone ringers on a lower volume
- Provide noise reducing headphones or headbands
- Cover speakers with cardboard if you don't have volume control
- Prep students for loud noises when possible (i.e. fire alarms, announcements, etc.)
- Play calming music

Proprioceptive Stimuli

- Recess is a must!
- Build in movement breaks
- Allow gum or chewy snacks
- Tie a theraband to student's chair legs to allow for kicking and pushing
- Allow for frequent position changes

Vestibular Stimuli

- Build in movement breaks
- Use flexible/alternative seating
- Use tape on the floor to allow and/or limit movement
- Post visuals of acceptable movement in your classroom



Step One

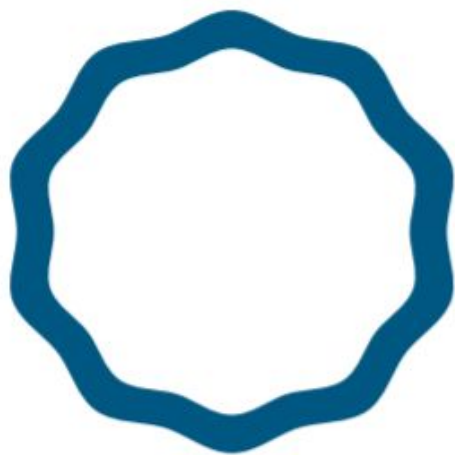


Get a comfy seat



Back to work!

Step Four



Step Two



Choose a calm down tool



Set a timer

Step Three



What it Means to Self-Regulate

The ability to adjust level of sensory

AND

Direct how emotions are expressed

In socially acceptable ways

To achieve goals

Best Practice

- Make notes on ways that the child's function in the home is affected after using the sensory room
- If there are significant behavioral issues, look for triggers
- Use sensory activities that offer predictability and set the stage for positive experience

Empowering Teachers, Parents, and Paraprofessionals with Practical Strategies

At the top right of the www.mypts.com homepage are the portals to our Teacher and Parent Resource Websites





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