


+ Understanding Sensory Processing Abilities and Challenges in Preschool:
Resources and Supports for Educators




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3-5 years old →

+ What is Sensory Processing:


- Experience world through our senses
- Brain filters out information that is most important, creates appropriate response
- Use information from senses to organize our behavior and interact with world
- Interaction between brain & body allows for positive interaction with world
- Can fluctuate depending on how we feel



tired / depression affects sensory processing

+ Importance of Sensory Processing

- Allows for successful participation in daily activities
- Use sensory information to regulate our bodies and behavior
- Building blocks for learning



+ Key Sensory Systems

- Auditory (Sound)
- Visual (Sight)
- Tactile (Touch)
- Gustatory (Taste)
- Olfactory (Smell)
- Proprioceptive (Muscle and Joint Input)
- Vestibular (Balance and Movement)



Muscle & Joint Input — is
How your Body moves in
relationship to Environment

+ Example of Sensory Processing

- Teacher says "put on your coat"
- You respond by:
 - 1) focusing your attention on the person speaking and hearing what is said
 - 2) screening out other information going on around you
 - 3) seeing the coat and making a plan for how to begin
 - 4) seeing the armpit openings and sensing muscle and joint position, which allows you to know where to put your arms in relation to the coat sleeves
 - 5) Using your touch awareness, you feel that the coat is on your body correctly
 - 6) Relying on adequate motor planning, touch awareness, and fine motor skills enable you to zip or button your coat

+ Example: Circle Time

- What are the expectations (what the child needs to do)?
- Which sensory systems are involved?



+ Breakdown in Sensory Processing

- Difficulty judging whether sensations are important or insignificant, safe or dangerous
- Spend much of daily life reacting to unpleasant sensory stimuli, or trying intensify sensory input to regulate nervous system



+ Characteristics of Differences in Sensory Processing

- Intense reactions to sensory input (ie: touch, auditory, taste)
- Unusual behaviors occur as a result of trying to manage distorted information
- When you can't get your sensory needs met, you become unhappy or irritable

+ Characteristics of Differences in Sensory Processing

- Actively avoids sensory stimulation
- May not want to participate in novel activities
- Adds movement, touch, sound, and visual stimuli to every life event
- Lacks caution in play, impulsive in movement
- Displays excitability, hyperactivity, difficulty sustaining attention and completing tasks
- Notices more things in environment than peers
- Not notice what is going on

+ Examples of Differences in Sensory Processing

Signs or behaviors observed	What it means
Seeks out intense sensory experiences, such as spinning, crashing into objects/people, constantly moving, may use too much force with tools and objects. May fluctuate between under- and over-responsiveness.	Under-reactive to sensory stimulation. <i>They need more sensory stimulation</i>

+ Examples of Differences in Sensory Processing

Signs or behaviors observed	What it means
Distractible, withdraws when touched, avoids certain textures, clothes, or foods. Demonstrates fearful reactions to ordinary movement activities, such as on the playground. Sensitive to loud noises	Overly sensitive to touch, movement, sights, or sounds

+ Examples of Differences in Sensory Processing

Signs or behaviors observed	What it means
Constantly on the move or may be slow to get going and then fatigue easily.	Difficulty modulating sensory information, which results in unusually high/low activity level

+ Example: Putting Coat On

- If classroom is busy, child may have difficulty
 - Focusing attention to speaker
 - Filtering sound
 - Locating his coat and making a plan
- May take additional time to complete entire task
- May not want to wear his coat
- May have difficulty accurately orienting and placing arms in coat
- May leave coat twisted on his body



+ Example: Circle Time

- Difficulty sitting still- constantly moving, fidgeting
- Difficulty focusing his attention
- May miss verbal directions
- Difficulty imitating gestures with songs



+ How Sensory Processing Impacts Learning

- Organizational abilities
- Attention/focus
- Motor skills
- Social behaviors
- Emotional regulation
- Communication skills



+ Regulation

- Self-Regulation= ability to maintain homeostasis in order to engage in daily occupations (play and learning)
- Children use sensori-motor strategies to calm
 - Mouthing or chewing objects
 - Toe walking, rocking
 - Removing oneself from a distressful situation (fright or flight)
- Calm, organized state supports learning and positive interactions
- Children with sensory processing difficulties are constantly trying to achieve homeostasis.

homeostasis = internal Balance

+ Purpose of Sensory Supports and Accommodations

- IMPROVE active participation, NOT change sensory processing patterns
- Teach self-regulation, flexibility, adaptation
- Positive experiences → increased engagement, integration of senses, regulation, decreased anxiety.

+ Goal is to help each child maintain regulation. . .


- Through a range of sensory experiences
- Through a range of environments
- Through a range of people,
- Through a range of emotions and challenges
- Through attending to interactions, activities, teachers, and tasks.

+ Key Things to Remember


- Sensory input can be powerful to children
- Classrooms provide a multitude of sensory experiences
- Monitor responses
- RESPECT choices
- DO NOT impose sensory input if child is not tolerant of it.

+ Strategies to Support Regulation

- Think about your approach
- Recognize & validate the discomfort these students experience
- Read child's cues/body language, level of engagement. Follow their lead.
- Provide extra time.
- Be a detective!



+ How a child's environment and day-to-day activities are presented can have a huge impact on his engagement and participation in classroom activities



+ Sensory Strategies to Support Regulation

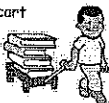
Alerting	Calming
Bright lights/colors	Low lights/cool soft colors
Loud music	Soft music
Fast, unpredictable movement	Slow, rhythmic movement
Light touch	Firm touch, deep pressure
Fast respiration	Slow, deep breaths
Spicy, crunchy, sour foods	Chewy foods

+ Sensory Strategies to Support Regulation

- Firm, sustained pressure, rhythm, oral-motor input, exercise = calming
- Deep pressure touch & proprioception = "Glue" for the nervous system (calming)
- March from one activity to another
- Provide structured, active movement activities prior to activities requiring sustained attention/focus (ie: circle, fine motor)


+ Sensory Strategies to Support Regulation

- Heavy Work
 - Simple, fun way to provide input to proprioceptive system
 - Calming and organizing effect on body
- Activities:
 - Jumping,
 - Lifting a heavy object- stacking chairs
 - Pushing a heavy object- furniture, kids shopping cart filled with weighted pillows, doing wall push-ups
 - Carrying heavy objects- phonebook disguised as present, box of toys, heavy backpack
 - Eating something chewy or resistive



+ Sensory Strategies to Support Regulation

- Oral input
 - Muscles in and around the mouth are active when stressed
 - Can have a powerful impact on calming, relaxing, organizing
 - Strategies:
 - Have sports bottle with water available on desk
 - Drink from a straw at snack/meals
 - Provide foods that are crunchy, chewy, sour, salty
 - Tic-tacs, lifesavers, gum
 - Identify something that is OK to chew on




+ Environmental Modifications

- Limit amount of visual material you have hanging on walls and from ceilings
- Create clearly defined boundaries for classroom spaces and materials
- Limit extraneous auditory input
- When possible, prepare child who is sensitive to noise for loud, alarming noises (fire drills).

+ Changes in Routine

- Have schedule of day posted or review schedule during circle. Highlight changes from typical routine
- Discuss or create a "story" about unexpected events before they occur to help children prepare and know what they can do to
- Provide visual and/or verbal warnings prior to transitions, loud noises, bright lights, etc.



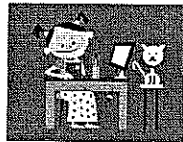
+ Other Classroom Accommodations/Modifications

- Provide alternative seating
 - Rocking chair
 - Disco seat
 - Sitting on felt square or carpet square
 - Weighted pillows or weighted stuffed animals
 - Sit directly in front of teacher
 - Sit at end of circle
- For students who have difficulty standing in line, allow them to be first or last during transitions



+ Other Classroom Accommodations/Modifications

- Provide fidgets at circle time
- Consider height of desk and chair.
 - Feet flat on floor
 - Back supported
 - Hips and knees at 90 degrees
 - Table surface above beltline
- Create quiet, well-defined break area in classroom
 - Pillows, heavy blanket, large bean bag
 - Calm strip, picture book about being calm



+ Understanding of sensory differences and implementation of effective strategies will increase educational success and development of meaningful social engagements

