Sensory Processing and Self-Regulation for Preschoolers

OBJECTIVES

- Gain knowledge of the basic sensory systems
- Gain understanding of the sensory systems in relation to behaviors
- Learn how to implement appropriate sensory strategies to address age-appropriate sensory needs
- Develop strategies to promote self-regulation in preschoolers in multiple preschool environments

Did you know?

- 1 out of 10 of American children have been identified with ADHD and half of them are medicated (Ostroff, 2012);
- It is estimated that 5% to 10% of typically developing children experience sensory integration problems that could benefit from therapy (Moyes);
- Sensory dysfunction can be found in up to 70% of children who have been labeled as "learning disabled"; (Moyes)
SELF REGULATION

- Ability to talk about and express feelings and monitor and manage our behaviors in healthy ways.

Self Regulation...

- Handle frustration well
- Control his/her anger
- Show patience
- Accept another choice when their first choice is not available
- Cooperate with others
- Share with others
- Listen to and respect others
- Calm self
- Play well with others

* Source: Denver Center for Radiant Children

• Any strategy is only as effective as the relationship it is built upon.
Relationship

When we talk about self regulation we have to begin with relationship...

What Kind of Connection Do You Have?

- Do you know each child's strengths, interests, challenges?
- Do you know if they are bringing any extra "baggage" to school?
- Are the children able to recognize and/or label their feelings?

Answering these questions will help build relationship with a child. It tells you where to begin.
Meet and Greet

- How does the preschool "greet" and welcome your children?

Universal Greetings
1. Bow
2. Bear Hug
3. Handshake
4. High Five
5. Pat Bump
6. Jazz Hands
7. Thumb Kiss

How do you make children feel welcome?

What are your preferences?

- You all indicated that you preferred different types of greetings or may want them depending on your mood!

- We all have preferences and/or aversions for certain types of sensory input.
  - Sometimes we think of these as part of our personality and "temperament".

- What are your preferences?
Sensory Processing

- [YouTube Video](https://www.youtube.com/watch?v=D1Q5ss7RLhw)

What are the types of our sensory systems?

- Tactile
- Vestibular - balance
- Proprioceptive - body awareness
- Visual
- Auditory
- Gustatory
- Olfactory

Degrees of Sensory Processing

- Modulation - brain's ability to regulate and organize our responses in an appropriate manner; well-modulated responses are said to be "integrated" when all systems are working appropriately together;

- Discrimination - allows us to distinguish differences between and among stimuli; develops with time and experience;
Responsivity

- Over-responsive — Too much information is coming in through the senses and the child may act to get rid of the stimuli —
  - May cry, scream, or complain about noise or bright lights;
  - May be easily distractible

- Or avoid it
  - May run away — “Fight or Flight”; clings to routines and may have trouble with transitions;

Responsivity

- Under-responsive — May act to increase sensory stimulation (sensory seeking)
  - Pughters, high activity level; may crave spinning, running, jumping
  - May mouth objects
  - May interrupt others and appear impulsive
  - Seeks or sensory experiences through touch, sound, vestibular etc.

  - Or, may need a lot of motivation and appear passive
    - Little interest in surroundings
    - May be slow to attend but are somewhat passive;
    - May need to hug, touch and seek tactile stimulation;
    - May rock or spin or hum

Attention

- The orienting of our minds and/or bodies toward events or information that interest us;
- Operates as a selection tool and filter that allows us to focus on what we need to see/hear/respond to;
- Can be fleeting or focused;
- Degree of attention depends on the integration of our sensory systems, mind (caring) and our nervous systems;
Sensory Break!

- Dots and Squeezes
  Find your favorite thumb. Press it into your palm. Now switch hands.
- Stretch Armstrong
  Squeeze down your arm. Switch arms. Pull on your wrist and bring across your body and stretch it (great for crossing the midline).1
- English Prince and Princesses
  Cup your fingers and hook them on each other. Stand up tall and bow to your neighbor.

Attending

- We have to know if kids are not “attending” or appearing to be engaged because they are over- or under-stimulated!
OR
- Do we have appropriate expectations for the child’s age for attention?

Behavior Commercial

- Fidget toys
- Lighting
- Standing up
- Wiggle seats
- Exercise balls, bean bags, etc.

Why do all children need to sit at circle?
Tactile

- When working, we are able to use different types of touch to gather data we need to learn and make decisions
- When not working well, may look like:
  - Not wanting to get hands dirty and avoid messy activities
  - Avoiding certain textures, such as sand; finger paint
  - Or
  - Over-using materials, such as paint, finger paint, etc
  - React negatively to being touched
  - Or
  - Excessive hugging and touching

Behavior Commercial

- Fidgets
- Clothing tags
- Clothing textures
- Toy textures

Vestibular - Balance

- The child may be unwilling to engage in motor activities, or appear to be clumsy
- They may refuse to engage in music and movement activities during group time
- They may still have trouble crossing midline by age 4 (i.e. move paint brush from hand to hand)
- How do you feel when your sense of balance is disrupted? Vertigo, sinus infections, etc.
Behavior Commercial

- Sitting on balls or T-seats
- Balance board
- Play "airplane" 'row boat' and "horsey"

Proprioception – Body Awareness

- Tells us:
  - Where our body parts are in space and how they relate to one another
  - How fast/slow our bodies move
  - How our muscles are stretching/not stretching
  - It can be conscious or subconscious

Body Awareness

- Over-responsive
- May avoid stretching and motor activities with a lot of sensory components (hopping, skipping, crawling, etc.)
- May effect eating, as certain foods require more or less muscular movement

- Under-responsive
- Lack of postural stability; may sit for long periods of time
- May have to look at body parts as they move
Behavior Commercial

- Paper Plate games - Music - low cost, flexible activities that promote positive sensory exploration for all kiddos!
- Kites
- Kickball with a paper bag
- Pounding boards or "nails"
- Stretchy bands
- Simon Says

Auditory

- May happen as a result of hearing infections or loss;
- Child may be upset by loud noises or certain noises
- Child may have difficulty recognizing sounds
- Child may have difficulty with receptive and/or expressive language

Behavior Commercial

- Tennis balls on chairs;
- Headphones, ear muffs, etc.;
- Fabric on walls and enclosures;
- Children within 10 ft. of teacher and away from wall to receive instruction;
- Children who talk very loudly or softly need to be observed to plan appropriate interaction;
Yoga Break

- Yoga can be used to incorporate motor activities in a group to help children relax and/or provide an outlet for movement.

Resources: Yokid.org

Environments

- As we move through this material, we are focusing on a preventative stance. To set every child up for success, we do bunches of work on the front end.
- Even though we have set everything up for an incident free experience, there may still be challenging behaviors.
- Think back to your individual greeting and consider what encouraged you to feel welcome.

Designing the Environment to Support the Sensory Development of All Children

- Balance of indoor/outdoor
- Lighting and sound levels
- Arts and creative materials
- Playground activities

Thinking through - Is the environment over/under stimulating? Be sure to assess after changes.
Environment
What are some of the positives in each environment?
What are some changes we could/should make?

Transitions
• One of the most reported challenges during the day is during times of transition.
• This could include classroom entry and going home, activity-to-activity; bathroom breaks, nap and eating times, etc.
• Often times children with sensory needs would benefit from extra support during transitions

"Often times children can better cope with sensory stimuli when they expect it, as opposed to when it takes them by surprise."

Carol Kranowitz - The Out-of-Sync-Child
Ways To Support Daily Transitions

- Prepare ahead-Daily Schedules
- Visual Schedules- Class and/or individual
- Announce changes - "2 minute until clean up"
- Songs or routines to support transitions

Transitions continued

Circle Time or Large Group

- Maintains Children's Attention
- Ask yourself: Have I provided enough movement before an expected quiet time?
  Providing "heavy work" to transition to calming them to circle. (Hop like a frog, or creep like a cat to get to circle)
- Using different surfaces for sitting or options for "being a part of the group" (standing or kneeling beside, fidgets, lap weights...)

Transitions to Learning

Manipulatives and Fine Motor Activities

- Sensory Smart Materials
- FUNtional Work Spaces
Facilitating Self-Awareness and Organization

- Quiet places
What is your most Challenging Transition?

On the back of the Sensory Planning Chart, write some ideas for planning a successful transition. Consider...
• When does it occur?
• What makes it challenging?
• Can you set the stage for the transition to make it more successful?
• What activities can be planned during the transition to make it work for all children?

School Environments:

Be sure that supports and strategies that work in the classroom are also used or provided in other areas of the school.

Chart it!

Incorporating Sensory Systems

• Arts/Crafts
• Housekeeping/Dramatic Play
• Blocks
• Writing and Fine motor
• Books/Library
• Centers
**Sensory Breaks**

- How would you decide when your group needs a sensory break?
  - When it gets too loud/too chaotic
  - Planned during typical times when children are apt to need more breaks or structure
  - When you sense that one or more children are not able to attend or are beginning to engage in non-productive behavior
  - When you feel "out of control"

**Safe Space**

- The purpose of creating a safe space in the classroom is for teaching children to gain composure. This is NOT a time out area or to be seen as punitive. This is also not a quiet space for reading, etc.
- Refrain from even using the terms “time out” because of connotations attached to the phrase.
Design your Safe Place

- On the back of the Sensory Planning Chart, design (using any method you choose – drawing, charting, mapping, etc.) a safe place for your environment
- Things to consider:
  - Location
  - Materials needed
  - How to include the kids in the planning
  - Guidelines for its use
  - Timeline for completion of the space

Elbow partner activity...

We have all been together for awhile now. You all have had to do some self regulation to stay with us to this point.

Write one thing you have done in the past hours on a post it note and talk with an elbow partner about what you have done.

How did you learn to use this technique for self regulation?

Teaching Self Regulation...

- Feeling Identification
- Teaching how the emotion feels in a bodily sensation
- Belly Breathing
- Pushing the pause button
- Self Talk:
  - I feel
  - I choose
  - I can
  - I can do it
More Strategies...

• Encourage self awareness about levels of excitement and relaxation throughout the day by asking children to reflect on how their body feels during these times. What do they notice?

• Observe and respond to subtle cues from children during times of worry or stress.

• Assist with transition from high energy state to a more relaxed state through the use of:
  • Counting backwards
  • Feeling their heart and notice when the breathing slows
  • Belly breathing

More Strategies...

• Pair children up with temperament and special interests in mind

• Provide verbal directives in a gentle concrete way. Avoid abstract phrases such as “over there” or “in a little bit.”

• Strategically plan for periods throughout the day where the whole class self regulates through breathing exercises, gross motor movement; music and movement, connecting activities.

Video Clip

Excerpt taken from “Challenging Behaviors in Young Children” training video.

• How does the teacher’s relationship with the child impact the outcome?

• What strategies does the teacher use to calm the child/desescalate the tantrum?

• How did the teacher lead the child to alternative actions?
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