

## **SECAC Meeting – March 7, 2019**

6:30pm to 8:30pm / McFaul Activity Center

**TOPIC:** Sensory Occupational Therapy

**Guest Speakers:** Kim White, MS, OTR/L  
Dr. Terri Bartley, OTD, OTR/L  
HCPS Occupational Therapists

SECAC chairperson, Dawn Markovic, welcomed the group, and reminded that the April meeting would be the Parent Input Forum. Any suggestions for topics could be emailed or placed in the suggestion box.

### **SUPPORTING SENSORY NEEDS IN SCHOOL**

**Guest Speakers:** HCPS Occupational Therapists – Kim White, MS, OTR/L and Dr. Terri Bartley, OTD, OTR/L

- Behaviors can be the result of a variety of things, so it *may* be related to sensory issues but all behavior is not sensory based.
- It is difficult to consistently interpret a behavior because humans are complex.
- Different environments present different sensory challenges
- Need to observe for 60 days
- Timing is important; summer is not good
- There are different approaches to assessment:  
Sensory Types/Dunn; or Sensory Processing Disorder/Miller
- For the specifics on sensory assessment, refer to the posted presentation document  
Also included: sensory diets, sensory breaks, and adding sensory to the classroom routine.

### **UPCOMING & OTHER NOTES**

- **SAVE THE DATE:**

**Saturday, April 13, 2019 from 9am-2pm**  
**Youth and Family Resource Festival**  
APGFCU Arena at Harford Community College  
Thomas Run Road, Bel Air 21014

- **Maryland Special Education Parent Involvement Survey**

Dr. Susan Austin reminded the group of the importance of completing the survey, how the parents' feedback helps guide the efforts to improve special education and related services in the local school system.

A paper copy has been mailed to the child's parent or legal guardian; or the survey can be completed online at MDPARENTSURVEY.COM by May 17, 2019.

- **Potential Outsourcing of Special Ed Transportation**

HCPS has issued *Requests for Information* to potentially outsource special education transportation services, food services, and custodial services. Parents are encouraged to provide input during this exploratory phase.

**Next SECAC Meeting: April 4, 2019 – Parent Input Forum**



# Supporting Sensory Needs in the School

Presented by:

Terri Bartley, OTD, OTR/L

Kim White, MS, OTR/L

March 7, 2019



# Introduction

Terri Bartley, OTD, OTR/L  
Kim White, MS, OTR/L

# Objectives

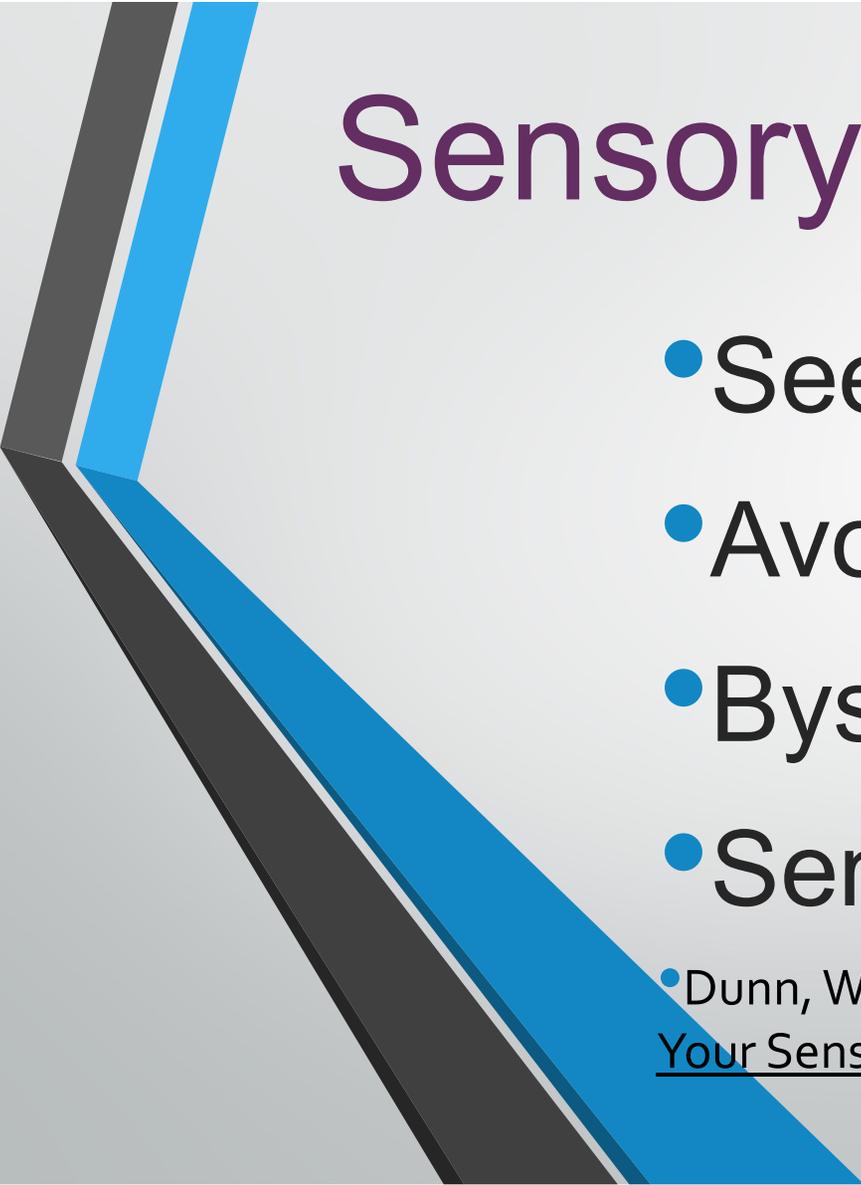
- How to Identify Sensory Needs
- Environments: Home, School and Daycare
- Sensory Assessment
- Sensory versus Behavior
- Sensory Types (Dunn)
- Sensory Processing Disorder (Miller)
- Sensations
- Addressing Sensory Needs in the School

## How do Occupational Therapists Identify Sensory Needs

- Environments: school vs home vs daycare
- Timing
- Sensory Assessments
  - Sensory Profile (Dunn)
  - Sensory Processing Measure (Henry and Colleagues)
  - Checklists
  - Observations

# No, It is not all Sensory...

- **It is difficult to consistently interpret a behavior**-especially when a child is non-verbal.
- Humans are complex. Behaviors can be the result of a variety of things and it may be related to a sensory issue.
- School is “hard” for our kids for many reasons: fear, not wanting to do something that is hard or takes more effort, not wanting to do school work because they want to do something else, something happened at home, they have learned behaviors that allow avoidance, they learn behaviors that allow them to obtain what they want
- Or it can be related to a **sensory issue**... a sock is bunched up, the shirt is scratchy, the routine or expectation for a routine is changed, they need to move and they can't sit in the seat anymore, the light is too bright, the sound is too loud, the food doesn't taste good or it feels funny, something doesn't smell right, they are constipated, their ear hurts, the supplies are just not interesting enough to pay attention to...



# Sensory Types

- Seekers
  - Avoiders
  - Bystanders
  - Sensors
- Dunn, W. (2008) Living Sentionally Understanding Your Senses.

# Seekers

- always want more. They can't get enough. They want more flavor, more brilliant colors more pulsing in their music, more dramatic clothing, fluffier pillows, more textured chairs, walls and furniture. Whatever they are interested in, they want more of it.
- love sensation and they are happier when they have more of their favorite sensations.
- want to control the amount of sensory information they receive and since they love sensation they seek more of it whenever they can.
- can be creative and come up with new ideas to find new and interesting sensation
- do a lot of seeking and that can interrupt the flow of their day.

# Avoiders

- want more of the same and nothing else.
- love order and routine, things are more comfortable when there is a plan
- do not like new sensory experiences so they try to get everything the same
- become uncomfortable when things change too quickly
- Need routine-it provides comfort because the sensations are familiar to-this familiarity keeps the brain from over reacting
- want to control the amount of sensory information they receive and they don't want very much of it.
- experience discomfort quickly and to keep from feeling this discomfort they withdraw and or can become stubborn and controlling, irritable and aggressive
- need to control everything around them to reduce the amount of sensory information

# Bystanders

- are not aware of things going on around them
- need more sensory information than others-louder, brighter, smellier, and faster in order to pay attention
- are often easy going, unaware and/or oblivious because they are not aware of things going on around them
- need more intense sensory input to notice what is going on. Increased intensity gives the brain more information.
- like things that weigh more, change color, have high contrast, move
- may miss important salient information (because it doesn't "grab" their attention) causing errors
- can tolerate more situations

# Sensors

- keep track of everything
- have very precise ideas about what is loud enough, bright enough, or soft enough
- will notice and have behavior related to what they think about the sensation
- notice everything and notice it quickly
- can be very distracted, because they notice sensory information all around them
- can be the first to detect a change in mood or circumstances
- can be very creative because they notice more detail than others
- can be easily overwhelmed by sensory info.
- can't ignore things as easily as others
- can detect even small changes in texture temperature, flavors and tend to be picky eaters
- spend a lot of time managing sensation
- They do better in more organized situations and do poorly in chaotic situations
- They are predictable-they choose the same things over and over because they need to predict the type of sensory info they receive

# Sensory Processing Disorder (SPD)

Sensory Modulation Disorder

Sensory-Based Motor Disorder

Sensory Discrimination Disorder

Sensory Over-Responsive

Dyspraxia

Visual

Sensory Under-Responsive

Postural Disorder

Auditory

Sensory Craving

Tactile

Taste/Smell

Position/Movement

Interoception

Miller, LJ et al, 2007

# Pattern 1: Sensory Modulation Disorder (SMD)

## (Challenges to regulate responses to sensory input)

- Sensory Over – Responsive
  - Individuals are more sensitive to sensory input
  - They may feel sensations too easily or too intensely
  - They feel like they are being bombarded with information
  - They may avoid or minimize sensations (example: withdrawal from being touched or cover their ears to avoid loud sounds)
- Sensory Under – Responsive
  - Individuals are usually quiet or passive
  - They do not detect sensory input in their environment and may appear withdrawn, difficult to engage or self-absorbed
  - They may appear clumsy or have difficulty grading their movements
  - They may not detect items that are hot/cold or notice pain in response to a fall, cut or scrape
- Sensory Craving
  - Seeks or craves sensory input – can not get enough
  - Constantly moving, crashing, bumping, and/or jumping
  - They have a strong desire to touch everything
  - They do not understand personal space

Key factor with sensory craving – when individual receives more sensory input, it does not assist with regulation.,<sup>12</sup>

  - they usually become more disorganized

## Pattern 2: Sensory-Based Motor Disorder (SBMD)

- Postural Disorder
  - Individuals have challenges to stabilize their body during movement or at rest to meet the demands of the environment or a motor task
  - Individuals do not have good body control to maintain a good standing or sitting posture
- Dyspraxia / Motor Planning Problems
  - Individuals have challenges in planning or carrying out new motor actions
  - They have difficulty in forming an idea, planning a sequence of actions or performing a new motor task
  - They may appear clumsy, awkward, and accident – prone
  - They may have poor skills in ball activities or sports
  - Individuals may prefer sedentary activities to hide their motor planning problems

## Pattern 3: Sensory Discrimination Disorder (SDD)

- Individuals usually have problems determining the characteristics of sensory input
- They have challenges with interpreting or giving meaning to the specific qualities of stimuli or detecting similarities and differences (Example: Do I see "P" or "Q"? or Do I hear "cat" or "cap"? or Do I feel a quarter or a dime in my pocket? or Am I falling to the side or backwards?)
- Individuals may appear awkward in both gross and fine motor abilities
- They may appear inattentive to people or objects in their environment
- They may need extra time to process the important aspects of sensory stimuli

# The Senses

- Taste (Gustatory)
- Smell (Olfactory)
- Sound (Auditory)
- Balance and Movement (Kinesthesia and Vestibular)
- Tactile
- Proprioception
- Vision
- Interoception--There is also the idea that people have a sense of the body's functioning -pain, need to eat, need to go to the bathroom

# Addressing Student Needs

- Sensory Diet
- Sensory Breaks
- Classroom Routines (daily schedule and snack, mealtime, recess)
- Sensory Room/Equipment
- Collaborating/Consultation to the Educational Team

# Sensory Diets

- In the literature the term Sensory diet is often used interchangeably for something as simple as a list of sensory strategies to be used with students to a very specific set of sensory strategies used at a SPECIFIC time of the day.
- Very specific Sensory diets are labor intensive for the teacher(s), the Psychologist and the Occupational Therapist. It implies that the student is well known, a pattern has been observed and documented and there is a “fairly certain” idea of the sensation(s) that is/are problematic for the student
- Few students need a Sensory diet, many students need sensory strategies and all students benefit from breaks.

# Sensory Breaks

## Three reasons to use sensory breaks:

1. To allow students to choose sensations that they “need” to PREVENT increasing behaviors.
2. To alert-Students need sensory information to arouse and alert them to be available for learning. \*some students can become over-aroused from alerting activity and then need a calming strategy. It can be difficult to get it “JUST RIGHT”.
3. To calm-Students have become over-aroused, are nearing their threshold for sensory information or have participated in something that is known to be difficult/hard for them.

# Adding Sensory to the Classroom Routine

It is important to consider each student's  
unique needs when implementing any  
strategies

# Adding Sensory to the Classroom Routine

- Have routine breaks
- On a routine basis, clean and organize the room versus entirely changing the room
- Create classroom routines and stick to them
- Avoid being “an extra stimuli” in the classroom

# Adding Sensory to the Classroom Routine

## **Calming:**

Pop up tents or tables covered with long floor length tablecloths

Sitting in a bean bag chair

Rocking chairs

Heavy blankets

Sheepskin fur rugs

Floor mats

Muted lighting

Recorded soft music, nature sounds (not thunder & lightning) white noise

Lava lamp

Bubble water machines

Water fountains

Fish tanks

Squeeze toys

Weighted objects

Yoga

# Adding Sensory to the Classroom

## **Alerting:**

TVT (trampoline)

Bouncing on therapy ball

Disco ball lighting

Black lights with the neon response colored objects

Balls with “things” inside

Bubble machines

Mirrors

Tart, minty and citrus smells and tastes

Teeter totter, spinning seats and scooters

Textured wall and or floor items

Water, sand, rice, bean and shaving cream play

Vibrating objects

Squishy toys

Ball pits

Light effects or real mobiles



Never discard something that a student is not really interested in. It may be “perfect” in another moment.

Sometimes children need to be gradually exposed and trained to use sensory strategies. They might not have had exposure and don't know what they really like to use the supply or strategy.

There is a generally accepted practice (research is ongoing) that sensory strategies used shall be used in increments during the day. Anything that is used all day or most of the day will lose its effectiveness.

# Adding Sensory to Classroom Routine

## Recess

- Students who receive recess display less behaviors and are likely to learn more (Barros, Silver, & Stein, 2009)



# Adding Sensory to Classroom Routine

## Snacks and/or mealtime

(All edibles should be approved by administration)

Oral sensory input (biting, chewing, sucking) is an effective way to self-regulate, support attention, calm and organize (<http://asensorylife.com/oral-sensory-needs-and-preferences.html>)



# Equipment

## Deep Pressure Touch

- **Weighted equipment** (General guidelines can be found in the reference section)



<https://www.therapyshoppe.com/category/5-weighted>

# Equipment

## Deep Pressure Touch



<https://www.google.com/search?q=sensory+steamroller>

# Equipment

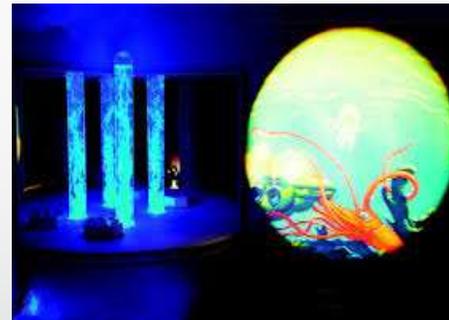
## Vestibular



<https://www.google.com/search?q=pictures+of+vestibular+input+with+equipment>

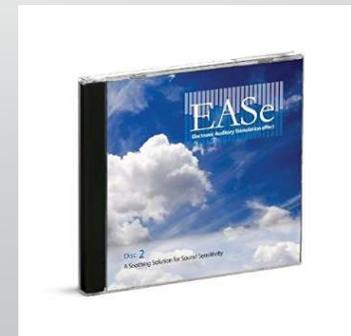
# Equipment

## Visual



# Equipment

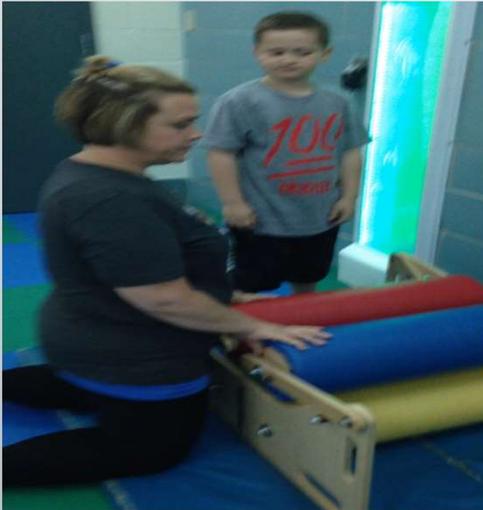
## Auditory



# Equipment in the Sensory Rooms

TVT – Therapeutic Vestibular Trainer  
(Trampoline)

Steam Roller



Cloud Pit



# Equipment in the Sensory Room

Blue Barrel

**Provides deep pressure touch, vestibular and proprioceptive sensory input**





# Questions and Answers

# References

Barros et al. **School Recess and Group Classroom Behavior.** *Pediatrics*, Feb 1, 2009; 123 (2): 431 DOI:[10.1542/peds.2007-2825](https://doi.org/10.1542/peds.2007-2825)

Barros et al. **School Recess and Group Classroom Behavior.** *Pediatrics*, Feb 1, 2009; 123 (2): 431 DOI:[10.1542/peds.2007-2825](https://doi.org/10.1542/peds.2007-2825)

DeGangi, G.A. (2000). *Pediatric disorders of regulation in affect and behavior: A therapist's guide to assessment and treatment.* San Diego, CA: Academic Press

Dunn, W. (2001). 2011 Elenor Clarke Slagle Lecture – The sensations of everyday life: Empirical, theoretical, and pragmatic considerations. *The American Journal of Occupational Therapy, 55, 608-620.*

How Does your Engine Run? A leaders Guide to The Alert Program for Self-Regulation by(Williams & Shellenberger 1996)

<http://www.cherringtonsawers.com/tactile-vestibular-and-proprioceptive-senses.html>

<http://www.developmental-delay.com/page.cfm/256>

<http://spdstar.org/what-is-spd/>

<https://www.therapyshoppe.com/category/5-weighted>

<https://https://www.google.com/search?q=pictures+of+vestibular+input+with+equipment>

Lin, H. Y., Lee, P., Cang, W., & Hong F. Y. (2014). Effects of weighted vests on attention, impulse control, and on-task behavior in children with attention deficit hyperactivity disorder. *The American Journal of Occupational Therapy, 68(2), 149-158.*

Miller, L. J., Anzalone, M.E., Lane, S.J., Cermak, S.A., Osten, E.T. (2007). Concept evolution in sensory integration: a proposed nosology for diagnosis. *The American Journal of Occupational Therapy, 61(2), 135-139.*

Mulligan, S. (1998). Patterns of sensory integration dysfunction: A confirmatory factor analysis. *The American Journal of Occupational Therapy, 52, 819-828.*

Reynolds, S., Lane, S. J., & Mullen, B. (2015). Effects of deep pressure stimulation on physiological arousal. *The American Journal of Occupational Therapy, 69(3), 1-5.*

Suarez, M., (2012). Sensory Processing in children with autism spectrum disorders and impact on functioning. *Pediatr Clin N Am (59), 203-214.*

# References-Continued

- Kranowitz, C. S. (1998). The Out of Sync Child. A Perrigee Book by the Penguin Group, New York, New York.
- Miller, L.J. (2006) Sensational kids. A Perigee Book by Penguin Group, New York, New York.
- Delaney, Tara (2010) 101 Games and Activities for Children with Autism, Asperger's and Sensory Processing Disorder. McGraw Hill, New York.
- Moyes, R. (2010) Building Sensory Friendly Classrooms. Sensory World, Arlington, Texas.
- Mauro, T. (2014) The Everything Parent's Guide to Sensory Processing Disorder. F + W Media, Inc. Avon, Massachusetts.
- Dunn, W. (2008) Living Sentionally Understanding Your Senses. Jessica Kingsley Publishers, London and Philadelphia.
- Notbohm, E. (2012) Ten Things Every Child With Autism Wishes You Knew. Future Horizons Inc., Arlington Texas.
- Koomar, j., Kranowitz, C., Szklut, S. Et al (2000) Answers to Questions Teachers Ask about Sensory Integration. 4<sup>th</sup> Ed. Sensory World, Arlington, Texas.
- Kluth, P. (2010) "You're Going to Love This Kid" Teaching Students with Autism in the Inclusive Classroom. 2<sup>nd</sup> Ed. Paul H Brookes Publishing Co., Inc.
- A special thanks to Shannon Griggs, Para Professional and Jeremy Gilmour, 5<sup>th</sup> grade student at RWES for assisting with the training videos. (NOTE: Mrs. Lindsey Gilmour , teacher at RWES gave permission for her son to participate in the training video)