Occupational Therapists

• Work with people throughout the lifespan
• At each stage of life we have different needs and activities that require an occupational therapist:
Today’s Session

• FASD and Sensory Processing
• Sensory Processing:
  – What is it anyway?
  – Story Telling
  – Addressing sensory processing difficulties
• Questions
Why are the sensory systems important?

• “When sensory information cannot be processed correctly, the brain cannot figure out what is happening inside the body, or in the world around. Depending on the type of sensory processing difficulties, the reaction is to slow down, or go into fight/flight response.”

http://www.sinetwork.org/aboutspd/whatis spd.html
Sensory Processing and Sensory Acuity

- Sensory acuity is how well the particular sense sees, hears, touches, tastes, smells, balances.
- Sensory processing is how the brain takes that information and translates it to make sense of the environment.
- Sensory modulation is how we adapt and change those sensations.
Figure 5. Pyramid of Learning. (Williams & Shellenberger, 1-4)
Sensory Processing Differences

- Frequently seen with people with FASD
- Are overly (hyper) or less (hypo) - sensitive to sensory input
  - Upset by bright lights or loud noises
  - Annoyed by tags in shirts or seams in socks
  - Bothered by certain textures of food
  - Oblivious to air temperature
- Have problems sensing where their body is in space.
- People with sensory processing differences may have difficulty focusing on important information because they cannot block out the extraneous sensory information

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Sensory Processing Involves

- the 5 senses:

and the Proprioception and Vestibular systems.
Proprioception
Vestibular System
• Need to ask a series of questions and/or observe the person as they react to their environment
• Develop a sensory diet after carefully assessing need
• Sensory diet is activities tailored to meet the sensory needs of the person.
The Assessment Looks at:

1. Whether the person registers the sensory information typically to most people or more slowly or quickly.

2. How sensitive the person is to the sensation: Are they typical of most people, or are they more or less sensitive?

3. Whether the person seeks out the sensation more or less frequently than is usual.

4. How much the person avoids the sensation? Is this typical of most people, or are they more or less likely to avoid it?

5. Can the person move well in their environment?

6. Can the person coordinate their movements and maintain balance in their activities?
Touch/ Tactile Processing
More Story Telling

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Tips for Tactile Processing Difficulties

• Must determine type of tactile processing difficulties
• If tactile defensive use soft, loose fitting and weighted clothes, use deep pressure rather than light touch, use weighted blanket to sleep under, explain to others that personal distance is needed
• For those who are hypo-sensitive keep water and air temperature at a consistent comfortable setting, protect against extremes of temperature, have others tell if their personal space is entered, use light touch
Auditory Processing
More Story Telling
• A person can be hypersensitive in one sensory area, and hyposensitive in another.
• Sometimes person seems hypersensitive, where they are actually the opposite
Tips for Auditory Processing Difficulties

- Slow down speech, use less words, use same words when can
- Use visuals to reinforce auditory learning
- Wear ear protection/ noise cancelling earphones when vacuuming, mowing the lawn or other loud tasks
- Wear ear phones and listen to music in class
- Sit in spot where more likely to hear speaker
- Use specific therapeutic programs

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AUDITORY PROCESSING DISORDERS (APD):
A Common and Serious Problem

I'm lost in this class!
What's wrong with me?
I just can't hear right.
Smell / Taste Processing
Another story
Tips for Smell/Taste Differences

- Slowly introduce new tastes and smells
- Warn before trying new tastes, or going into highly fragrant areas
- If hypersensitive use non-scented products, comforting low-intensity smells, use same products regularly
- If hyposensitive change taste diet and fragrances used regularly, spice up foods, make sure smoke detectors are working, use scented candles, etc.
- If mouth is hypersensitive, follow therapeutic program to desensitize
- May need reminding to bathe, or cueing regarding amount of fragrance to use
Visual Processing
Tips for Visual Difficulties

• Cover over extraneous visual material – highlight where they should focus their vision
• Teach them to use their fingers to help them “feel” what object is like
• Colour code classroom, common areas such as lockers
• Use bright colour strips on stairs, doorways and corner of rooms
• Use computer games to help “train” the eyes
• Use bright coloured balls for ballgames
• Specific therapeutic interventions
Visual Sensations
that Calm or Alert
(Adapted from Karen Moore O.T.)

- **Calming:**
  - Soft Colours
  - Natural or dim lighting
  - Dark glasses
  - Serene paintings
  - Pleasant views through windows
  - Watching fish in an aquarium
  - Bubble or lava lamp
  - Clean or sparsely furnished room

- **Alerting:**
  - Bright colours
  - Artificial or bright lights
  - Modern Art
  - Complex visual images
  - Changing patterns of light
  - Video games
  - Rotary sprinkler
  - Messy and cluttered room

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Vestibular and Proprioceptive Processing Differences

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More Stories
Tips for Vestibular and Proprioception Differences

- Deep pressure, deep pressure, deep pressure!
- Weighted products
- Connect deep pressure to cognitive and/or movement activity
- Increased practice opportunities to learn new movements
- Use visuals and hand over hand teaching
- Mark corners and stairs to help register presence
- Assess best seating at school/home/work
- Incorporate movement into many activities
- Therapeutic program to treat
Sensory Diet

• Everyone is unique, sensory diet must be developed for the individual
• Involves person, family, teacher/school/work in the planning and training
• Often means adjusting the environment, creating calming or alerting inputs.
• May involve special tools and equipment
• Involves visuals
• Uses an assortment of activities
<table>
<thead>
<tr>
<th><strong>Motion</strong></th>
<th>Most activities alert and organize the mind &amp; body.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pressure n’ Touch</strong></td>
<td>Calms and settles. A get ready, regrouping or transition strategy</td>
</tr>
<tr>
<td><strong>Heavy Work</strong></td>
<td>Motion and deep pressure for alerting &amp; calming.</td>
</tr>
<tr>
<td><strong>Suck, Chew ’n Breathe</strong></td>
<td>Organize &amp; alert to help listen &amp; focus.</td>
</tr>
<tr>
<td><strong>Retreat</strong></td>
<td>Reduce sensory overload (visual, auditory &amp; physical).</td>
</tr>
<tr>
<td><strong>Routine ’n Planning</strong></td>
<td>Build-in cognitive support strategies familiarity, predictability &amp; pre warnings.</td>
</tr>
<tr>
<td><strong>Tips Tools ’n Doing</strong></td>
<td>Strategies for task or tool modification; and activities of everyday “Doing it” events</td>
</tr>
<tr>
<td><strong>Clinic Time (in the therapist version)</strong></td>
<td>Promote child participation in selecting, planning &amp; adapting therapy session activities</td>
</tr>
</tbody>
</table>
Classrooms that Take Sensory Needs Into Account

• Are comfortable to be in – walls warmly painted, ambient lighting, different types of seating available.
• Have ways of covering learning materials when not in use.
• Have movement breaks which could include Tai Chi, Yoga, Brain Gym and heavy work.
• Have fidgets, chewies, gum, and bottles of water
• Have adapted pens and work angled up
• Have a quiet area with soft seating, blankets, weighted products and gentle lighting
• Use multi-sensory approaches to learning and match learning styles with individually tested needs
• Use visuals and social stories
• Have earphones, earbuds and music and/or therapeutic sound boxes

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Homes that take sensory needs into account

- Are comfortable to be in – walls warmly painted, ambient lighting, different types of seating available.
- Have ways of covering materials when not in use.
- Keep things sorted and in their places.
- Have movement breaks which could include MeMoves, Tai Chi, Yoga, and heavy work.
- Have fidgets, chewies, gum, and bottles of water.
- Have a quiet area with soft seating, blankets, weighted products and gentle lighting.
- Use multi-sensory approaches to living.
- Use visuals and social stories.
- Have sensory tool boxes for home and when out.
- Have earphones, earbuds and music and/or therapeutic sound boxes.

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Remember that

• In general everyone needs:
  – Priming, timing and miming.
• Prepare the person for change in activities,
• Make sure this is the right time for the change, let them know how long it will take (use a time-timer).
• Show them what they will be doing with visuals and hands-on miming.
• Model behaviours
• Keep instructions simple, concrete and one at a time
• Use multi-sensory approaches
• Visuals – are critical, at least when you start new learning, and perhaps always.
• Give no more than 2 choices per activity time.
Interventions

• Relationship, Relationship, Relationship
• Observe the person’s developmental stage
• Adapt your expectations
• Identify strengths, skills and interests
• Change the way you interpret behaviours
• Break down tasks into smallest components
• Train concretely and teach specific social skills
• Use visuals to help remind person – understand their way of communicating
• Many need hand-over-hand training
• Help them become functionally interdependent – money management, cooking, reading labels and signs, safety in the community
• Use consistency
Some Links to Resources

• The Asante Centre:  
  http://www.asantecentre.org/education.html

• The Government of Manitoba:  
• Provincial Outreach Program for Fetal Alcohol Spectrum Disorder (Manitoba)
  http://www.fasdoutreach.ca/teacher-resources/print-resources/print-resources

• Sensory Processing Disorder Foundation:
  • http://www.spdfoundation.net
• CanFASD Research Network
  http://www.canfasd.ca

• FASD Support Network of Saskatchewan
  http://www.skfasnetwork.ca/main/resources/communityresources/
Sites Regarding Sensory Processing

- The inspired Treehouse: http://theinspiredtreehouse.com
- FDMT: https://www.fdmt.ca
- Therapro: http://www.therapro.com
- Pinterest: https://www.pinterest.com
• Pocket Full of Therapy:  
http://www.pfot.com

• Southpaw Enterprises:  
https://www.southpaw.com

• Abilitations:  
https://store.schoolspecialty.com/OA_HTML/xxssi_ibeCategoryPage.jsp?docName=V700839&minisite=10206
• Zones of Regulation
• www.zonesofregulation.com
• MeMoves
• http://thinkingmoves.com
• How Does Your Engine Run – Alert Program series
• http://www.alertprogram.com/New_to_the_program.php

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• The Sensory Connection Program:
  • http://www.sensoryconnectionprogram.com/program.php

• Living Sensationally: Understanding Your Senses by Winnie Dunn – available through Amazon Books
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