

How sensory processing affects children's behavior

How do sensory processing issues affect children's behavior and learning?

Identify students with these difficulties

Learn techniques to help them

Sherra Bloomenkranz, OTR/L

Why do they do this?

- ▶ ADHD vs. SI
- ▶ How they feel
 - Too little battery
 - Too much to juggle
- ▶ Pride – frustration – escape

What senses are they processing?

- ▶ Sight
- ▶ Touch
- ▶ Sound
- ▶ Vestibular input
- ▶ Proprioceptive input

These are all background input for most of us...

What does it look like

... when it goes wrong?

- ▶ Decreased vestibular system
- ▶ Decreased proprioceptive system
- ▶ Hypersensitivity to stimulus
- ▶ Engine trouble–poor regulation



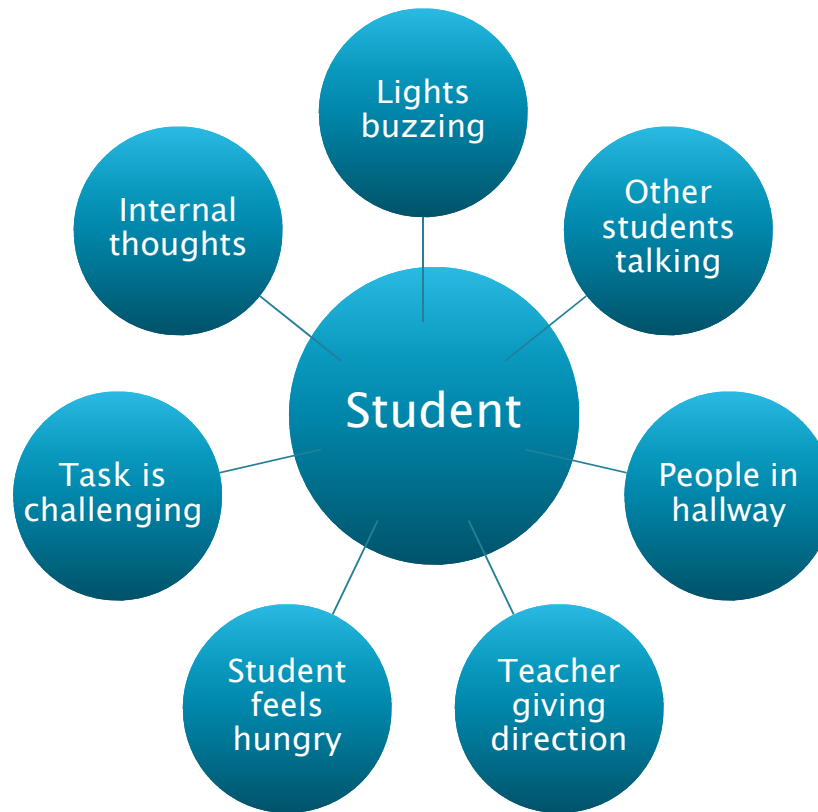
A decreased vestibular system

- ▶ Do not register position/orientation accurately – close their eyes and they fall!
- ▶ Speed and pacing is off
- ▶ Low muscle tone
- ▶ Initiating movement is difficult – “conservationists”
- ▶ Need to keep moving to remain aroused
- ▶ Can swing or spin forever without dizziness
- ▶ Other senses may be high or low
- ▶ Sometimes over-focus to block out noise, looks like they can't hear
- ▶ Notice one thing at a time – or just one thing

Decreased proprioception

- ▶ Use vision to guide body movement
- ▶ No graded movement – just 'on' or 'off'
- ▶ No feedback from muscles –
 - How hard do I push/pull (We were just playing)
 - Where am I??? (Did I just knock that over?)
- ▶ What did I do wrong?
 - Can't relate to vague terms (slower, gentler, careful)
 - Body won't maintain it's space (move over!)
- ▶ Like snug, tight, deep touch/pressure
- ▶ Like to wrestle for input – poke a caged lion

So much to process



Engine trouble - disregulation



Help them identify where they are at,
 where they need to go, and how to get
 there.

| | | |
|----------------|------------|--|
| hyper | Exploding | 1. I will immediately ask a teacher to cool down in a different space or take a walk. |
| fast engine | Boiling | 1. I will use my self-talk strategies: - "It's no biggie" - "problems are made to be solved" |
| | Angry | 2. I will go to the cool down area |
| | Upset | 3. In the cool down area, I can: - take deep breaths - count to 10 - look at calming books |
| engine revving | Frustrated | 4. I will stay in the cool down area until I am calm and then I can return to the activity by myself |
| | Irritated | |
| | Nervous | |
| calm engine | COOL | I KNOW I AM DOING A GOOD JOB! - I am doing my work - I am using whole body listening with my teachers and peers - I am using a quiet voice - I am cooperating with peers - I am using expected school behaviors |
| slow engine | CALM | |
| engine off | RELAXED | |
| | Sleepy | 1. Ask teacher for help 2. Take a walk 3. Do some stretching |
| | Tired | |
| | Exc | |
| | Shy | |

Can we fix it?

- ▶ No, but we CAN make it better
- ▶ Bridge the gap
- ▶ Remove the obstacles – less input
- ▶ Change the environment
 - Sensory equipment
 - Seating changes
 - Something to chew

Remove the obstacles

Modifications we can make to give them less to process:

- ▶ Are there too many words on a page, or too small writing?
 - ▶ Are there too many math problems on the page?
 - ▶ Do they need to use a number grid or alphabet chart?
 - ▶ Do they need to do seat work facing a wall (in their 'office')
 - ▶ If they struggle with writing, can they dictate or do a final copy at home?
 - ▶ Do the smaller lines require too much effort to write?
 - ▶ Would directions on their desk help them organize?
 - ▶ Is the time slot too long for them to work without a break?*
- *breaks can be in room, stretch legs, get a drink, head on desk

Change the environment

Sensory equipment for movement –

- ▶ Seat cushions
- ▶ Seat cushions on floor for feet to squish or on lap
- ▶ Allow to work standing at desk

Sensory equipment for proprioceptive input –

- ▶ Lap weights, wrist weights
- ▶ Theraband on chair legs to kick or pull
- ▶ Sitting on knees at their desk

Sensory equipment to arouse –

- ▶ Velcro strip to scratch/roll pencil
- ▶ Sour candy, crunchy snack or gum to chew
- ▶ Pencil tips or grips with spikes or fuzz

What can I do for the class?

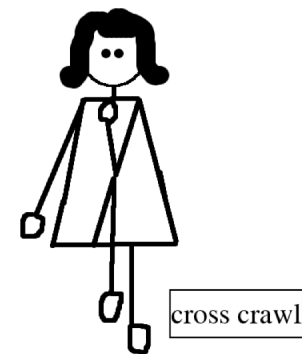
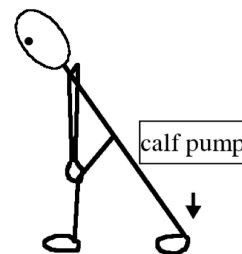
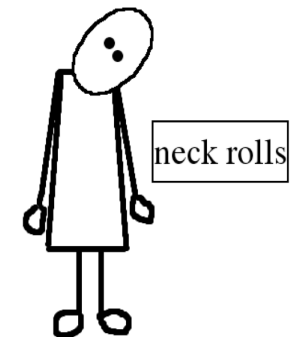
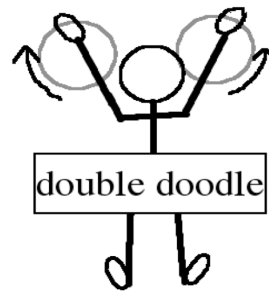
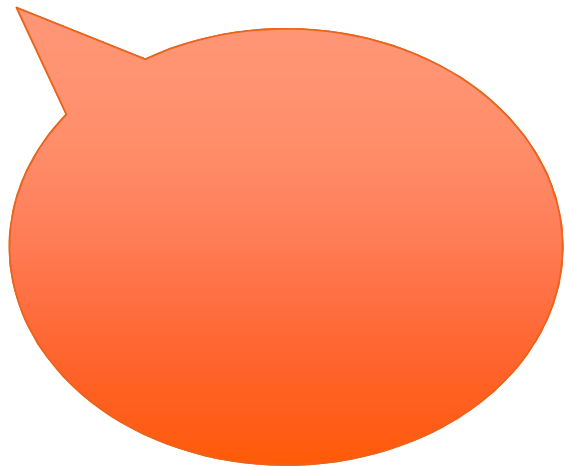
Whole group strategies

- Read the signs:
 - Too loud or too antsy?
 - Hard work or hard day?
- Sensory breaks to regroup
 - Just like clapping for focus
 - Planned or as needed
 - To transition from active to quiet
 - Before doing cognitive seat work

Whole class sensory based movement breaks that work

- ▶ Rhythmic
- ▶ Jolting/intense
- ▶ Slow – to calm, quick – to arouse
- ▶ Fade out
- ▶ Limit the movement away from seat

Sample exercises



What can I do when it's only 1 or 2?

- ▶ Differentiate – is it too hard?
- ▶ Isolate – if he can't keep it together
 - Divide and conquer
 - Don't “sacrifice” the many for the few

Thank you for your patience!