Hey! My Brain Doesn’t Work That Way!

Using the Body to Lead the Mind

Understanding Sensory Processing,
Teaching and Supporting Self-Regulation

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Hey! My Brain Doesn’t Work That Way!

Strength Based Models, Cloud Theory, Neuroplasticity

The Stress System - Sensory overload and sensory stress

The Sensory Systems - How Sensory Processing Works

Self Regulation - How to Influence Level of Arousal, Teaching Self Regulation

Sensory Diet - Using Sensory Motor Strategies to prepare kids brains and bodies for learning

Using Strength Based Models
Professionals and Parents are Advocates and Participant Observers

Positive Deviance - The “How She Did That” approach
Look at how people harness resources from their own lives and environments during different situations. Manage own routines and resources. The answers are all around us. We learn through Experimentation and Observation.

Positive Psychology - The “I Can” approach
Focus on optimism, strengths, resources. Create the “flow”, the “just-right challenge”. Self Understanding leads to better strategies and Self Advocacy, more resourcefulness in novel situations. Fosters sense of Self Efficacy and Self Determination.

Occupational Therapy - The use of purposeful, enjoyable activity to address therapeutic goals. Meaning, relationship, and pleasure achieve wider brain activation and allow skills to become automatic and sub-cortical.

Spectrum/Cloud Theory

Everyone has some of the qualities that are on a specific spectrum. It is “how many” or “how much” which determine how much that factor will interfere with learning and doing.

Intelligence
Anxiety
Learning Disabilities
Neurological Thresholds
Brain dominance
Learning Styles
Sex Differences
Level of Arousal
Inclusion
Toxic Exposures
Hypothalamus in PWS

1  Autonomic control  5  Endocrine control
2  Temperature regulation  6  Emotional reactions
3  Thirst and control of body water  7  Sleep and wakefulness
4  Appetite control  8  Stress response

Most clinical and empirical studies document the commonality of hoarding; cognitive rigidity along with the need for sameness, temper outbursts and emotional lability, repetitive and perseverative behaviors and skin-picking. Sensory Issues in the form of an altered sensitivity to pain, failure to exhibit fevers when expected and high rates of skin picking and gouging other body areas are extremely problematic among this group of individuals. Skin picking and other similar self injurious behavior occurs with increased prevalence in PWS. When looking specifically at a population of those with PWS, skin picking is ubiquitous and when quantified, is as prevalent and problematic and in some studies even more so than hyperphagia. It is the source of significant behavior and medical concerns and management challenges. Management is directed towards minimizing both the occurrence and impact of the behavior. To this end, a recent survey of 67 affected children and adolescents documented skin picking in 96% of respondents, which were directly associated with measures of anxiety, inattention, oppositional behaviors, function and quality of life. Thus separate from medical management, behavior management must be focused on decreasing anxiety and boredom while eliminating opportunities for picking. Poor oral-motor control, muscle hypotonia, decreased pain sensation

I SUSPECT LOW REGISTRATION internal with some SENSITIVITY external.

Exercise & Move to Grow Your Brain
They Can’t Pay Attention? Give Them a “Time IN” !!!

Exercise improves cognition/protects neurons
- brain systems work better
- cellular systems in the brain work better
- stimulates production of GABA in hippocampus
  this calms brain function, increases stress resistance, reduces fight/flight reactions, triggers growth of new neurons

Movement cures a bad mood
- improves impulse control, attention, motivation, balances arousal, anxiety regulation, entire pre-frontal area

Factors in AROUSAL
Sensation and Emotion are neurobiologically hard wired together and affect thinking (reticular system, amygdala, locus coeruleus, etc.)

Is it sensory?
- YES!
  sensory overload
  increases arousal

Is it emotional?
- YES!
  Increased emotions lead to over arousal, make it harder to use cognition to balance out

Is it cognition?
- YES!
  We can think ourselves into a frenzy!

www.nognz.com
nognz brain fitness

www.bokskids.org

NEUROPLASTICITY
PRUNING  NEUROGENESIS  SYNAPTOGENESIS

BDNF (brain-derived neurotrophic factor) increases neurogenesis and synaptogenesis

Pillars of Brain Health
- Exercise/Movement (increases energy to brain)
- Nutrition (Energy and glial support)
- Stress Management (Brainstem and Limbic Load)
- Socialization
- Mental Stimulation (May be work or, better yet, PLAY!)

www.nognz.com
We retrieve memories and formulate action plans according to the level of arousal of our body.

Gray zone level of arousal connects with memories and responses from other lethargic and mellow situations from the past.

Green zone level of arousal connects with memories and responses from other calm and alert situations from the past.

Red zone level of arousal connects with memories and responses from other agitated and frazzled situations from the past.

Stress Response System (primarily sympathetic activation)

TOP-DOWN
Stress can be caused by your thinking, by difficulties, problems, etc.

BOTTOM-UP
Stress can be caused by SENSORY OVERLOAD, busy environments, too much stimulation, etc.

LOW AROUSAL
Low Neurological Arousal can be due to sensory processing, sensory deprivation, being tired, ill, etc.

The Senses are important to learning!

EXTEROCEPTORS v Interoceptors

Vibration
Light period/rhythm
"The felt sense"
Auditory
"The felt sense"

Auditory
Light period/rhythm
"The felt sense"

"The felt sense"
Light period/rhythm
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Signs of Sensory Processing Differences:

I cry and shield my eyes from sun and other bright lights
I hate my hair washed, brushed, cut
I have trouble focusing or concentrating

I have selective hearing or am uni-sensory
I am a picky eater and resist new foods or textures
I smell everything

I complain about the tags in my clothing
I chew on everything
I seem to have weak fine motor skills

I seem to be unaware of touch or pain and may touch others too soft or too hard.
I complain about the tags in my clothing
I seem to have weak fine motor skills

I hate being tickled or cuddled
I have difficulty dressing myself
I hate having my hair washed, brushed, cut

I always walk on tip toes
I have trouble focusing or concentrating
I am very sensitive to loud sounds, especially blenders, vacuums, etc.

I complain about the tags in my clothing
I seem to have weak fine motor skills
I have difficulty dressing myself

My posture is weak when I am still
I need my socks just so, and either love or hate being in bare feet.
Additional Senses - These are really systems rather than organs. They are hidden, automatic, we are not aware of them and have little control over them.

The Vestibular System - Balance/Gravity
Processes information about movement and the position of the head in relation to gravity. This enables us to maintain our balance while still or in motion. Information is processed via the tiny fluid filled semicircular canals in the inner ear, as well as utricle and saccule via the medulla. Vestibular nuclei communicate with reticular activating system, limbic system, as well as cerebellum, motor areas, visual cortex. Vestibular processing anomalies are common in persons with autism.

The Proprioceptive System - Pressure/Force/Position
Processes information about body position through the muscles and joints. Application of regular proprioceptive feedback to the muscles through firm, deep pressure and heavy work, is recommended for many people, because it has been shown to have an organizing effect on the central nervous systems.

Kinesthesia - Movement
A sense built using information from vestibular and proprioceptive systems as well as stretch and touch receptors. Kinesthesia gives us a sense of what parts of our body are moving and how so. Function requires good proprioception, vestibular function, and felt sense (via arousal system).

The Felt Sense - State/whole of emotion/consciousness
The Felt Sense is how we experience the fullness of sensation and knowledge about ourselves as an organism. This includes internal sensations and synthesis of different sensations. The felt sense unifies lots of scattered data and infers meaning. The felt sense (developed in insula?) communicates to my nervous system what is my overall experience in my environment. It is influenced by all sensory input as well as emotions, thoughts, intentions. It is always present, always changing, it is the most basic experience of being alive as an entity. Feeling comfortable, safe, nervous, anxious, happy, are examples. In some contexts (i.e. Eugene Gendlin), the felt sense can be perceived in the body and changes and moves.

For more on the felt sense, see Waking The Tiger by Peter Levine, pgs. 8, 66, 67, 68, 69 and Focusing by Eugene Gendlin.
Sensory Modulation Continuum

Full Range of Responses to Internal/External Sensory Input

Hypo-responsive Behaviors involve:
- A slow response to a sensory stimuli, requiring high intensity or increased duration of the stimulus to invoke an observed behavioral response.
- The person does not respond easily.
- Frequently you will see accompanying signs of low tone.
- The child may appear disinterested or lethargic.

Hyper-responsive Behaviors involve:
- A quick or intense response to a sensory stimulus that most other persons perceive as benign. This response results in “fight, flight, fright or freeze.”
- A sensory defensive response is an “emotional” or “visceral” reaction, mediated by the sympathetic nervous system and not under conscious control.
- Begins with a dump of adrenaline and stress hormones.
- In more extreme cases the child may be aggressive in response to a gentle touch, or may cry excessively or withdraw when there is too much noise or activity around them.

Sensory defensiveness is a descriptor of the aversive or defensive reactions that one may exhibit to sensory stimuli that is not usually considered noxious or overwhelming. The child may respond protectively even though he may consciously know that the stimulus is not a threat.

Relationships between Neurological Thresholds & Behavioural Responses

Strategies and Ideas

- Enhance inherent stimulation in tasks and contextual cues.
- Add movement to activity (i.e. child has to go get parts or move across room to respond).
- Add contrasting colour.
- Decrease predictability of routine.
- Use a chair ball (firm).

Make experiences more concentrated with sensory information so there is more likelihood the thresholds will be met and the child will be able to notice and respond to cues in the environment.
**Strategies and Ideas**

- Decrease amount of stimuli in environment.
- Teach child regulating strategies (vest, squeeze, pressure).
- Provide discriminatory input, (proprioception, body mapping).
- Use predictable patterns of visual/auditory routines.
- Provide headphones/white noise.
- Decrease angular and alerting movement.
- Use chair ball (soft).

<table>
<thead>
<tr>
<th>Sensory Seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load schedule and activities with modulating input so that thresholds can be met while conducting daily life. (Add weight, movement, etc.)</td>
</tr>
<tr>
<td>Complete desk work after recess/movement/heavy work.</td>
</tr>
<tr>
<td>Take movement breaks between seatwork.</td>
</tr>
<tr>
<td>Use a chair ball (medium)</td>
</tr>
<tr>
<td>Can learn to ask for input</td>
</tr>
<tr>
<td>Use hand fridgets.</td>
</tr>
</tbody>
</table>

Do not use sensory as a reward or reinforcement. Provide the input as the child needs it to enable performance rather than making it contingent on performance.

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**Emotional Regulation**

- Emotional Regulation is a function of the neocortex (human brain) and the limbic system or mesocortex (mamalian brain). In the cortex, we build meaning for our emotions.
- We reason with ourselves and tell ourselves stories to help us feel calm. The frontal cortex can moderate and dampen the reactions of the amygdala and inhibit over-activation of emotional responses.
- Requires language areas and frontal/executive areas to work together.
- "Social Stories" (Carol Gray) can help children to achieve Emotional Regulation by reducing the load on the amygdala.
- In OT jargon, this is a form of self regulation that we call "top down" or "third order" Self Regulation.
- Emotional Regulation is not possible if the body is too agitated, or if fear or anger have cut off the neocortex or cognitive brain.
Oetter’s Stages of Self Regulation

First order - self regulation is dependent on the autonomic nervous system and its interconnections with the reticular formation and the limbic system. They function to regulate temperature, tone, sleep/wake, monitor for survival, etc. Typically, no conscious control over this area. Automatic

Second order - self regulation is reflected in sensorimotor strategies to achieve, maintain and change situation appropriate states. Sensorimotor input and feedback help organize states, ie. Foot tapping, rocking, thumb sucking, doodling. Using the body to lead the mind

Third order - emergence of higher level cognitive (cortical) skills. At this stage, problem solving abilities and the use of verbal and internal language for organization allow the individual to monitor, plan and evaluate regulatory strategies. “Just this much more and then I will treat myself to…” or “If I don’t get it done, such and such will happen.” Using the mind to lead the body. This can also be called Emotional Regulation, as it is referred to in psychological and educational jargon.

Regulatory strategies may include all sensory pathways:

tactile eg. constantly touching objects, one’s face or hands; fidget items

visual eg. stares out the window, stares at objects in the hand; use slow movement or exaggerate movement, face away from activity;

proprioceptive eg. jumps, pushes, bounces; increase the awareness of gravity, wall pushes, chair push-ups, provide touch pressure

vestibular eg. seeks movement with pacing, rocking, or spinning; provide movement in linear, lateral or orbital planes, rocking chair, beach ball seat

auditory eg. squeals, hums, repeats directions; slow down communication to allow time for processing, expand the vowel in a word to increase attention to the key word, emphasize action words, use white noise, calm music, headphones to improve focus

oral eg. sucks a soother, thumb; eats food, sips drink, chews objects or clothing, oral motor overflow; provide food to chew or suck; provide a water bottle, chew straws

olfactory eg. smells or sniffs objects, make comments re smell

What are Your Sensory-Motor Preferences ?

- Chew gum
- sip water
- hard candy
- crunchies
- bite nails
- smoke
- popcorn
- coffee
- mints
- sweets
- rub tongue inside mouth
- chew on pencil/straw
- Rock, spin on chair
- squirm/shift in chair
- roll head
- rock body
- run, jump
- tap objects or body parts
- stretch
- isometrics
- balance chair on 2 legs
- shake feet, etc.
- Avoid bright light
- Listen to calm or lively music?
- Sing or talk to self
- gravitate toward rhythm
- avoid loud noises
- more intense reactions than others to unexpected sensory input around you.

“How Does Your Engine Run?”
A Leader’s Guide to The Alert Program™ for Self-Regulation

Mary Sue Williams
Sherry Shellenburger

TherapyWorks Inc.
www.alertprogram.com
**Teaching Self Regulation (The Alert Program™)**

**Stage One: Identifying Engine Speeds**
1. Child learns engine words or zone colours
2. Adults label their own engine levels
3. Child develops awareness of the feel of engine speeds, using adult's labels as guides
4. Child learns to identify and label levels for himself
5. Child labels levels for himself

**Stage Two: Experimenting with Methods to Change Engine Speeds**
6. Adults introduce sensory-motor methods to change engine levels
7. Adults identify sensory-motor preferences and sensory hypersensitivities
8. Child begins experimenting with choosing strategies

**Stage Three: Regulating Engine Speeds**
9. Child chooses strategies independently
10. Child uses strategies independently, outside of sessions
11. Child learns to change engine speeds when options are limited
12. Child continues receiving support.

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**Sensory Diet**

- A sensory diet is a balance of activity, exploration and sensation, unique to an individual, which meets the needs of that individual’s sensory system and allows for calm-alert state and wide-brain activation.

- Its purpose is to help the person become more focused, adaptable, and skillful.

- Most people are able to seek and get tactile, proprioceptive, and vestibular input through their day, as needed, meeting their own sensory needs. That is, most people get their sensory diet met by choosing from the sensory buffet that is always around us in the sensory world.

- When an individual has not been able to do this, his/her sensory needs have not been fully met, and this makes it difficult to regulate one’s own state of being and to be available for age appropriate learning and functioning.
Sensory Diet

When I want to keep my engine running “Just right”

<table>
<thead>
<tr>
<th>What Works?</th>
<th>What Bothers Me?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouth</td>
<td>Mouth</td>
</tr>
<tr>
<td>Move</td>
<td>Move</td>
</tr>
<tr>
<td>Touch</td>
<td>Touch</td>
</tr>
<tr>
<td>Look</td>
<td>Look</td>
</tr>
<tr>
<td>Listen</td>
<td>Listen</td>
</tr>
<tr>
<td>Smell</td>
<td>Smell</td>
</tr>
<tr>
<td>Pressure / Heavy Work</td>
<td>Pressure / Heavy Work</td>
</tr>
</tbody>
</table>

The other half of self regulation - what will help and what will not

Calming activities help to decrease hyper-responsiveness to stimulation.
- Deep pressure to head, trunk, shoulders, hands
- Heavy work as in dragging and pushing or carrying a weighted backpack
- Slow controlled rocking
- Cuddling & backrubs with pressure
- Mat sandwich or bean bag press
- Heavy Work/Proprioception

Calming is slow, rhythmical, pressure, warmth, sweet

Self-Calming activities can be initiated by the child or done independently
- Specifically asking for or initiating any of the above Calming activities
- Sucking on a frozen fruit bar or spoon of peanut butter
- Rubbing hands together using Palms to press on the sides of the head
- Wrapping self in a rug or blanket hugged self (around knees and trunk)
- Learning to use a rocking chair and swing
- Going to a quiet area and hugging a blanket or stuffed animal
- Smuggling into a beanbag chair
- Brushing hands, sitting on hands

The term “sensory diet” coined by Patricia Wilber, an occupational therapist, refers to “how certain sensory experiences can be used to enhance occupational performance in any individual.” (Bundy, Lane & Murray, 2002)
**Organizing** activities help the child to attend and to regulate responses. Examples include:
- Pushing or pulling heavy loads
- Hanging from the hands
- Being upside down
- Longer periods of jumping on a trampoline
- Heavy chewing (gum, fruit roll up, licorice)

**Alerting** activities help the child to focus longer and be more alert. Examples include:
- Bouncing on the therapy ball
- Brief jumping on a trampoline
- Crunchy chewing
- Cold/sour in the mouth

**Some Sensory Diet and Self Regulation Equipment**

**Sensory TOOLS for grounding and regulating**

Can improve listening, thinking, language functions, focus.
- These only work when kept to the self.
- They provide the body with movement and touch input.
- Older students can create their own inventories.

**In Your Mouth!**

**Alerting Foods**
- Cold, sour, tart, spicy, minty, crunchy

**Calming Foods**
- Warm, smooth, sweet

**All Purpose Foods** (deep pressure through jaw from chewing)
- Chewy and crunchy foods may belong in this category

**Non Foods:**
- Water, gum, straws to suck, blow or chew, bubble toys
- Aquarium tubing is great for sucking, blowing, and chewing. You can also get plastic hose for water cooler or hospital use that is high quality.

See oral motor section at www.fdmt.ca online store

“Our Chewable Jewels (right) are made from FDA approved food grade silicone and are Phthalate, BPA, PVC, Latex and Lead free products!”
MOVEMENT!!!!

- Small movement, big movement, now and then movement, constant movement
  - Up & down, back and forth, side to side, round and round (orbital and centrifugal)

- Movement of mouth/hands/feet can happen/help when whole body movement is not an option. (mouth items, fidgets, exercise band)

- Dynamic sitting provides movement input (chair ball, move’n’sit cushion, t-stool, kneeling).

- Increased gravity can decrease need for movement (weighted products, proprioception).

MOVEMENT!!!!

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These only work when kept to the self.
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Older students can create their own inventories.

Ask Eric McHaffie eric@jmclimited.ca

PantoMove
the best chair in the world!

Hokki Stool
Zuma Cantilever
Standing
Zuma Rocker
movin sit
disc o sit

Conquer Portable Mini Exercise Bike
https://www.theinsidetrainer.com/office-exercise-equipment/

Older students can create their own inventories.

https://www.theinsidetrainer.com/office-exercise-equipment/
**Heavy Work**

Involves Pressure/Force and provides a lot of calming sensory feedback from the body. Also promotes core strength and stability, for increased strength and endurance.

Promote Heavy Work throughout the day, but direct a person to it:

- When reaching overload
- when s/he can’t focus or be still,
- when something challenging is coming,
- when s/he needs a break from something challenging,
- when s/he needs to wind down a bit.

Before, during, and after collaborative problem solving™ Ross Greene

DO the DETECTIVE WORK! Take cues from what the person’s body is telling you.

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**Environment vs. Sensory Processing Style**

**The Environment can be the Stressor**

**Visual**

- Is the lighting too bright or shining directly into the child’s eyes.
- The flicker of fluorescent lighting or computer monitors may be bothersome.
- Look at what is in the child’s usual line of view, is it visually overstimulating (i.e. too bright, too cluttered)?
- Keep visual tasks and work area clear, neat, and meaningful.
- Some children will miss important visual cues because of competing visual input.
- Does the child need to process some or all of his/her work in a separate calm area?
- Are there too many things or people in the visual field between the child and the teacher?
- Is there a quiet area that is darker than the general environment and visually calming to withdraw to for calming purposes?

**Auditory**

- Is the noise level too high? The child may need to work in a quieter area to decrease stimulation. (Just how loud and disorganizing is your lunch room?)
- Would white noise help? (Headphones by themselves or with accompanying soft sounds, such as ocean or nature music, classical or new age music)
- Is the child too near to fans, heaters, discussion groups?
- Why do the bells need to be that loud? Put a muffler on it. You may need to take extra precautions for fire alarms. The hypersensitive child with autism may need to be absent or leave immediately.

- Constant streams of language can be very stressful with a language processing delay/disability.

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**Heavy "Jobs"**

- Haul groceries into the house and put things away. (include climbing and hands and knees)
- Sweeping, mopping, wiping boards, desks, raking, mowing, beating a rug
- Dragging hose, leaf bags, wheelbarrow, cart of balls or playground supplies
- Pull linens off of the bed and drag down stairs. Move the sofa or classroom furniture
- Carry laundry basket, carry pots or buckets of water, sand, dirt
- Move books, office supplies, boxes of paper, trash cans, recycling, lumber, firewood
- Chopping, sawing, hammering

**Heavy Play**

- Dragging out the box of books, toys
- Magic Carpet - Kids pull each other on a piece of rug or blanket
- Walk like different animals (include plenty of 4 leg creatures, i.e. bear, crab, etc)
- Jump on a mini trampoline or rebounder
- 2 people sit face to face and rock to "row your boat" with rope or inner tube around them
- Fall into a bean bag chair
- Encourage hands and knees play with cars, animals (one hand plays, one hand holds you up)
- Sidewalk chalk, playing in a wet sandbox
- Swinging from rings, bars, jungle gym, hockey
- Broad jump, jumping off of platforms and playscapes

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**Handling Stress**

**Implementing Change**

Common reactions to stress are ESCAPE and AVOIDANCE. These interfere with task performance and need to be worked on. Baseline cortisol levels set in first 6 years of life.

Stress challenges us to adapt or cope, and these are better strategies than avoidance. Stress that makes us stronger is usually moderate, predictable, and patterned, unless it happens when the individual/system is overloaded. Stress (cortisol) damages the hippocampus, involved in new memory/learning. Neurological reactions to stress and anxiety can be neurotoxic if not modulated.

Perceptions of what is stressful can change, and are often controlled by autonomic function (sensory processing) and emotional and cognitive factors.

Rather than avoiding a stressor, we can seek to reduce the reaction we generate to the stressor.

Learning to expect and accept stress can help to take the power away from our stress reactions.

- What is stressful for a child can be very different from what you might expect, and is very different for different brain types, different environments, families
- Stress factors: anxiety, demands, energy levels, illness, toxins, sleep, diet, love, movement
Environment vs. Sensory Processing Style
The Environment can be the Stressor

Auditory - (cont)
• Rhythm is often tolerated better than loud speech.
• Try adding a carpet to absorb noise, or place slit tennis balls under the chair legs.
• Some children don't hear their name called when attending to distracting background noise, others make continuous sounds to try to block out the background noise.
• Are excess noises muffled in the quiet area? Use room dividers, carpeting, blankets, and other soft, sound absorbing textures.

Tactile
• Note reactions to hard and soft materials.
• Observe differences due to temperature of items (metals are colder).
• The child may avoid different textures. If the child does not tolerate play-dough, glue, fingerpoint, mud, and other goopy textures these may need to be introduced very gradually.
• If the child will only hold items with his/her fingertips, tactile hand desensitization may need to precede activities. Handling things from a “feelie box”, brushing the hands, or starting with a deep lotion hand massage are examples.
• A hard chair may feel cold to the child, if so, use a pad or cushion.
• Provide a variety of textured materials and objects in the quiet area.
• Is the child's clothing well tolerated? Transitions, including seasonal changes in clothing, may need to be slow and gradual. Don't fuss over long sleeve vs. short sleeve. It may be necessary to allow the child to leave on coat/jacket until ready to have it off.
• Have the child be first or last in line if lightly bumping or touching peers is irritating.
• The sound or feel of water may be irritating or scary, especially when unexpected or not in control.

Environment vs. Sensory Processing Style

Vestibular
• Some children will crave movement and seek the feeling of heights and swings. Assess safety factors (balance and grip on swing). Generally, the child who craves these sensations can handle them.
• Try incorporating movement into activities (getting materials, sharpen pencil, etc.) Or allow short movement breaks during tasks/chores.
• Try sitting on a ball, air cushion, t-stool, allow alternate positions
• Is the child fearful of heights, stairs, ladders on slides? If so, beware of stands or stairs with no back (you can see through to behind them), as they are more threatening. Gravitational Insecurity is real and is rooted in neurology, not behaviour.
• Plan an alternative route if a child is not ready to use an escalator or an elevator.
• Children who are fearful of heights or movement may react with fear on playgrounds. Often, remaining on the periphery and watching others may help. The child may need to very gradually explore a playground area, in isolation, at a quiet time of the day.

Reading List
Amen, Daniel Change your Brain, Change your Life 1999
Dodge, Norman, MD The Brain that Changes Itself 2007
Green, Ross The Explosive Child 2010
Green, Ross Lost in School 2009
Levine, Mel A Mind at a Time 2002
Lehrer, Jonah How We Decide 2009
Perry, Bruce and Szalavitz, Maia The Boy who was Raised as a Dog 2007 Born For Love 2010
Pert, Candace Molecules of Emotion 1997
Sarno, John The Mindbody Prescription 1998
Stock-Kranowitz, Carol The Out of Sync Child
The Out of Synch Child Has Fun http://www.johnratey.com
http://www.youtube.com/watch?v=8SVZdTQlmDs
www.bokskids.org
www.ognz.co
zhtp://www.brainhighways.com

Brain Links
zQuantum Physics www.whatthebleep.com
www.flaghouse.ca therapy balls, chair balls, etc

Sensory Web sites
Henry’s Occupational Therapy Services www.henryot.com
Diana Henry lists her strategies for occupational therapists, teachers and parents.
Southpaw Inc. Sensory Integration Products www.southpawenterprise.com
www.incrediball.ca therapy balls, chair balls, etc
www.nognz.co brain fitness

Covering Autism, Sensory Processing Differences, Stress Management Skills. Self Empowerment, learning from life, finding like minds.
www.marclandry.ca
Visit my website for the following:

“Workshop Materials”
Recommended Reading and Links Self Regulation gauges
Relaxation Book & Social Stories Fine Motor Planner
“What Works” “Red Zone” and “Safe Place” forms Teaching Self Regulation Handout
The Scarfes Papers (“Play”) The World is Waking Up
Advocacy Support
My Newsletters
Resources
Information about my private practice (“About Me”)