



Autism Spectrum Disorder Newsletter
06 Issues 2
April 19, 2006

Lester B. Pearson School Board

Sensory Modulation: What is it? How can we facilitate it?

The concept of **Disruption in Sensory Modulation (SMD)** has lately emerged as a “hot topic” in the field of occupational therapy. Sensory Modulation refers to the ability of the brain to take in and balance all incoming sensory information, so that our response (degree, intensity and quality of response) is adjusted to match environmental demands, and that a range of optimal performance/adaptation is maintained. This includes appropriately determining the sensory information that needs our attention and what information can be ignored or disregarded. Therefore, effective modulation allows us to balance our reactions so that it matches the ongoing requirements of an evolving situation.

When there is disruption in that process, a person may present a variety of symptoms, such as being defensive, avoidant, reactive, lethargic, disorganized, whiny, unfocused, fidgety, spacey, unpredictable, tuned out, seeking constant stimulation, etc. Individuals with SMD often present other diagnosis, such as ASD, ADHD, or genetic disorders (Fragile X, Turner Syndrome, etc.). The following are general guidelines to address SMD in any of these conditions, following the STEPSI model developed by leading occupational therapists in the field (J. Wilbarger, T.M. Stackhouse & S. Trunnell).

In order to facilitate the Sensory Modulation process, adults interacting and working with students with SMD need to first identify the person’s **baseline level of activity and alertness**. To do this, you can observe the person when they are at rest, playing on their own, and not following any demands. In this manner, you can see if their level of alertness tends to be low/high, if it is stable or fluctuating,

and if it follows a particular rhythm throughout the day. Although most people have an identifiable pattern, some don’t.

The second step is to determine the **level of reactivity** of your student. This includes how his/her activity level and alertness changes in response to a change of either external (e.g.: adding music/background noise, visual stimulation, movement, etc.) or internal stimuli (e.g.: after eating). Here you want to ask yourself a few questions: How intense does the stimulus need to be to provoke a response? Is the reaction stable on a day to day basis, or is it fluctuating? How is the level of recovery of the student? Some students need a few seconds to recover from an unpleasant stimulation, while other may need extended amount of time and particular circumstances to do so (e.g.: quiet space with preferred toys or sensory soothing activity, etc.).

The third step consists in identifying your student’s **optimal range of alertness**. This includes how high/low his/her activity and alertness level needs to be to function in the different school environments and to learn at his/her best. For example, some students may concentrate best when sitting quietly in a bean bag chair, while others may listen more efficiently when fidgeting.

Once you understand these three concepts, you can start to **make adjustments to situations** following six criteria:

1. Sensation: This refers to manipulating the sensation modality provided and using specific sensory inputs. For example, providing visual contrast and allowing the student to stand at his/her desk may facilitate his/her performance on tabletop tasks.

2. Task: This refers to modifying the structure, complexity, demand for attention and skill, as well as purposefulness of a task. For example, you can decrease the level of motor requirements of a drawing task by providing opportunity to use stamps or stencils.

3. Environment: This refers to modifying the qualities of the different environments the student evolves in. For example, you can organize classroom furniture to promote the feeling of being contained in space for students who like playing under a table or seek closed spaces.

4. Predictability: This refers to using novelty, consistency, expectedness, routine and flexibility, to alter the predictability of an activity, in order to allow maintenance of optimal level of alertness. For example, you can alter a scheduled routine, by integrating a preferred task that will increase motivation, and in turn impact on the student's level of alertness.

5. Self-Monitoring: This refers to developing the student's awareness of his/her personal "just right" alertness state, by labelling states and pairing them with what happened to reach these states, selecting appropriate means to reach optimal alertness state, modelling and practicing strategies selected. For example, it can be as simple as identifying one word/gesture cue indicating the need of a break.

6. Interaction: This refers to adjusting your interactions and adopting a variety of attitudes/roles, such as supporter, encourager, model, coach, narrator or reflector, to help the student attain and maintain an optimal level of alertness. For example, you can adopt a model role to teach new strategies during a learning activity. Keep these guidelines in mind when working with your students and remember that at times addressing only one or two criteria may have a huge impact on your student's comfort level and learning.

Joëlle Hadaya,
Occupational Therapist

Leslie Broun Workshop

On Friday, March 17, 2006, the Centre of Excellence for Autism Spectrum Disorders had the pleasure of hosting a workshop given by Leslie Broun, Special Programs Consultant at the Peel District School Board of Ontario here at Lester B. Pearson. She presented a highly stimulating, teacher-friendly workshop focusing on strategies for teaching reading and building foundation skills in mathematics. Over 140 teachers, resource teachers and professionals were in attendance for this extremely valuable conference. Leslie has written a new book with Patricia Olewin which is expected to be released this summer. We are planning to have a couple of copies available through our library in the fall.

The Hidden Curriculum May 5th

On Friday May 5th, the Miriam Foundation will present The Hidden Curriculum with **Brenda Smith Myles, PhD**. The Hidden Curriculum is

comprised of knowledge that is not typically taught formally to neurotypical children, but is acquired via incidental learning. Strategies to teach these critical skills to students on the Autism Spectrum will be covered at this workshop.

For more information please contact Diana Carr dcarr@lbpsb.qc.ca. It's not too late to register or use those PIC Funds as there is still space available.

Linda Hodgdon May 18th

On May 18th, 2006 The Center of Excellence for the Physically, Intellectually and Multi-challenged in the Eastern Townships will be hosting a presentation by Linda Hodgdon, M.Ed., CCC-SLP. "Visual Strategies: The Key for Improving Communication, Behavior and Social Skills" promises to be an informative day for any individual working with children who would benefit from the supports that visual strategies offer. This workshop and opportunity to hear Linda Hodgdon is a deal at a mere \$25.00 for the day. May 19th will be the Annual Symposium, which will offer six sessions on varied topics in special education, including an introduction to TEACCH by our very own Jade Lawsane.

Please do not hesitate to contact Anna St-Hilaire regarding information on either of these days buttersl@etsb.qc.ca.

The Top Shelf



This section will highlight new acquisitions or timeless favourites from the ASD Library. To borrow from our library, see the link on the ASD website for titles, and e-mail or call Catherine Burrell, or ask any member of the ASD team!

For students with autism, social situations can be bewildering. The series **Autism & PDD – Social Skills Lessons** from Lingui Systems is a collection of Social Stories which can help you to teach students with ASD appropriate coping skills for almost any social situation they may encounter.

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