

Sensory Systems and Managing the School Environment

We each have 8 senses. Our sensory system is at work all the time: like an automatic camera lens, it constantly retunes searching for balance until there is a power surge causing it to go into overdrive. As an adult we make many choices, often subconsciously because of our sensory system, but as children we may not have connected how we feel to the environment around us. As children, we certainly have a lot less control of the environment and how we respond, particularly in schools.

The sensory system

We are all familiar with our 5 basic senses – seeing, hearing, tasting, touching, smelling. Our other 3 senses are less well known:

- 1) Interoception helps us understand and feel what is going on inside our body –children who struggle with the interoceptive sense may have trouble knowing when they feel hungry, full, hot, cold or thirsty. Having trouble with this sense can also make self-regulation a challenge.
- 2) Proprioception tells the body where it is in space using forces of muscles and joints. Proprioception plays a big role in self-regulation, coordination, posture, body awareness, the ability to attend and focus, and speech.
- 3) Vestibular relates to our sense of balance but can also affect vision and hearing. It provides feedback to our body like an internal sat nav or spirit level. Difficulties with the vestibular system can affect motor skills and communication.

Our senses can be under-responsive or over-responsive to stimuli. We all have varying degrees of tolerance and this can go **up** or **down** in response environmental stimuli.

Sensory Profiles

We each have a sensory threshold. If the threshold is low, then we notice sensations quickly but if the threshold is high, then it takes us a lot longer to notice sensations. We can make adjustments to provide for more or less sensory stimulation to help us achieve our comfort levels. Simple examples might be using lamps because the main light is too bright, always having the radio on in the background because we don't like silence or choosing a vibrating toothbrush over one with soft bristles.

As adults we have developed a degree of familiarity with our own sensory system and have figured out ways to accommodate it –going for a vigorous run or a yoga session to make us feel better. Children have not achieved this level of self-knowledge or understanding. They may

not realise their sensory system is being overloaded and have fewer ways of adjusting. As adults we may not realise the extent of their overload until we see the 'meltdown'.

Sensory demands in schools

There is considerable build-up of stress on a child's sensory system throughout the school day. The child has very little freedom to adjust the sensory input and release some of the stress.

Many parents experience the 'coke bottle' effect after school where the child has held it together all day at school and then explodes at home. Some sensory stresses at school include:

- sitting on a hard chair at a desk or sitting on the floor with legs crossed
- bright strip lights
- constant classroom chatter and movement
- only eating or drinking at set times
- the noise, amount of people, movement, unexpected happenings at play times
- the noise and echo in a school dinner hall
- being quiet and still for large periods of time
- the smell of toilets and school dinners

Consider how often we, as adults, respond to our sensory system or environment. For example, sucking on a mint when we feel our attention wandering; turning on the radio when silence feels oppressive; turning off the TV when it interferes with our concentration; going for a refreshing lunchtime walk rather than sit in the busy staff canteen.

We are turning up or down the environmental stimuli around us helps to reset our sensory system returning us to our optimum comfort level.

Looking after the sensory system in school

Not everyone's sensory profile is the same and our tolerance of environmental stimuli can go up or down according to our mood and how much sensory stress we are experiencing. There are many things we can do to help regulate children throughout the school day:

- provide appropriate sensory breaks – alerting, organising and calming activities - throughout the day
- provide a variety of snacks chosen for sensory integration
- choose uniform materials which are non-irritating and cut labels off
- provide fidget toys
- provide wobble cushions, resistance bands and weighted blankets
- provide safe spaces for children to recover their equilibrium
- be attuned to the child so we can regulate the environment for and with them

Recommended reading - *Living Sentionally* by Winnie Dunn

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