

Sensory Advice for Schools

Introduction to Sensory Processing

Sensory processing refers to how we use the information provided by all of the sensations from within our body and from our environments. Our senses integrate to help us understand who we are, where we are and what is happening around us. When our senses are integrated correctly we are able to respond appropriately to the sensation. For example we know to take off a piece of clothing that is irritating us or we may take time to smell something we like.

Those people who have sensory processing difficulties find it hard to work out what is happening around them and inside their bodies as they are not registering sensory information accurately. For example in a school situation when standing in a line another child may brush up against them and this feels painful to them or the noise levels in the lunch hall feels like people are screaming in their ear. Some children need to move around in their seat more than others as their bodies are not providing enough information as to where their arms and legs are so the extra movement gives that extra feedback.

Those children who experience sensory processing difficulties seem to have difficulty coping with information in their environment. This can result in children over-responding or under-responding to sensory information and these children need support from those around them to learn and develop strategies to make their life a little bit easier.

We have seven different senses. Detailed in this information pack is information on each sense and strategies to apply if a child has problems within this area.

Vestibular
Auditory
Proprioception
Smell/Taste (including oral seeking)
Vision
Tactile

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006

The Vestibular System

What is it?

How the body handles movement is down to our vestibular systems. This is located in our inner ears. This sense helps us to keep upright against gravity. It is stimulated when we move or change our head position, it enables us to keep orientated when we are bending over to pick something up, ride in a car, walking around and doing physical activities. More subtle vestibular activities include maintaining a seated posture and paying attention.

Problems you may see: Over-Responding

- Avoids apparatus or fast moving playground equipment
- Hesitates or avoids walking down stairs
- Gets dizzy very easily
- Gets car sick on trips

Strategies to help: Over-Responding

- Use a firm, supportive seat that will not tip to help the child feel stable and secure whilst at their desk. Make sure their feet can stay flat on the ground.
- When expecting a child to change position in the classroom e.g. sitting on the carpet, provide a visual marker so the child has a clear aim of where to go. This could be a cushion or a spot.
- When sitting on the floor during carpet time, assemblies etc., wherever possible position the child so they can lean against a wall.

Problems you may see: Under-Responding

- Moving in their seats or getting out of their seats but not necessarily in an organised manner
- May have poor sitting posture, e.g. slumping over their desk
- Some children may have low muscle tone so doing P.E activities is challenging with poor balance skills

Strategies to help: Under-Responding

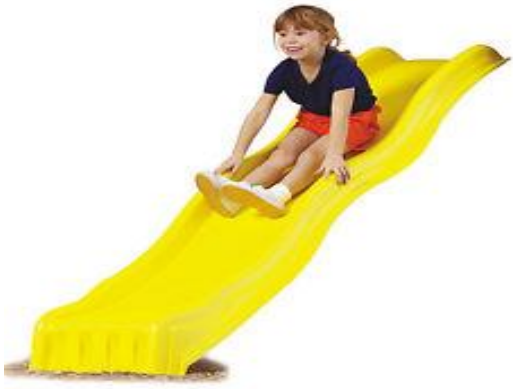
- A regular change of position can help them to maintain their attention, e.g. sitting on the floor (including during circle time), sitting on a chair, high kneeling etc.
- Provide regular, short 'movement breaks', e.g. walking around the classroom to carry out a chore
- The use of a writing slope to help maintain an upright posture
- Provide as many opportunities as possible for active work during the day, e.g. carrying out a maths activity on the board instead of sitting
- Some children may be better able to work if allowed to stand by a high counter or bookshelf. Also, many children benefit from sitting on a move and sit cushion, which allows them to get the movement they need while working (see equipment suggestions).

General Strategies

- Keeping children in for break, as a consequence for not getting work done, is counterproductive. It creates a cycle that is hard to break. Children who do not finish their work and are not allowed to get the movement they need will be less likely to finish the work as more time without movement goes by. If you feel strongly about providing a consequence, give those children who do finish their work five extra minutes of free time. You may also consider sending children who have not finished their work out to run a lap around the playground. They must return to the classroom to finish their work.

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006

- Do some “wake-up” activities before starting instruction. Long bus rides to school are not conducive to the best level of alertness. Gentle stretches, movement of music, running and/or jumping on the spot are all good. Similar activities can be used for a minute or two throughout the day whenever you sense the need.
- Make sure that children do not just sit or wander around during break time. This should be a period of strenuous activity. Running, swinging, sliding, hanging or climbing on the monkey bars are all activities that help children to organise themselves.
- Allow children to write on the chalkboard prior to writing with pencil and paper. The large movement of trunk, shoulders and arms will facilitate the posture control and feedback for this fine motor task.
- Activities that require fairly intense concentration (reading, maths, language) should ideally follow PE or following the child being allowed some movement opportunity or proprioceptive input.



Auditory

What is it?

Auditory processing refers to how the brain recognises and makes sense of sounds. Sounds consist of loudness, pitch, how long it lasts for and where it is coming from. We automatically put all of this information together and respond appropriately to it. Children who do not process this information accurately may over-respond or under-respond to sounds.

Problems you may see: Over-Responding

- Puts hands over their ears in reaction to noise levels
- Over reacts to sounds that others barely notice
- Unable to tune out background noises, e.g. a fan
- May hum or make noises to themselves to drown out sounds

Strategies to help: Over-Responding

- Respect the child's sensitivities (to some children sounds are perceived to be painful)
- Try to forewarn the child before noises, e.g. fire alarm, school bell
- Allow the child to wear headphones or earplugs when there is expected to be excess noise in the room
- Reduce extraneous noise or wait until it has gone before giving instructions. Do not expect a child to concentrate when there is a lot of noise going on outside the classroom.
- Reduce background noise
- A child who is over responding to noise may benefit from sitting in a quieter space of the classroom away from walkways.
- Dinner halls and assembly can be particularly overwhelming. Extra preparation for these times and the availability of sensory strategies such as fiddle toys and proprioceptive activities/strategies may help them feel calm.

Problems you may see: Under-Responding

- The child speaks in a loud voice
- Child hums to themselves
- Child seems to ignore you when you call their name even though you know they heard you

Strategies to help: Under-Responding

- Only speak to the child when they are facing you
- Give simple instructions – don't use too many words
- Ask the child to repeat the instruction to you
- Wait for the child to process the information and respond which may take them longer

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006



Proprioception

What is it?

Proprioception helps us to know where each part of our body is and how it is moving. It helps us to judge the force at which we do something and perform everyday tasks e.g. dressing without having to rely on our vision. The receptors for the proprioception sense are located in the muscles and joints**.** They are mainly stimulated by resistive activities or stretching. When the proprioceptive sense is working well, we can make continual adjustments to our position. This helps us to:

- Stay in the best position in a chair
- Hold utensils in the right way e.g. pen, cutlery
- Judge how to manoeuvre through space
- Develop an awareness of our own and others personal space
- Judge the force at which we do something
- Calm and organise ourselves

Problems you may see

- Have stiff and uncoordinated movements
- Be clumsy and fall frequently
- Crash into objects in the environment
- Have difficulty dressing or undressing
- Not be able to do things without looking
- Have difficulty seating themselves in a chair and fidgets
- Always on the go
- Have difficulty grading the force at which they do something
- Has poor spatial awareness

Strategies to help

The following activities provide ideas to help your child to become more aware of their body position and become calmer and more organised.

NOTE: Please use common sense and do not apply to much pressure or ask your child to push, pull or carry something that is too heavy for them.

Heavy work

- Wearing a weighted ruck sack
- Using a weighted lap pad when sitting

- Throwing games using weighted objects e.g. Throwing bean bags at targets
- Lifting items e.g. floor cushions or box of objects
- Carrying heavy bags or pile of books
- Carrying washing upstairs.

Pushing/pulling tasks

- Moving equipment/future (chairs toy boxes)
- Play magic room-pretend to push out the walls with arms and hands
- Helping with house hold chores e.g. mopping floors, sweeping and hovering
- Pushing the supermarket trolley
- Tug of war games

Deep pressure touch

- Firm massage
- Bear hugs
- Firm hand shakes
- Hot dog game- rolling your child in a rug or blanket with their head showing
- Sandwich game- child lays on their back and adult lays items such as cushion on top of child applying firm/comfortable pressure pretending items are sandwich fillings.

Games

- Animal walks-pretend to be different animals moving as lightly and heavily as possible.
- Do activities such as puzzles in all fours position
- Jumping and hopping games
- Play on space hopper or gym ball with feet flat on floor gently bouncing
- Playing on trampoline
- Rough and tumble games
- Child stands with eyes closed. Adult then moves the child's limbs into different positions then returns them to original position. Child opens eyes and then tries to remember the position they were placed in.

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006

Smell/Taste

Smell travels directly to the centre of the brain that controls emotions, memory and learning. Smell is closely linked to our sense of taste. Our brains are wired so that we are able to respond appropriately to tastes and smells. A bad smell for example does not go away, our brains just stop noticing it; otherwise we would be totally distracted by it.

Problems you may see

There may be an over sensitivity or under sensitivity to smell and taste, although it is less common to be under sensitive. When a child is over sensitive they may avoid some foods, get upset by certain smells or crave smell, become distracted by a smell in the room and gag at smells others are only mildly affected by.

Strategies to help

- Redirect the child to carry out some heavy work activities to distract them and also calm their overly alert sensory systems
- Allow them to have their favourite scent or an object that they like the smell of to block out the 'offensive' smell.

Oral Seeking

We all use our mouths to organise ourselves. Think about how many times a day you put your hand to your mouth or put something in your mouth. Many children will be better able to concentrate and have a more appropriate level of arousal if they are allowed to chew or suck.

Strategies to help

- Allowing children to sip water from individual sports bottles throughout the day
- Allowing the child to have a thick milkshake at break or lunch that they suck through a straw
- Provide chewing gum (with rules in place by teaching staff)
- A range of chewy crunchy snacks e.g. carrot sticks and cereal bars
- Chewy pencil toppers
- Chewy tubes or chewellery

Chewy Tubes

Chewellery

Vision

What is it?

Visual processing is the brain selecting and responding appropriately to visual input. This requires effective visual processing and eye movements.

Problems you may see

- Limited eye contact
- Use their finger when reading
- Repeatedly lose their place when copying from the boards
- Struggle to judge distances and bump in to furniture
- Distracted by pictures and people within the room
- Cover their eyes to shield from florescent lighting
- Complain of headaches, rub eyes or squint

Strategies to help

- Allow the child to sit at the front of the class
- Provide a written sheet rather than expecting them to copy from the board
- Provide large print worksheets
- Use a marker to help them with reading
- Use a typoscope when reading (cut out a window in a piece of card to show only what is needed to be read)
- Use a writing slope to reduce the distance eyes have to travel from the board to their paper
- Use different colours for different lines on the whiteboard
- If there is adequate natural lighting in your classroom consider turning off the fluorescent lights. If it is impossible to eliminate the fluorescent lights, turn on only the number necessary and turn them off periodically when children need calming.
- Provide an area without excess visual stimuli. Some children may need to use this area for seatwork.
- Areas for group instruction should be placed away from doors, windows or heavy traffic areas. Children should not be facing bulletin boards or anything else that will be visually distracting.
- Provide a quiet, soft, comfortable corner or tent that children can use as needed. It should be softly lit and filled with pillows and soft blankets.
- It may be difficult for some children to sort out all the visual, auditory and tactile stimuli of being in a classroom. Allowing them to work in an area that is more enclosed might be helpful. allowing them to stand or sit slightly away from, behind, or with their backs to the rest of the group.

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006

Tactile

What is it?

Our skin has receptors within it that respond to pain, temperature and light touch. This alerts us to potential threats and allows us to react appropriately. The information is interpreted and our brain decides as to how we should act. Through touch we gain information about where and how our bodies are positioned.

Problems you may see: Over-Responding

- Avoidance of messy play (will become distressed if pushed to do it)
- Become upset if others brush past them
- Avoid feeding with their fingers
- Gets upset when their hands and face are messy
- Over-responds to unexpected touch

Strategies to help: Over-Responding

- Allow child to walk at beginning or end of queue when lining up to avoid unwanted touch
- Use firm pressure when touching children. Never use light touch. Pats on head, back or shoulders are not reinforcing for children who have a tactile system which is over responsive. Downward pressure on both shoulders can be calming for many children. Touch should always be expected by the child, not a surprise.
- Do not tickle children or touch their hair during play. This can be perceived as an irritant or at the extreme painful
- Avoid touching or approaching children from behind. Make sure children see you before giving instructions or asking for responses.
- When using physical prompts, instruction or guidance, use as firm a touch as possible without hurting
- Be aware during messy activities, e.g. painting and gluing, that a child may become distressed if their hands get messy. Provide tools such as paint brushes and glue sticks and allow them to wash their hands if necessary

Problems you may see: Under-Responding

- Child has messy hands and face but doesn't seem to notice
- Clothes look dishevelled and child doesn't notice
- Difficulty manipulating pencils and scissors
- Excessively touches other people and objects

Strategies to help: Under-Responding

- Encourage localisation of touch by using stickers on arms or legs, ask child to find them
- Allow the use of fidget toys. Permit them to use one object and set boundaries for them to use it and ensure it is not impacting negatively on their attention to the task.
- Provide activities that encourage tactile discrimination, e.g. finding objects in beans, sand or rice.
- Allow the child to engage in messy play, e.g. sand, paint, water play etc.

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006

Equipment

- A move and sit cushion can be placed on a chair or used at carpet time. This allows subtle movement while remaining seated. Note when using this on a chair it is important that the child's feet are flat on the floor to provide stability.



- A gym ball seat can be used to improve posture and gives the child movement while seated.

- Heavy pillows are great for the reading corner. They can also be used as punching bags and some children will benefit from having the pillows piled on top of them. This provides proprioceptive input. Old T-shirts filled with heavy stuffing material and sewn shut may be useful.
- Weighted lap pads can also be used during lessons and assembly.

- Therapy putty can provide proprioceptive input to the finger joints which can have a calming influence as well strengthen hands.

Therapy Putty

- Fidget/tactile toys if chosen carefully can be effective in helping a child maintain focus

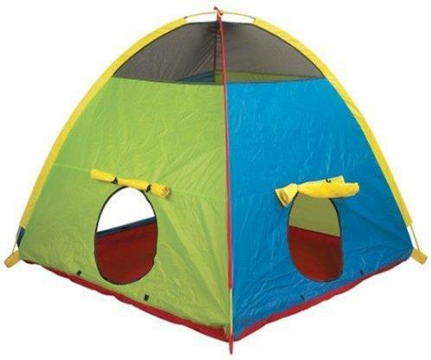
Desk buddy sensory bar ruler

Tangle Toy

Twist and lock block

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006

- A freestanding dome tent will provide a place for over stimulated or fearful children to withdraw for short period of time. It can also be used for one-to-one instructions and small quiet groups.



Pop up tent

References

- Sensational Kids by Lucy Miller
- Raising a sensory smart child by Lindsey Biel and Nancy Peske
- The Goodenoughs get in sync by Carol Kranowitz
- Understanding your Child's Sensory Signals by Angie Voss
- No Longer a Secret Bialer and Miller

Useful websites

www.sensetoys.com
www.rompa.com
www.nrs.uk.co.uk
www.spdfoundation.net
www.fledglings.org.uk
www.sensorysmarts.com

Provide Community Interest Company: 900 The Crescent, Colchester Business Park, Colchester, Essex CO4 9YQ
Registered in England and Wales no. 07320006