

60 Sensory Minutes

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helping children and young people to succeed

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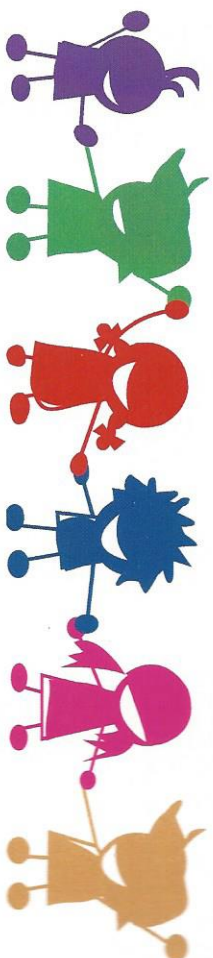
User Guide

By Tina Rae

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DEVELOPING
SENSORY
SKILLS
IN THE
NURTURE
GROUP

60th Sensory Minutes



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About the author

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Dr Tina Rae has a Master of Arts (MA) degree in Education and a Master of Science (MSc) degree in Professional Educational Psychology. She has also conducted research on the topic of children missing education for the Doctorate in applied child and educational psychology at the University of East London and been awarded the qualification of Doctor of Applied Child and Educational Psychology. She has over 30 years experience working with children, adults and families in both clinical and educational contexts within local authorities and specialist educational services. She is currently working as a Consultant Educational Psychologist in a range of SEBD and mainstream contexts and as an Academic and Professional tutor at the University of East London. She is also providing consultancy and supervision for carers and social workers at Compass Community as part of their REACH approach. She is a registered member of the Health and Care Professions Council and a full member of the British Psychological Society. Tina is also Vice Chair of SEBDA and a member of ENESEC (European Network for Social and Emotional Competence).

Tina is a prolific author and has written extensively on topics such as wellbeing, attachment, emotional literacy, behavioural problems, anger and stress management, critical incidents, cognitive behavioural therapy, motivational interviewing, solution focused brief therapy, loss and bereavement in young people, youth offending and social skills development. Her 71 publications to date can be accessed via Sage publications, Paul Chapman publishing, Folders publishers, Jessica Kingsley, Speechmark, Routledge, Hinton House, NGN and Optimus publications.

Tina also contributes to national and international conferences and events on a regular basis including those for SEBDA, NGN and Optimus while also providing training courses and supervision for school based staff in both special and mainstream contexts and Educational Psychology services across the country and abroad.

Introduction

This programme is designed to support young children within both the mainstream classroom context and within the nurture group setting.

IS IT SENSORY? OR IS IT 'JUST' BEHAVIOUR?

These are questions that we frequently hear in schools today where children and young people are displaying a range of behaviours that often emanate from some very complex needs. Many of our children and young people display significant difficulties in terms of managing their sensory world – both socially and in the learning context.

The range of difficulties and complex co-morbid needs they present with can often both puzzle and intrigue us as practitioners. We very often see children and young people with 'labels' of ADHD/Autism/Aspergers/SEMH/behaviour needs/FAS etc, and a common thread within all these difficulties are concerns regarding sensory needs and difficulties in managing the sensory environments of both home and school. We are therefore very conscious of the need to develop more effective support systems and approaches to meet the needs of such children and young people with sensory processing/integration difficulties.

It is vital for us as practitioners to be aware of the fact that sensory hypersensitivity in one or more areas make it difficult to concentrate and attend within class. It can impact on children's learning, it impairs working memory, executive functions, and emotional regulation, and their abilities to maintain and form relationships, fine and gross motor skills and language development. Sensory difficulties are a fluctuating condition, the child may be able in one instance manage well with a sensory stimulus then react in an unwanted behaviour and even a terror response to the same stimulus moments later.

There is also a clear and evident link between the development of social and communication skills and sensory difficulties. It is important not to underestimate the emotional aspects of managing such difficulties for both the child and the parent. Alongside addressing sensory needs, practitioners also need to attend to the emotional needs of the children – supporting wellbeing and the management of anxiety and

stress levels in both the social and learning context. We would recommend systems and programmes that help the child to manage the emotional aspects of their difficulties, including their ability to engage socially and maintain self-esteem and confidence levels. The joint publication between SEBDA and NGN The **Wellbeing Tool Kit** provides practitioners with a comprehensive training package to enable them to develop specific skills in working more therapeutically with children and young people who exhibit such difficulties and supporting them more appropriately in developing anxiety and stress management skills.

WHAT IS SENSORY INTEGRATION?

Sensory integration is the ability of the brain to organise information received from the senses so an appropriate response is made. We all learn about ourselves through our bodily senses. As well as the five senses of touch, taste, smell, sight and sound, the body also senses movement, force of gravity and body position through the muscles and joints. This is referred to as proprioception – the ability to sense one's position in relation to the space around one.

The body also senses where the head is in relation to gravity. This keeps us upright and balanced. This is known as the vestibular sense. These senses give us information about the physical condition of our body and the environment around us.

The brain must organise all of these sensations if we are to move, learn and behave normally. This is known as sensory integration. We all depend on sensory integration in order to carry out daily tasks in work, play and self-care. It also provides a crucial foundation for later, more complex learning and behaviour.

Sensory integration takes place in the central nervous system where complex interactions such as co-ordination, attention, arousal levels, autonomic functioning, emotions, memory and higher level cognitive functions are carried out.

Sensory integration takes information through the senses, puts it together with prior knowledge, information and memories stored in the brain to make meaningful responses.

Development of sensory integrative functions

Sensory integrative functions develop in a natural order and every child follows the same basic pattern. The child uses each activity to develop "building blocks" that become the basis for more complex development.

Visual perception, emotional growth, academic learning and behaviour are all dependent upon the sensory motor foundation.

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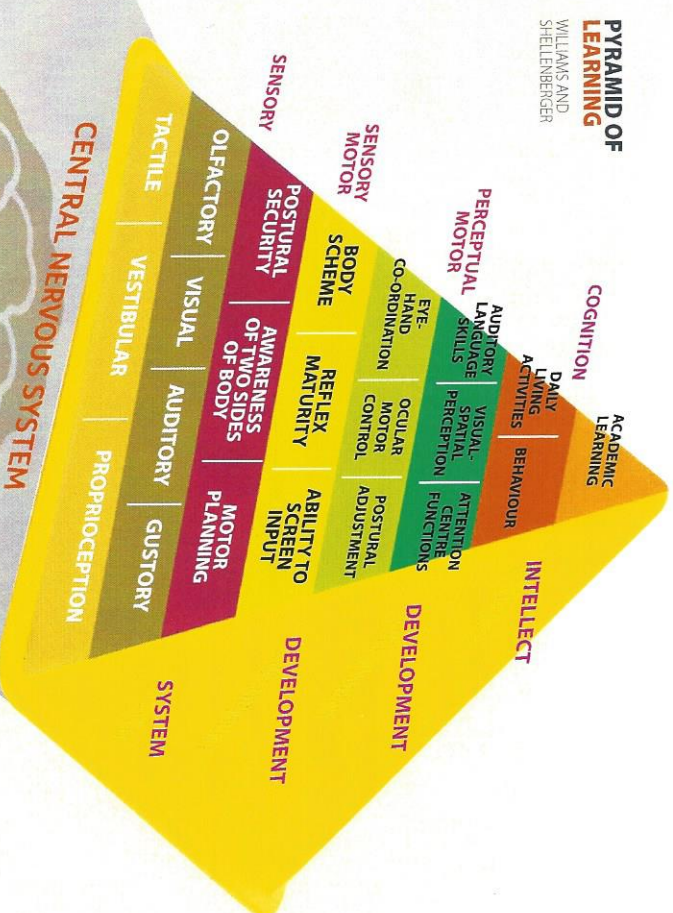
Ayres' Model of Sensory Integrative Development

Sensory integration is a concept which has existed within occupational therapy practice since the 1960s. Dr A.J. Ayres first coined the term and proposed sensory integration as being:

"The neurological process that organises sensation from one's own body

and from the environment and makes it possible to use the body effectively within the environment." (1972, p.11)

We obtain information through seven main sensory processes: auditory (hearing), vestibular (gravity and movement), proprioceptive (muscles and joints), tactile (touch) and visual (seeing), as well as olfactory (smell) and gustatory (taste). These systems are complex and allow us to interpret and experience incoming stimuli. Participation in daily activities depends on the ability to process and integrate this sensory information from the environment within the body.



INDICATORS OF SENSORY INTEGRATION DIFFICULTIES

This list of indicators could be used as a checklist with parent/carer and will certainly 'flag up' children and young people who may need additional support at the outset.

General indicators of sensory processing difficulties may include:

- Over or under sensitive to touch, movement, sights or sounds
- Motor coordination difficulties
- Activity level unusually high or low
- Poor organisation of behaviour
- Delays in speech and language development
- Poor self-concept
- Difficulties in activities of daily living
- Difficulties in learning
- Challenging behaviours

Our senses

Understanding how our senses work is clearly an important factor for us in terms of facilitating the identification and treatment of any difficulties.

The tactile system

Tactile system is developed by a baby through touch as a primary method of communication and to establish social bonds. Through tactile responses a child learns about feeding, dressing, language, movement, perception, basic concepts and handwriting.

Tactile processing is the ability to interpret sensory information from the skin

Signs of tactile dysfunction

Hypersensitive (over sensitive) – This is also known as tactile defensiveness and is characterised by a child who may overreact to sensations that do not distract his peers.

Signs include:

- May dislike certain foods due to texture
- May dislike brushing teeth or hair
- Responds with alarm when face/body is washed
- Frequently walks on tip toes to limit sensation on the feet
- Does not like the feel of certain clothing
- Reacts aggressively/emotionally to touch
- Rubs or scratches at a place on the body that has been touched by another

- Dislikes crowds
- May avoid putting hands in sand, finger paint, glue and other "messy" activities
- Dislikes being dirty

Hyposensitive (under sensitive) Characterised by a child who does not seem to be aware of tactile sensations

- Does not react to painful experiences
- Frequently bumps into and pushes other children
- Seems unaware of cuts, bumps and bruises
- Bites self or picks nails frequently
- Difficulty manipulating tools and toys
- Craves touch, may touch constantly or indiscriminately

The proprioceptive system

Proprioception is the conscious and unconscious awareness of body position and movement. **The proprioceptive system is the muscle sense which tells the brain:**

- When and how the muscles are contracting or stretching
- When and how the joints are flexing, extending or being pulled and pushed
- What the body parts are doing and where they are in space
- The force muscles are exerting
- How to modulate the vestibular system

If the proprioceptive system is not functioning correctly the child may have difficulty with fine motor skills, gross motor skills and self-help skills

Signs of proprioceptive dysfunction

- Stiff uncoordinated movements
- Poor spatial awareness
- Craves deep pressure sensations on body
- Unaware of obstacles in their pathway
- Difficulty in moving and maintaining posture without the use of direct vision
- Difficulty getting in and out of chair, up and down stairs
- Too tight or too weak grasp on pencil

Proprioception is the key skill required to plan movements. It becomes automatic with repetition. Activities performed against resistance facilitate good proprioception.

Vestibular system

The vestibular system is the balance sense. It is the ability to interpret information relating to movement and balance.

It tells us:

- Where one is in relation to gravity, i.e. when you are spinning, jumping and swinging
- Whether one is moving or standing still
- How fast one is going and in what direction
- Where one's body is in space

Its function is to:

- Maintain muscle tone and posture in order to move efficiently
- Maintain a stable visual field by adjusting eye and neck muscles to compensate for movement of head/body
- Enable you to use both sides of body together
- Provide foundation for higher level learning

Signs of vestibular dysfunction

If a child's vestibular system is over sensitive the following may be observed:

- Car sickness
- Child who over reacts to mild or vigorous movement that most children would enjoy
- Dislike of carnival rides
- Seeks sedentary options
- Fearful of jump up and down stairs, rolling in a barrel, climbing, leaning backwards, somersaults and swinging
- They may try to control and manipulate events to avoid stressful sensations which may appear to others as obstinate and unco-operative behaviour
- They often seek physical support from an adult

If a child's vestibular system is under sensitive the following may be observed:

- Child who needs lots of vigorous activity in order to "get going"
- Often stumbles and falls
- Rocks in chair at desk
- Twirls/spins thought the day
- Seeks movement constantly- fidgets, rocks cannot sit still
- Takes excessive risks
- Difficulty co-ordinating both sides of the body, lacks hand dominance, does not cross midline

- Confusion of right and left
- Reversal of letters
- Has difficulty motor planning and performing motor sequences
- Delay in speech, reading, writing and visual perception
- Love of fast and moving equipment – without becoming dizzy
- Inability to follow a moving object, draw a line, read a line of print of copy from blackboard
- Trouble holding head up while sitting

Visual processing

Visual perception is the ability to understand and interpret visual stimulus so we can understand the world. A child who has a deficit in visual processing has normal or corrected vision. Visual perception skills develop when well organised vestibular, proprioceptive and tactile systems at brain stem level support interaction with the higher level function of the cerebellum.

Signs of visual processing dysfunction

If a child's visual system is *over sensitive* a child may be seen to over react to visual information in the environment that other children are not distracted by the following may be *observed*:

- Avoid bright lights
- Become frustrated when trying to find objects in competing backgrounds i.e. find pencil in drawer
- Is distracted by activity within the classroom
- Has difficulty completing puzzles as compared to peers
- Gets lost in familiar places
- Struggles to copy information from text book or board
- Avoids eye contact

If a child's visual system is *under sensitive* a child may appear unaware of visual information that they should notice the following may be *observed*:

- Looks carefully or intently at objects and/or people
- Hesitates going up/down stairs
- Has difficulty staying between the lines when colouring and writing

- Handwriting is illegible
- Difficulty copying from board- unable to hold image long enough to transfer it to the page
- Leaves sections on work sheets blank

If there is *poor visual perception* the following signs may be *observed*:

- Inability to avoid objects
- Lacks personal space and boundaries
- Disorganised possessions
- Difficulty holding eye contact
- Difficulty with depth perception
- Poor attention to visual detail
- Poor handwriting
- May avoid reading, writing and drawing
- Has difficulty with building and doing puzzles
- Gets lost easily
- Difficulty recognising and drawing letters, numbers and shapes

Auditory processing

Auditory processing is the ability to interpret information that is heard

It involves:

- Receiving information
- Perceiving and discriminating between sounds
- Sound association and decoding
- Remembering what is heard
- Attending to sound
- Integration of what has been heard and expressing a response
- Localising sound

Signs of *poor auditory processing*

If a child's auditory system is over sensitive a child may be seen to over react to noises that other children are not bothered by

- Holds hands over ears to protect for sound
- Complains about noise levels within the classroom
- Is distracted by noises within the classroom
- Easily frustrated during listening activities
- Needs instructions to be repeated and may confuse instructions
- Gives the impression that they are not paying attention

If a child's auditory system is **under sensitive** a child may appear unaware of sounds/noises and **do not seem to hear as much as others do.**

- Difficulty discriminating/locating sound
- Make noise for noises sake
- Difficulty relaying simple message
- Gives inappropriate response to routine questions
- Difficulty following simple instruction
- May take longer to respond to instructions or to answer a question
- Frequently misuse grammar
- Problems with spelling
- Speech can be hard to understand due to inaccurate word substitution.

Olfactory system

Sensory organ for smell is the nose. Taste and smell are more than mere sensory decoration. They serve as valuable early warning systems in situations where there are no auditory or visual clues. These senses can contribute to memorable experiences on a personal level and memory associations may occur.

Oral processing

This is the least versatile of the senses. It is triggered by the chemical content of substances in the environment. The chemical particles are picked up by receptor sites on the tongue.

There are five tastes perceived:

- **Sweet**
- **Sour**
- **Bitter**
- **Salt**
- **Umami**

Children have more taste buds than adults, giving them a more highly developed sense of taste. A child may have difficulties perceiving taste or be over sensitive to strong tastes, which can lead to issues at meal times. Touch and pressure receptors in the mouth perceive information about texture and sensation of food. Taste also works very closely with smell. It is rare to taste something without smell. It elaborates on the information received about food.

Using a checklist to facilitate initial recognition of difficulties

When looking at the specific sensory systems the following difficulties may be observed and could be recorded in the checklist provided here:

1. Tactile system

	Present	Partially present	None
Child may react negatively to touch, being hugged or bumped into			
May avoid or crave certain textures which has a significant impact on choice of clothing			
May avoid messy play			
Constantly touching and feeling certain objects or people			
Avoids being barefoot			
Doesn't like splashing water			
Difficulty standing in line			

2. Visual system

	Present	Partially present	None
Avoids bright lights			
Difficulty finding objects in a competing background			
Covers eyes to protect from light			
Stares at objects/people intensely			

3. Vestibular system

	Present	Partially present	None
Difficulties with balance			
Doesn't like playground rides			
Doesn't like car journeys			
Dislikes feet off the ground			
Constantly moving			
Twirls/spins or rocks frequently and often unconsciously			
Seeks out all kinds of movement activities			

4. Auditory system

	Present	Partially present	None
Holds hands over ears to protect from noise			
Doesn't respond to name being called			
Responds negatively to loud or unexpected noises			
Distractable when trying to work in a noisy environment			

5. Proprioceptive system

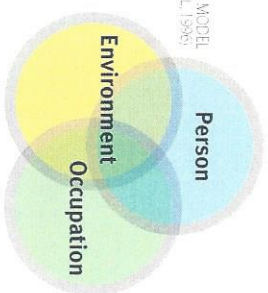
	Present	Partially present	None
Holding a pencil properly			
Always bumping into things			
Doesn't appear to notice obstacles in the environment			
Difficulty judging the pressure of touch i.e. hugging too tightly			
Carrying out movement activities without vision			
Seems to like falling over or bumping into things			
Tends to prop themselves up on objects or people			
Poor motor co-ordination skills			

6. Oral system

	Present	Partially present	None
Avoids certain taste, smells and textures			
Craves certain tastes, smells and textures			
Gags easily on food textures or utensils			
Mouths, chews or licks non-food items			
Picky eater			

Other indicators of sensory integration difficulties are the social, emotional and behavioural responses to sensory stimuli, which may include:

- Temper tantrums
- No sense of humour
- Cries easily
- Can't express emotions
- Unco-operative
- Anxious
- Poor self-confidence and self-esteem
- Immaturity
- Avoids eye contact
- Overly affectionate
- Can't read body language
- Frustration
- Difficulty coping with changes in routine



THE ROLE OF THE OCCUPATIONAL THERAPIST

An occupational therapist is a medically trained health care professional who looks at helping a person meet goals of everyday life that are of importance to them as individuals. They are concerned with looking at occupation – not paid employment but occupations we participate in during daily life. **The areas of function that a therapist will look at are:**

Self-care

This covers all the activities that are needed to look after oneself. As a young person grows they take on more responsibility for tasks and so needs vary with age.

Productivity

This area covers all the aspects of life that occur within a school day and allow a child to access the curriculum such as drawing, writing, to use scissors, pencils and rulers. For children, play is a means of developing their skills and so is a form of work. It also includes chores that a child may do within the home.

Leisure

This area covers our interaction with others and what we do to relax or for fun and pleasure.

It is the occupational therapist's responsibility to help

children and young people who have recognised areas of fine and gross motor difficulties, hand/eye coordination difficulties, visual perceptual difficulties and difficulties with sensory functions. They help a child obtain their maximum potential in tasks described in the three functional areas described to the left. This is done through the use of meaningful and purposeful activities. Some occupational therapists are also trained to work with children with sensory integration difficulties. The child will usually be assessed by the therapist using a variety of standardised and non-standardised assessments, **which may include:**

- The Movement Assessment Battery for Children
- Berry's Test of Visual Motor Integration
- Test of Visual Perceptual Skills – Gardner
- Sensory profile – Winnie Dunn
- The Bruininks-Oseretsky Test of Motor Proficiency
- Handwriting sample
- Clinical observations
- Hawaiian Early Learning Profile – HELP charts
- Play activities
- Parental questionnaires
- Teacher questionnaires
- Medical notes
- Reports from other professionals involved in the child's care

Once the assessment is complete the occupational therapist will offer helpful advice and strategies for the child, parents and school. They may also devise an individual programme of activities, unique to the child, to help them achieve their potential in each of the functional areas and sometimes they will offer one-to-one treatment in order to achieve specific goals. When treating a child the therapist will employ a number of treatment approaches such as a neuro-developmental, developmental, rehabilitative, cognitive, sensory-motor, perceptual-motor and sensory integration approach. It is the latter approach that seems to have been most successfully used with many of our young people in the specialist context.

Occupational therapists practising sensory integration view a child's exhibiting behaviours as an attempt to avoid certain types of sensation or to seek preferred stimuli in order to balance out their nervous system, as opposed to viewing such behaviours as attention seeking/odd/bad – which are all labels used by some of those in education contexts who are not aware of such complex needs. When specifically looking at the sensory integration approach the following treatment principals are suggested as unique to sensory integration therapy (Ayres, 1972; Clark, Maillois and Parham, 1985; sensory integration international, 1990; Merrill, 1990; Fisher, Murray and Bundy, 1991; Kielhofner, 1992; and Kimball, 1993):-

1. Creation of a therapeutic environment

Throughout our lives we interact with, explore and master our environment therefore the environment needs to provide multiple opportunities for interaction, challenges the child, who through activities, initiates interactions for the purpose of learning.

2. Implied or stated goal of improving neural processing and organisation of sensation

Treatment should aim at tackling the underlying deficits in sensory processing rather than train in specific skills or behaviour.

3. See movement, think sensory

Movement activity is valuable in that it provides the sensory input that helps to organise the learning process.

4. The use of planned and controlled sensory inputs

Therapy will involve activities that provide vestibular, proprioceptive and tactile stimulation, and is designed to meet the child's specific needs for development.

5. Emphases on the elicited adaptive responses

Adaptive response is an appropriate action in which the child responds successfully to the environmental demand. In therapy the child will be guided through activities that challenge his or her ability to respond appropriately to sensory input by making a successful, organised response.

6. Gradation of activities for simple to complex responses

The activities will also be designed to gradually increase the demands upon the child to make an organised, more mature response.

7. Child-centred approach

Therapists consider the child's sensory needs so that appropriate intervention and therapeutic rapport can be established to nurture the child's development.

8. The use of non-directive purposeful activities

Emphasis is placed on automatic sensory processes in the course of a goal-directed activity, rather than drilling or instructing the child on how to respond.

9. Balance of facilitation and inhibition

The therapist should regulate the child's arousal level by using different facilitatory and inhibitory activities.

10. Encourage active participation

The child should be encouraged to be an active participant in activities. It helps them to become a more mature, efficient organiser of sensory information.

11. Capitalise on the child's inner drive and self-direction

Motivation of the child plays a crucial role in the selection of activities. Most children seek out those activities that provide sensory experiences most beneficial to them at that point in their development.

12. To learn how to learn

Training of specific skills is not usually the focus of this type of therapy. A variety of activities will be used to develop the underlying abilities that enable a child to learn such skills efficiently.

13. Therapy must be fun

Therapy is almost always fun for a child. If it is fun the child is more likely to benefit from their time in therapy.

This type of therapy should only be carried out under supervision of an occupational therapist with the appropriate post graduate training, the appropriate equipment and with experience in dealing with children with sensory processing difficulties. However, there is also a great deal that we can do within the school context in order to better support the needs of such children and young people.

STRATEGIES FOR SCHOOL

There are children in all schools who show signs of sensory processing difficulties, in various degrees. Some children have difficulty focusing in school making it much harder for them to learn. This can be seen in different ways such as talking, lots of movements and fidgeting or sluggishness and slumping in their chair. Children may become more attentive and focused when there are changes in their environment and certain resistive type of activities are adopted.

WHOLE SCHOOL APPROACH

At a whole school level we would advocate flexible teaching and learning i.e. taking account of auditory, kinaesthetic (including tactile) and visual learning styles. There is a need to provide safe (quiet, comfortable) spaces in school for calming at all times.

Difficulties can occur especially during playtimes, change, and times of less routine (e.g. Christmas). The whole school ethos of a 'sensory friendly school' can be developed by

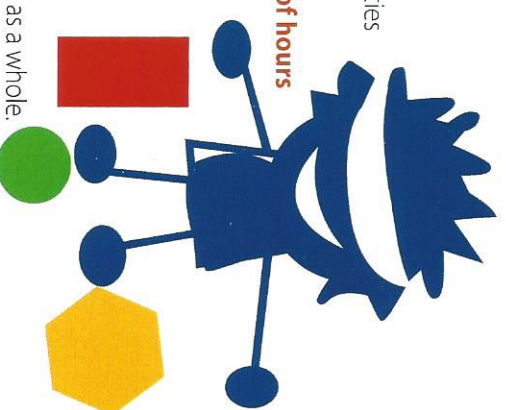
promoting such activities as:

- Brain gym
- Yoga
- Massage
- Motor control exercises
- Multi-skills
- Wake and shake
- Take five
- Encourage movement breaks /heavy work activities before and between desk activities

School staff can also encourage extended out of hours activities (not always competitive) i.e.

- Sport
- Tai Kwando
- Multi-skills
- Dance
- Music

They can and should also consider the environment as a whole.



SENSORY PROCESSING AND THE ENVIRONMENT

The environment is the key to how effectively or otherwise a child will learn. This is particularly true of school as it is a learning environment. Children with sensory processing difficulties will require an environment that is sensitive to their needs. These needs will vary according to the child. What may suit one will not necessarily be ideal for another. Children and adults have senses that respond with random and variable effectiveness and this in turn has a significant impact on how they respond to different and varying stimuli in a learning environment.

The ability to undertake a task will depend on the ability to screen out, or inhibit, non-essential sensory information such as background noises and visual information. An individual with sensory processing difficulties may respond to sensory input without this ability to screen out non-essential information which may produce distractibility, hyperactive, or uninhibited behaviour. They may be unable to calm or console themselves and may overreact or be unresponsive to different stimuli. Attention and regulatory problems occur in balancing and regulating the sensory processes.

Children may respond very differently to their peer group in the school environment and will provide different challenges for the teacher.

When looking at the environment the following need to be considered:

- Lighting
- Acoustics
- Furnishings
- Odours
- Demarcation lines between environments, e.g. clear boundaries
- Child's seating position within the classroom
- Temperature
- Chill-out area

The following framework may help school based staff to reflect further on the environment and the need to adapt or modify it for individual children and young people:

Lighting - Visual environment

Modify the environment to suit the child's needs. Is the environment:-

- Too dark? Observe how the child responds in different environments within the school and/or within different spaces within the classroom. Once you have completed your observations, what changes can you implement? For example is it possible to use a different coloured light bulb in a particular corner of the room? This may allow the child a corner in which to relax.
- Too light?
- Is there too much artificial light?
- The wrong type of artificial light?
- Too much daylight?
- Light that causes shadows that may panic a child?

Acoustics

Written instructions will be very useful to ensure that the child is able to process teaching instructions if they experience difficulty processing verbal instructions. Allow the child to work in a quiet room during paired or group activities if the volume of the other children rises too high for their level of noise tolerance.

Furnishings

Seating

Seating should allow the child to sit with both feet on the ground and the hips, knees and ankles should be at approximately 90 degree angles. It may be necessary for the child to sit on a chair with armrests. Or have access to a move'n'sit cushion.

Desk

The desk should be at elbow height, when the arms are in a relaxed position. A sloping surface may be required.

Seating position

Seat the child directly in front of the teacher. This prevents the child from having to sit at an angle to the teacher or to have to twist or turn the body unnecessarily. Do not sit the child near distractions such as a door or a window.

Odours

Ensure that odours are neutral as far as possible.

Friendships

Ensure that you make opportunities available for friendships to flourish in the classroom, encourage paired working and or group working. Friendships develop in the classroom; the playground offers further opportunities to strengthen friendships but not necessarily to foster them in the first instance.

Extra supervision

The child is very likely to require extra supervision to stay on task.

CLASSROOM STRATEGIES

The following strategies are suitable for all children and particularly those children with sensory difficulties. These ideas will also complement any advice given to the school staff by the occupational therapist.

1. **Consider the sensory demands of the class environment.**
2. **Have an area (if possible) where there is less sensory stimulus so that they can work at times without distraction and they don't distract others.**
3. **Have an area where they can go and calm down** (in class if possible). These areas need to be separate from facilities for isolation and exclusion since they are there to prevent escalation and they should be seen as places of safety.
4. **Consider visual stimulation**
 - ✓ Clearly displayed.
 - ✓ Timetables (visual and interactive if possible), capable of being changed on a day to day basis.
 - ✓ Keywords/topic vocabulary.
 - ✓ Clearly labelled areas and resources.
 - ✓ Clearly labelled expectations/rules and objectives.
 - ✓ Place coloured card/paper under the child's workbook. This will highlight the book/worksheet against the background.
 - ✓ Coloured borders at the start and end of lines for writing e.g. green for go and red for stop.
5. **Consider auditory stimulation**
 - ✓ Wait longer than you think is necessary to process instructions and put into action.
 - ✓ Establish and prompt eye contact with the child before speaking to them
 - ✓ Teach children to ask for help and make yourself available to them if they are having difficulty
 - ✓ Break directions down into steps and allow extra time for children to process them if needed
 - ✓ Use prompts to help children increase alertness and return their attention to task in hand.
 - ✓ Monitor and limit the time for which focused auditory attention is required.
 - ✓ Consider classroom noise level

6. **Consider splitting the lessons that involve a lot of sitting, for refocusing and calming through:**
 - ✓ Brain gym
 - ✓ Yoga
 - ✓ Multi-skills
 - ✓ Drinking water
 - ✓ Drama
 - ✓ Rhythm and movement
7. **Ensure consistent routines, rules and boundaries from all adults including supply teachers.**
8. **Plan transition times i.e.**
 - ✓ Around class activities
 - ✓ Lesson to lesson (especially important in Secondary schools)
 - ✓ Playtime to classroom
9. **Check understanding (success of processing) of information by:**
 - ✓ Saying/displaying what you are going to teach
 - ✓ Say/display what you have taught
 - ✓ Practise what has been taught
10. **Have a range of resources at your disposal i.e.**
 - ✓ Different size/colour/shapes of writing implements
 - ✓ Different methods of recording
 - ✓ Fiddling aids (blue tack, bands, and squiddy balls)
 - ✓ Different resources for calming, extension, withdrawing
11. **Don't assume what makes us feel safe/happy is the same for all i.e.**
 - ✓ Some children may find messy play really challenging (tactile defensiveness).
 - ✓ Eating can be difficult for some children with tactile or odour defensiveness.
 - ✓ Crowded situations including lining up can be very difficult for children with sensory integration difficulties.
 - ✓ Playtimes are difficult for many children across a whole range of sensory issues.
 - ✓ PE, while very good for many children with sensory issues is also very difficult for them and may lead to them attempting to withdraw.
 - ✓ Art is a lovely activity, but can be very stressful for children who have motor control issues or who are visually or tactile defensive.

SPECIFIC STRATEGIES

Sense	Over sensitivity	Under sensitivity
Touch/tactile	Goal: To limit unfamiliar and unpredictable touch sensations Avoid approaching from behind. Allow the child to direct tactile contact. Consider position in class – ideally away from main thorough fare/Allow child to choose where they sit. Allow child to stand at beginning/end of line Provide a quiet corner. Help the child learn to communicate their need for personal space Identify trigger objects/fabrics etc. Introduce tactile sensations gradually	Goal: To provide a variety of tactile sensations in the classroom Encourage the child to explore through touch Provide a tactile rich classroom environment Increase contrast between items, objects, tasks Give the child appropriate items to touch and 'fiddle with' i.e. fiddle toy
Vestibular/movement	Goal: To limit movement experiences that over stimulate the child Avoid/limit fast movements Give the child an appropriate object to squeeze to calm down e.g a stress ball	Goal: To provide a variety of movement sensations in the classroom Encourage the child to participate in sensory motor and perceptual programmes. Incorporate movement breaks in to the child's school day Consider a move'n'sit cushion Consider the length of time a child is expected to sit in one position

Sense	Over sensitivity	Under sensitivity
Auditory	Goal: To decrease distracting noises whenever the child is listening to instructions or is task focused Consider noise levels – allow child to use headphones/earplugs to eliminate excess noise Quiet, calm and well-paced voices Keep instructions consistent and concise. Give a visual clue to gain a child's attention Allow child to sit near source of information Limit auditory distractions	Goal: To increase the amount of auditory stimulation in the environment Give a clue to gain the child's attention Place child near source of information Use visual cues to support auditory instructions Allow the child to receive auditory input that does not distract other children Have child act as classroom messenger
Visual	Goal: To decrease visual distracting elements in the classroom environment Reduce visual distractions Create designated area for frequently occurring information Consider child's position in class/consider a corral Use auditory cues to support instruction	Goal: To increase visual stimulation and visual cues in the classroom environment. Consider lighting Provide distinguishing/contrasting visual cues within the classroom Use enhanced task features and contextual cues.

CHILD/YOUNG PERSON'S VIEW

SO, WHAT IS IT REALLY LIKE TO LIVE WITH SUCH DIFFICULTIES?
LET'S NOW HEAR FROM THE YOUNG PERSON AND HIS PARENT.

GARETH'S VIEWS

When I was younger it took me ages to learn to ride a bike, I kept falling off. I have never really perfected not falling off but I do it a lot less now! I ride to school each day. I still fiddle with stuff like my watch, bendy ruler and anything else really. People think I am not listening when I fiddle or chew my tie and are really surprised when I know the answers. No-one can read my writing but I am really good on computers now. People get frustrated because I fiddle with the computer as well. I rock a lot on my chair and my friends and teachers try and stop me because they are worried I will fall off. I like my school work here now, I am good at Maths, but I still hate PE. I get left out of the games because no-one wants to be my partner. I like Maths and Science but hate homework. I always seem to lose it and never get it in on time, Mum nags me which is really annoying sometimes. People have given me things to help, like a cushion to help me to stop rocking and a writing slope, also a chewing band, but I don't want to use them because I hate feeling different. My temper can be a problem, I get angry with myself and others and find it hard to calm down and control my feelings. Most of my friends understand my problems but can be frightened sometimes. I like to try everything and am going on a school trip with school to an adventure activities centre – I am not sure how good I will be at things but am determined to have a go.

Gareth – age 12

HIS PARENT'S VIEW

My son is 12 years old and was assessed as having sensory integration issues when he was seven. He has difficulty processing auditory, proprioceptive and vestibular information. What does this mean? The theory is in this guidance but what it actually means is the following. Gareth is a hugely intelligent child who definitely marches to his own tune! He chews constantly, licks until his lips are sore, rocks his whole body almost all the time, fiddles with anything he can get his hands on and never appears to be listening to me. His writing is unreadable unless painstakingly copied and he loses his temper far too often for comfort. However, he is also very loving, generous, witty, quirky and very good at science and maths and an absolute genius on the computer. It has been a struggle sometimes to get people to see past the strange habits he has, to his potential. I accept that it can be very difficult to understand his issues because I found it difficult to understand that the fiddling, chewing and rocking were actually Gareth seeking additional sensory information to enable him to concentrate. How I regret all the times I said stop rocking/chewing and listen to me. His school tries very hard to understand him and he is making good progress and he likes his school and teachers. I could not therefore ask for more, except it has been frustrating over the years having to explain his issues over and over again. His school recognises his potential and he is now in the top groups for most subjects despite not being able to write. He was issued with a laptop a year ago which helps him access the curriculum at the right attainment level, although it is frustrating for his teachers when he is fiddling with the computer rather than working. He is included in activities, although PE continues to be an issue. Homework is a total nightmare! I make sure he does it when I finally get it home only to find that the teacher never gets it or it looks like it has been dragged through a puddle several times.

Gareth has matured over the last year and to reflect this I allow him to ride his bike (a skill very painfully acquired) to and from school every day which is about seven miles round trip. My hair is prematurely greying but overall it is worth it. He still has demons to overcome, his temper being the main one. However, things are much more settled and the future brighter than I thought possible three years ago.

The emotional impact – stress and anxiety

Providing support for sensory integration difficulties is not just vital in terms of ensuring children's inclusion in the learning and social context but also in recognising the emotional impact on the individual child or young person. As the case studies illustrate, these can be significant and there is clearly a need to provide support for young people to manage the emotional impact of such difficulties alongside the impact on levels of self-esteem, confidence and anxiety. School based staff and parents need to understand and be aware of the symptoms of stress and anxiety and also help children to develop self-help tools to manage such emotions – particularly when they are under stress and the difficulties with sensory processing can become more enhanced as a direct result of a challenge outside their comfort zone. The fluctuating nature of sensory difficulties needs to be recognised as the child may well be able to cope one day but become very anxious another day if an activity presents a more significant challenge. Raised anxieties will obviously exacerbate sensory difficulties.

USING THIS RESOURCE

This resource provides the school-based practitioner with a series of practical and user-friendly activities. These are presented on a series of 60 laminated cards for ease of use and durability. Each card provides the facilitator with clear instructions and details of the resources they will need to have available or have prepared beforehand.

The resources are divided into six key development areas as follows:

- **Gross motor skills**
- **Fine motor skills**
- **Social skills**
- **Communication skills**
- **Classroom skills**
- **Outdoor skills**

Each section comprises 10 activity cards and aims to develop key skills. It is relatively easy to set up most of the activities. What is important, is to constantly observe the development of children's skills and to ensure that they have the opportunity to develop the skills they need as identified in an initial assessment as described earlier in the checklist.

It is also important to ensure that alerting activities (mainly those described in the gross motor kills and outdoor skills) are followed by activities that enable the children to organise and calm themselves. Using mindfulness activities as presented in the **60 Mindful Minutes** programme is clearly a useful approach.

A FINAL REFLECTION

It is hoped that this resource bank will prove to be extremely effective and useful within the context of the nurture group. We all want to ensure the development of children and young people who can engage in healthy social relationships; who can pay attention in the school and learning contexts; who can manage their anxiety; who can build their capacity to memorise and self-manage and understand themselves, and also who can relax as and when it is appropriate to do so. Promoting and developing children's sensory awareness, sensory integration and sensory skills can only serve to enhance their overall wellbeing and inclusion in both the social and learning contexts. Overall, the key aim here is to promote the wellbeing of all children – not simply those who have additional or complex needs.

USEFUL BOOKS

Author	Title	Publisher	ISBN
	Sensory Integration – Information Booklet – a Resource for Parents and Therapists	Sensory Integration Network, UK and Ireland	0-9545434-0-8
ANDERSON, EJ & EMMONS, P	Unlocking the Mysteries of Sensory Dysfunction	Future Horizons	978-1885477255
AQUILLA, Paula SUTTON, Shirley & YACK, Ellen	Building Bridges Through Sensory Integration Therapy for Children with Autism and Other Pervasive Developmental Disorders	Sensory Resources	978-1931615129
AVRES, Jean	Sensory Integration and the Child (1979)	Western Psychological Services	978-1885477255
BUNDY, C MURRAY Elizabeth A & LANE, Shelley J	Sensory Integration: Theory and Practice	F.A. Davis Company	978-0803605459
CHARA, Kathleen A CHARA, Pat & BERNIS, Joel M	Sensory Smarts: A Book for Kids Struggling with Sensory Integration	Jessica Kingsley	978-1843107835
DeGANGI, GA	Paediatric Disorders of Regulation in Affect and Behaviour (2000)	The Psychological Corporation	978-0122087707
EMMONS, Polly Godwin ANDERSON, Liz McKendry	Understanding Sensory Dysfunction: Learning Development and Sensory Dysfunction in Autism, Spectrum Disorders, ADHD, Learning Disabilities and Bipolar Disorder	Jessica Kingsley	978-1843108061
FISHER, Anne G MURRAY, Elizabeth & BUNDY, Anita GANZ, J	Sensory Integration: Theory and Practice Including SI – A Guide to Using Sensory Integration Concepts in the School Environment (1998)	Bohemia, NY: Kapable Kids	978-0803635654 978-1929882380
GRANDIN, Temple BIEL, Lindsey & PEAKE, Nancy	Raising a Sensory Smart Child: The Definitive Handbook for Helping Your Child with Sensory Integration Issues	Penguin Books	978-0143115342
HOROWITZ, Lynne J & Cecile	Helping Hyperactive Kids: A Sensory Integration Approach – Techniques and Tips for Parents and Professionals	Hunter House	978-0897934817
KOONAN, J KRANOWITZ, Carol & SZKUT, Stacy	Answers to Questions Teachers Ask about Sensory Integration: Forms, Checklists, and Practical Tools for Teachers and Parents	Sensory World	978-1932565461
KRANOWITZ, Carol Stock	The Out of Sync Child	The Benchmark Publishing Group	978-0399153372
KRANOWITZ, Carol Stock	The Out of Sync Child has fun	The Benchmark Publishing Group	0-399-53165-3
KRANOWITZ, Carol Stock	101 Activities for Kids in Tight Spaces	The Benchmark Publishing Group	0-399-52843-1
MILLER, Lucy FULLER, Doris A	Sensational Kids: Hope and Help for Children with Sensory Processing Disorder		0-312-13420-7
MYLES, Brenda et al	Asperger Syndrome and Sensory Issues	Autism Asperger Publishing Co	978-0967251486
TORRANCE, CA	A Parent's Guide to Understanding Sensory Integration (1991)	Sensory Integration International	0-9672514-7-8
TROTT, Maryann Colby	Sense Abilities: Understanding Sensory Integration (1993)	Tucson AZ: Therapy Skill Builders	978-0521387125
WILLIAM, Mary Sue & SHELLENBERGER, Sherry	How Does Your Engine Run? – The Alert Program for Self Regulation (1992)	Albuquerque, NM: Therapy Works	0-9643041-4-7
WILSON, Shelley R	What's Wrong with My Child?: Struggling with Sensory Integration Dysfunction	Publish America	978-1424113231

USEFUL WEBSITES

www.sensoryresources.com
www.sinetware.org
www.community.com/disability/sensory
www.out-of-sync-child.com
www.nashvillesid.com
www.sensoryintegration.btinternet.co.uk
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