

Meeting Sensory Needs









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My sensory needs

I'm so happy to share with you the first chapter of my upcoming book 'Inclusive Teaching Strategies', released especially for Autism Awareness Week.

Within this chapter, I will walk you through understanding and recognising a child's sensory needs and ways to provide suitable and personalised sensory input. This will support sensory regulation and improve focus, in order for the children to be ready to learn!

Understanding my own sensory needs has been essential for my own education and ability to learn. As a child, I disengaged from reading and I remember how I'd often pretended to 'look like I was reading'. It was later in life when I got to college that a teacher noticed this and did a very simple thing that improved my learning greatly; she printed out the whiteboard presentation and put it in front of me on my desk. This made a huge difference to my engagement and attention in class, because having it right in front of me made it easier to follow. That same year I learnt that I am dyslexic with visual hypersensitivity, meaning my brain processes visual stimuli differently. This makes things (such as text) look like it vibrates and wobbles. This makes reading tiresome and unenjoyable. I am a visual learner and pictures tend to provide me with information in a much quicker and easier way, making me a champion of visual resources, encouraging their use for people of all ages.

It is due to these personal challenges and the impact they had on my learning that has shaped my understanding of sensory needs. I invite you to take this time to consider how you're own sensory needs are met and the specific regulations that help all of us to engage better, enabling use to learn with joy rather than struggle.



Steph Reed,
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Our senses

We use our senses to process everything in the world around us





Visual/Sight:
We see colour hues, depth, perception and light with our eyes, which is then processed by our brain.

Taste/Flavour:
We taste different flavours using the taste buds on our tongue.



Hearing/Sound:
We hear vibrations and frequencies which our brain then interprets as sound.



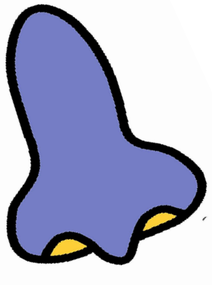


Vestibular/Balance:
We experience a sense of balance and movement through a part of our inner ear sending information to our brain.

Smell/Scent:
The different smells we experience can trigger emotions, such as feelings of calm or discomfort.



Proprioceptive/ Body position:
We have a sense of self movement and body position through our muscles, tendons and ligaments, creating an awareness of how to position and use our body, according to the situation.



Tactile/Touch:
We feel things like temperature, pain, pressure and vibrations through the nerves that sit under our skin. When we touch things, sensory information is passed from our skin to our brain.

All of us process information through our senses very differently. So, in the classroom, we cannot assume that all children will be processing information through their senses in the same way, because they won't be.

Some individuals can have difficulty organising and making sense of sensory information.

Some individuals may be **highly sensitive** to sensory input (such as sound, light or textures) causing discomfort, confusion, loss of focus or withdrawal. In these situations, a child may understandably try to avoid certain sensory stimuli.

Some individuals may be **under sensitive** to sensory input and therefore may appear unresponsive, lacking energy or on the other hand, seek out specific sensory input such as chewing or jumping, to stimulate themselves more.

Sensory needs impact every aspect of daily life including learning.

If children's sensory needs are not supported effectively, this can lead to avoidance, withdrawal, inattention and behaviour that challenges.

Which is why it's so important to understand the sensory needs in your class in order to create a conducive and supportive learning environment.

Please take a moment to think about how it would feel to have specific sensory needs and how this would impact your day and learning.

Two terms used to describe sensory needs are **'hypersensitive'** (very sensitive) and **'hyposensitive'** (hardly sensitive at all). Individuals can be either or both.

Hypersensitive: This is when someone is very sensitive to the sensory stimuli around them and they may try to avoid or cope with certain situations by responding in such ways as:

Putting their fingers in their ears (hypersenstive to sound or pitch)

Avoiding looking at things, covering their eyes or turning lights off (hypersensitive to light, colour or pattern)

Refusing to eat certain foods (hypersensitive to taste or texture)

Only wanting to wear certain clothing, avoiding touching specific materials, not wanting to have their hair brushed or cut (hypersensitive to touch or texture)

Avoiding movement activities such as running and jumping (hypersensitive to balance and movement - vestibular sense)

Hyposensitive: This is when someone is underwhelmed or not stimulated by sensory input, meaning they may not react at all or they may seek out sensations elsewhere, such as the following ways:

Repeatedly seeking out sensations, such as hugs or feeling specific textures (hyposensitive to touch)

Not reacting to pain (hyposensitive tactile sense)

Poor fine motor skills, like holding or writing (hyposensitive proprioceptive sense)

Seeking large movements, such as jumping from heights or wanting to be picked up by their arms from the floor (hyposensitive vestibular sense)

Chewing or smelling everything (hyposensitive tactile or smell senses)

Appearing over forceful with touch or with toys (hyposensitive to touch)

PRACTICAL STRATEGIES

Know Their Sensory Needs

Being able to understand a child's sensory needs is hugely important in helping them engage and learn. You can use the following sensory checklists to distinguish how a child's sensory processing may be having an impact on their learning.

Understanding a child's sensory profile will also enable you to examine whether the environment may be having an impact on sensory needs and enable you to make informed decisions about environmental changes.

Sensory checklist by Biel and Pekse
Sensory assessment checklist by Autism Education Trust

SUCCESS STORY

Cameron

Cameron is a nine year old boy with a diagnosis of autism and severe learning difficulties. He is non verbal and communicates through some single words and the picture exchange communication system (PECS).

When observing Cameron, we found he would often pull people very close to him, for example, by grabbing your arm and holding you very tightly to his body. When sitting down, he would also pull the table very close to his body and any nearby adults. These types of observable behaviours were showing us that Cameron was seeking deep pressure, due to him being hyposensitive to touch.

To help Cameron, we implemented a regular series of deep pressure activities throughout the day. This included: seated bouncing on a gym ball whilst supporting his hips, light pressure hand sweeps down his arms and rolling a gym ball over Cameron's body whilst he lay down. We did this series of deep pressure activities three times a day before lessons, preparing Cameron for this by showing him a visual schedule with the photos of each activity. These deep pressure activities supported Cameron's sensory regulation and we noticed he was then able to take part in all lessons for a longer period of time.

SUCCESS STORY

Faith

Faith is an eleven year old girl with a diagnosis of autism and severe learning difficulties. She is non verbal and mostly communicates through Makaton (simplified sign language) and vocalisations.

During group circle time, Faith's seating arrangement was in the middle of the semicircle. When the classroom was set up in this way, we found that Faith would first sit on the chair and then fall and lie on the floor. She displayed this behavior over a period of time, clearly finding it difficult to sit in this seating arrangement compared to sitting at a table.

After trying a series of different strategies, we moved her seat to the end of the semi-circle. We noticed that after we had done this, Faith seemed happy to stay seated and no longer fell to the floor. I interpreted this as Faith being more comfortable when having space around her, rather than having someone sat either side

Assess The Environment

Consider how you could adapt the environment to support a child's sensory needs.

Think about the following -

Position

Where is a child sat in relation to you, the whiteboard or where they need to face? Please bear in mind that children with additional needs will be best placed in a position that gives them optimal opportunity to focus, with minimal movement (e.g directly opposite the whiteboard, at the front of the classroom rather than at the side of the classroom where they may need to change the position of their body depending on personalised needs).

Height of tables and chairs

Is the chair too low or the table too high? Ensure children are positioned comfortably and their posture is supported effectively.

Space

Are any of the children sitting too close to another person or to a distracting object? Check if there is anything positioned near to them or behind them, which is distracting or even causing anxiety.

Visual stimulation:
Are there wall displays that are taking the children's focus and attention, or avoidable clutter that can be placed out of sight? Visual stimulation directly in the child's view can be distracting and take their attention.

Sounds:
Are there any sounds that are causing distress or lack of focus that can be adapted? There will be sounds coming from electrical equipment, nearby rooms and of course, the children. Some individuals will find it difficult to foczus on one sound (e.g you talking) when there are lots of different noises in the background.

Smells:
Any smell could be overwhelming if you are hypersensitive to smell. Be aware of a scents in the classroom and how this may impact a child. It's good to avoid wearing perfumes and aftershave as you may not be aware if the scent is bothering a child. I knew a student who would not enter a room for weeks; it turned out there was a dead mouse under the floor that no one else could smell.

Lighting:
Does a child cover their eyes or work, to shade the text, complaining of headaches or turning off the lights? This could be because the lights are too bright and causing discomfort.

Textures:
Are any of the students avoiding touching any of the teaching resources or materials that you use?

Taste/ texture:
What are the children eating at lunch? Are there any children that are not eating particular foods and need their lunch adapted and monitored?



Make It Personal

By structuring time and activities for children that would either benefit from alerting movement activities or seek specific sensory input, you can help support their sensory regulation on a daily basis. In turn, this will enable them to be in a more regulated state and ready to learn. There are many different activities that can help to regulate or calm the sensory system, meaning you can design personalised sensory activites that meet a child's individual sensory needs.

Staring at lights: sensory light toys (flashing or colourful moving light toys)



Chewing clothing and objects: Safe chewable resources such as a 'chewy', 'teether' or 'chew toy'. Providing crunchy or chewy snack items such as apples and cereal.

Pushing on parts of their body: deep pressure massage

Jumping: bouncing on a large gym ball, jumping on a trampette or trampoline

Active and energetic: running laps around the playground or calming activities such as listening to peaceful music in a quiet environment or looking at a book

Wanting to be picked up from the arms or purposefully falling on the floor: press ups against the wall, gym ball squeezes – for this, the child stands against the wall or lies down on a mat and an adult places the gym ball on their body and applies some pressure.

Avoiding sensory stimuli (e.g. avoiding touching wet substances or certain food types): many children experience anxiety around eating different types of food. Offering a variety of food items and trying to minimise anxiety through ensuring that the foods do not touch each other (this can be done using a plate which is divided into sections or multiple plates) can be helpful. Food messy play can also be a fun experience where the pressure is not on eating; I have seen many children smell, touch and taste new foods for the first time during food messy play. Be aware that these experiences can provoke extreme anxiety, so it's vital to approach the introduction of new textures, smells and tastes with zero pressure and in a playful way.

A great resource for more information and sensory regulation activities is Sensory Circuits by Jane Horwood.

DO IT TOGETHER

There are times throughout the day when children are more likely to be either energetic, such as after play, or calmer, at the end of a lesson. In order to support the sensory regulation of all of the class, you may want to consider doing whole class sensory activities during these moments. Calming or alerting activities support the children to either be calm and ready to learn or wake up their body in order to be ready to learn! Either way, you can support their sensory regulation and in turn, their engagement.

Here are some examples of my whole class movement and calming activities:



In the morning, the children arrived to a quiet classroom with calming music and soothing visualisation on the interactive whiteboard. The children would go to their visual timetables first before coming to sit down ready for 'Morning Circle Time'. After sitting in the semicircle for a few minutes they were calm and ready to start the lesson. The calm and quiet environment and atmosphere, plus the consistent routine, helped to support their emotional regulation. I could imagine if they were entering into a noisy environment, this would have started the day in a very different way!

Within a school day, I noted that first thing in the morning when children arrive into school and straight after play times were specific moments when the children tended to be most energetic! In preparation for these bursts of energy, I'd strategically implement calming activities for the whole class to engage in.



If the class had been sat down for a long period of time, I would introduce energising class activities for us to do together and get the children's bodies moving, such as dancing to a song or using ribbons to wave around in the air. Similarly, I created a whole class 'exercise' routine which incorporated moves targeted at individual sensory needs whilst also supporting the whole group. For example, beginning with some calming independent massage and self hugging techniques, in order to teach the children to be able to do this themselves, followed by full body alerting activities such as jumping. We would follow a sequence of tasks as displayed on a large visual schedule, to support their understanding of what we were doing next.

Make Your Lessons Multi-Sensory

How to incorporate sensory activities
and learning into your curriculum lessons

Research shows us that movement can support learning and retention, meaning that when children are active whilst learning, they can absorb and remember information better. Consider your learning objectives and whether you can teach these through movement that involves the child is actively doing something.

Rather than dinosaurs in a tray with laminated resources, why not place the dinosaurs on a bed of broccoli, cauliflower and stones

Rather than sitting, placing letters in the correct order to spell a word, they can run to, or lie on a rolling board and push themselves to find different letters to make a word

Rather than sitting counting objects, get the children to count how many hoops they are jumping into

Things you can think about when planning a lesson to meet specific learning outcomes:
Does the lesson involve movement?
What resources will you be using?
Are you using a range of multi-sensory resources?
Will all of the children be able to access the resources?

Seek further advice from an Occupational Therapist:

If you are unable to identify sensory needs or are unsure about how a child's sensory needs may be impacting on their learning, speak to their parents or carers about a referral to an Occupational Therapist for further expertise and information. You can speak to your school Special Educational Needs Coordinator (SENCo) for further advice about this process.



SUCCESS STORY

Rashid

Rashid is a seven year old boy with a diagnosis of autism and severe learning difficulties. He uses single words and the picture exchange communication system (PECS) to communicate.

Rashid experiences hyper and hyposensitivies to various stimulizz. He often puts his fingers in his ears, smells the objects and people around him, only eats specific food and responds with extreme anxiety to changes to the environment. Rashid requires support to regulate his bodily functions, such as his temperature, by making sure he takes his jumper on and off.

To help Rashid's extreme anxiety, I ensured he received consistent support from familiar adults and access to resources to support his sensory regulation. We noticed that when Rashid would jump on a trampette, he seemed much happier and calmer afterwards. We therefore introduced jumping on the trampette at regular times throughout the day. To ensure that Rashid could communicate that he wanted to use the trampette, we put a photo of it on his table. Initially, the supporting adult would point to the photo and ask "do you want the trampette?". We then showed him what this meant by then taking him to the trampette and saying 'trampette'.

Alongside an occupational therapist, we trialed the use of vibration as a way of giving sensory input and noticed that this had a very calming effect on Rashid. In response to this, we made sure he always had access to the vibrating cushion at any time, in a tray near to him. Over a period of time, Rashid learnt that he could take the cushion when he needed and would often sit on it or put it under his feet, during lessons. This clearly supported his sensory regulation, as he appeared calm when using the vibrating cushion and able to engage in lessons for much longer periods of time.

REFLECTION

Take a moment to think about how you are currently meeting the sensory needs in your class.

Remember that the better sensory regulation your class has, the better their experience of learning will be.

I hope this chapter will carry you into the classroom with a positive understanding of sensory needs and I look forward to sharing the full eBook with you soon.

Available with the Ebook will be resources relevant to each chapters topics. For example, this chapter will provide you with an environmental checklist, sensory regulation activities and a model timetable for a child with high sensory needs.

Make sure you join the mailing list to be updated on the progress of the ebook and upcoming webinars. In the meantime, you can head over to the Autism Spectrum Teacher Podcast and listen to conversations between myself and guests, sharing information about teaching and supporting autistic and neurodiverse learners.

References:
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Donnelly, J and Lambourne, K, (2011) *Classroom-based physical activity, cognition, and academic achievement* Preventive Medicine

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