



An Chomhairle Náisiúnta
um Oideachas Speisialta
National Council
for Special Education

Sensory Spaces in Schools







**An Chomhairle Náisiúnta
um Oideachas Speisialta**
National Council
for Special Education

This work is licensed under a Creative Commons Attribution

Non-Commercial – ShareAlike 4.0

International License

©NCSE 2025

National Council for Special Education

2 Mill Street, Townparks South, Trim, Co. Meath

Web: www.ncse.ie

This booklet was developed by The National Council for Special Education (NCSE) Senior Occupational Therapists. The content of the booklet is based on research evidence and the therapists' professional experiences of working in schools.

Contents

Glossary	3
Disclaimer	5
Introduction	6
Sensory Processing: What is it and why is it important?	7
Sensory Differences	9
Muted Sensory Experiences	10
Intense Sensory Experiences	11
What Can We Do to Support These Differences?	12
What is a Sensory Space?	13
Setting Up Your Sensory Space	14
Location	14
Timetabling	14
Gradual Introduction to Space	15
Prioritise Storage	15
Equipment	16
Tools to Support Transitioning	18
Effective Use of Sensory Spaces	19
Student-Centred	19
Reactive vs Proactive	19
Punishment and Rewards	20
The Role of the Adult	20
Universal Approaches to Supporting Regulation	21
How to Create a Regulation-Friendly Classroom	22
Sensory Space Use: Planning Document	27
Conclusion	30
What are the Key Messages to Take Away?	30
Complementary Resources	31
References	32

Glossary

- **Neurodiversity**

Neurodiversity is the idea that all brains process information differently. Neurodiversity includes everyone and it highlights how each person thinks, communicates and senses the world around them in a unique way. Within this, people may be neurodivergent or neurotypical. Both neurodivergent and neurotypical brains are naturally occurring (Middletown Centre for Autism, 2023).

- **Neurotypical**

Neurotypical refers to people whose brains develop and/or process in a way similar to the majority (Middletown Centre for Autism, 2023).

- **Neurodivergent**

Neurodivergent refers to people whose brains develop and/or process in a way that is categorically different to the majority (Middletown Centre for Autism, 2023). This includes neurodevelopmental differences such as autism, attention deficit hyperactivity disorder (ADHD), dyslexia, and others. Neurodivergent people experience and interact with the world in a different way. These differences are to be embraced and encouraged (Neurodiversity Ireland, 2024).

- **Neurodiversity affirming**

Neurodiversity affirming practice acknowledges and welcomes neurodivergency. It goes beyond simply changing your language to be more respectful of the neurodiversity paradigm, while keeping all else the same; it is about making systemic changes to affirm neurodivergent people as individuals who have a valued role in society (Hartman *et al.*, 2023).

- **Sensory stimuli**

Sensory stimuli refers to any input received by the senses that evokes a response from the individual. The stimuli can be anything from the environment (for example sound or touch) or from internal factors (for example a tummy pain). Sensory stimuli are perceived by one of our sensory systems (for example touch or taste) (Lestrud, 2013). Stimuli, stimulus and input are often used interchangeably.

- **Participation**

Participation can be seen as 'doing' a task, but for meaningful participation to take place, other key ingredients are required such as social connection, motivation and most importantly, choice (Maciver, 2019). Occupational participation refers to 'engagement in work, play or activities of daily living that are part of our sociocultural context and that are desired or necessary to our wellbeing' (Kielhofner, 2008, pg. 5.).

Regulation

- **Self-regulation**

Self-regulation is the ability to understand, monitor and modify energy level, emotions, attention, social interactions and prosocial thinking and behavior (Shanker, 2013). How we experience the world in any given moment is dependent on our current state of regulation. Self-regulation impacts our capacity to participate and engage with the world around us. Self-regulation needs to come first to enable meaningful participation and learning to occur.

- **Co-regulation**

Co-regulation is a bidirectional process. It's when one person's nervous system and behaviours are modified and influenced by another's (Bornstein et al., 2023). Co-regulation occurs as biological (nervous system and hormones) and behavioural (cognitive) processes and plays a crucial role in the development of self-regulation. As adults, our role as co-regulators is to connect with a student and use our sense of calm to help to support them to maintain states of regulation or return to states of regulation when in distress (Salamon, 2024).

- **Felt-safety**

Felt-safety is not about reducing danger, threat or risk, but increasing a sense of co-regulation, social cues and connection with someone that makes us feel safe. Felt-safety occurs in our nervous system, not our high level thinking. Felt-safety turns off our defensive systems and facilitates social behaviour (Porges, 2024).

- **Dysregulation**

Dysregulation occurs when a student's stress level is so high that they have difficulty functioning. Dysregulation limits a student's ability to maintain efficient "readiness" for participation in any aspect of education setting activities as well as reduces their ability to connect with others, thus jeopardising occupational engagement (Whiting *et al.*, 2023).

- **Inclusive Education**

Inclusive Education as defined by the NCSE (2024) is an on-going process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination (UNESCO, 2009).

- **Universal Design**

Universal Design (UD) is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability (Centre for Excellence in Universal Design, 2024).

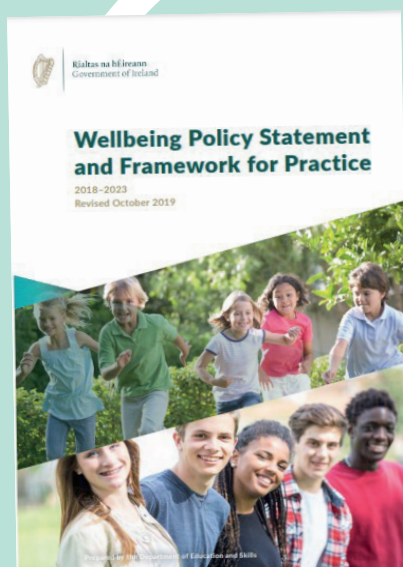
- **Universal Design for Learning**

Universal Design for Learning (UDL) is an approach to curriculum development that promotes access, participation, and progress for all learners. UDL is underpinned by neuroscience research and aims to improve not only the learning outcomes, but the learning experience for all students. Students learn differently and to effectively teach all students, pedagogy needs to include greater flexibility and offer students more choice (Center for Applied Special Technology, 2018).

Disclaimer

This booklet has been created to provide information on sensory processing and advice on the use of sensory spaces that should be used for general purposes. All changes carried out within the classroom environment and the sensory spaces are the responsibility of the classroom teacher and school management. The teacher is responsible for ensuring that all adaptations are implemented safely and in line with school policy.

It is important that the teacher is aware of their students' abilities so that changes made to the learning environment are appropriate and accessible for all. The teacher is responsible for assessing the risk prior to implementing any environmental and activity changes. Where a student has an occupational therapy report or a sensory diet, it is advised to consult with the student's primary occupational therapist.



As captured in the aims of the Wellbeing Policy Statement Framework for Practice 2018-2023: **Sensory spaces should enhance and promote the health and wellbeing of the whole school with a focus on both the culture and the environment.**

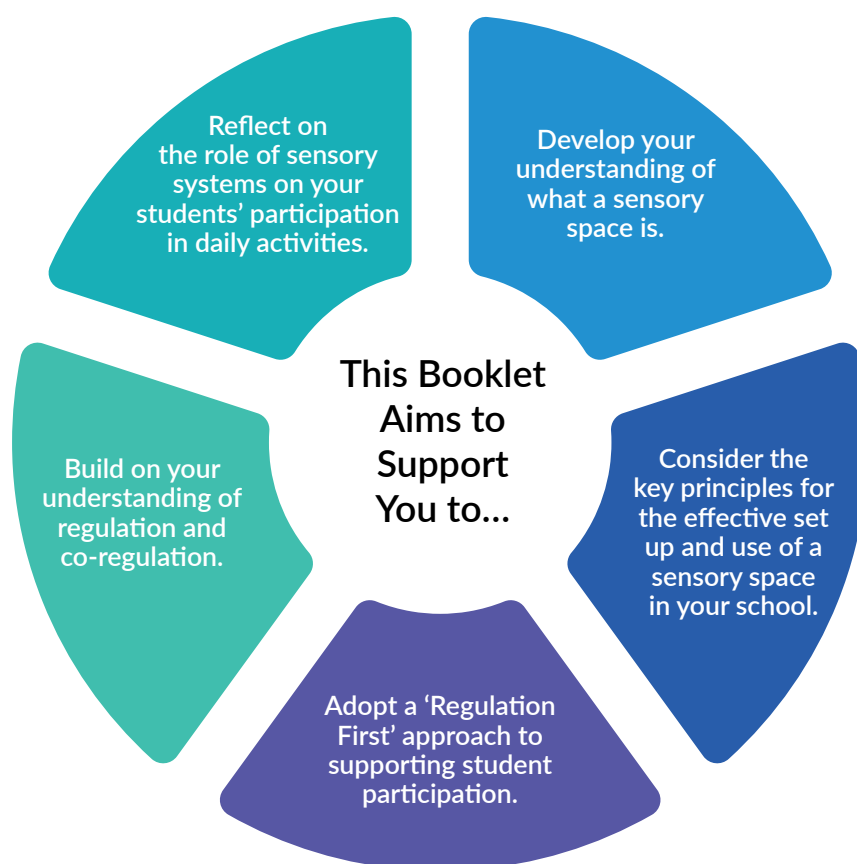
This booklet is aligned with the Wellbeing Policy Statement and Framework for Practice: Whole School Approach.

Introduction

We are all sensory beings. Our sensory systems are what allow us to experience and make sense of the world around us. Regardless of ability, all individuals have unique sensory processing patterns. Some individuals have difficulties in how they process their sensory world and for many students in our schools, the classroom is a very busy and overwhelming place.

Whether you are teaching children and young people, understanding these patterns and differences in your students provides you with an insight into how to best meet their sensory and regulation needs, so they can meaningfully engage and participate in their learning (Dunn, 2001).

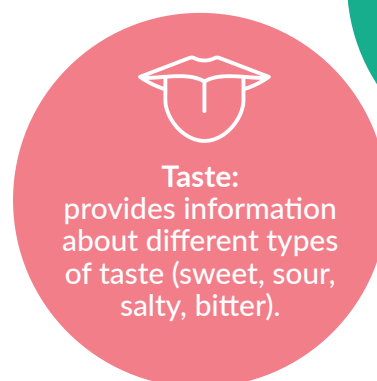
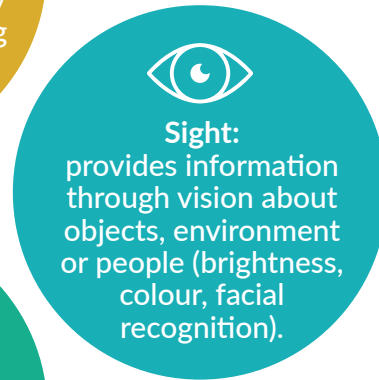
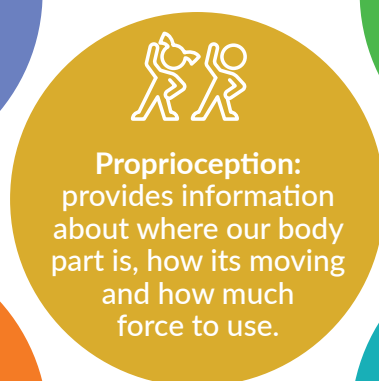
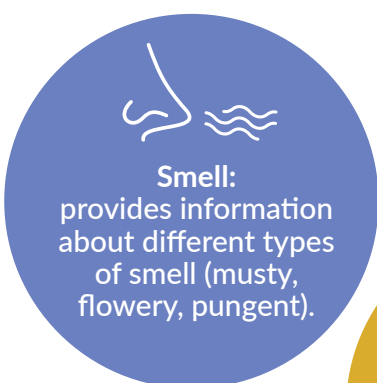
This resource adopts a **strengths-based, student-centred approach** to looking at the sensory environments within a school. It focuses on establishing a cultural practice within a school where sensory spaces and sensory strategies are utilised throughout the school day. It offers guidelines for teachers and school staff to holistically support students, by collaboratively creating and using sensory spaces with their students.



Sensory Processing:

What is it and why is it important?

We have eight sensory systems that provide us with information which is vital to our understanding of the world and how we respond to it (Addy, 2016). Sensory processing occurs when the brain takes in sensory information from the environment and integrates, organises and interprets that information so that we can make sense of our experiences and react and interact with our environments.



Sensory processing makes sense of the interaction between our internal experiences (our body) with the external environment (where we are at that time) allowing us to understand the world around us and in us (Dean *et al.*, 2022). Our sensory preferences and aversions can both support and/or inhibit our participation and engagement in anything we do (Dunn, 2014).

Check out this short video [Your Sensory Orchestra: Understanding Your Unique Sensory System](#) created by Sensory Integration Education, which describes our sensory systems using the analogy of an orchestra.

At any given time, the brain is flooded with sensory information from our environment and from our bodies. Yet the brain filters this information, allowing us to focus and react to the most important stimuli – this is fundamental to day-to-day activities and it's often this step where some of us have differences (Star Institute, 2021).

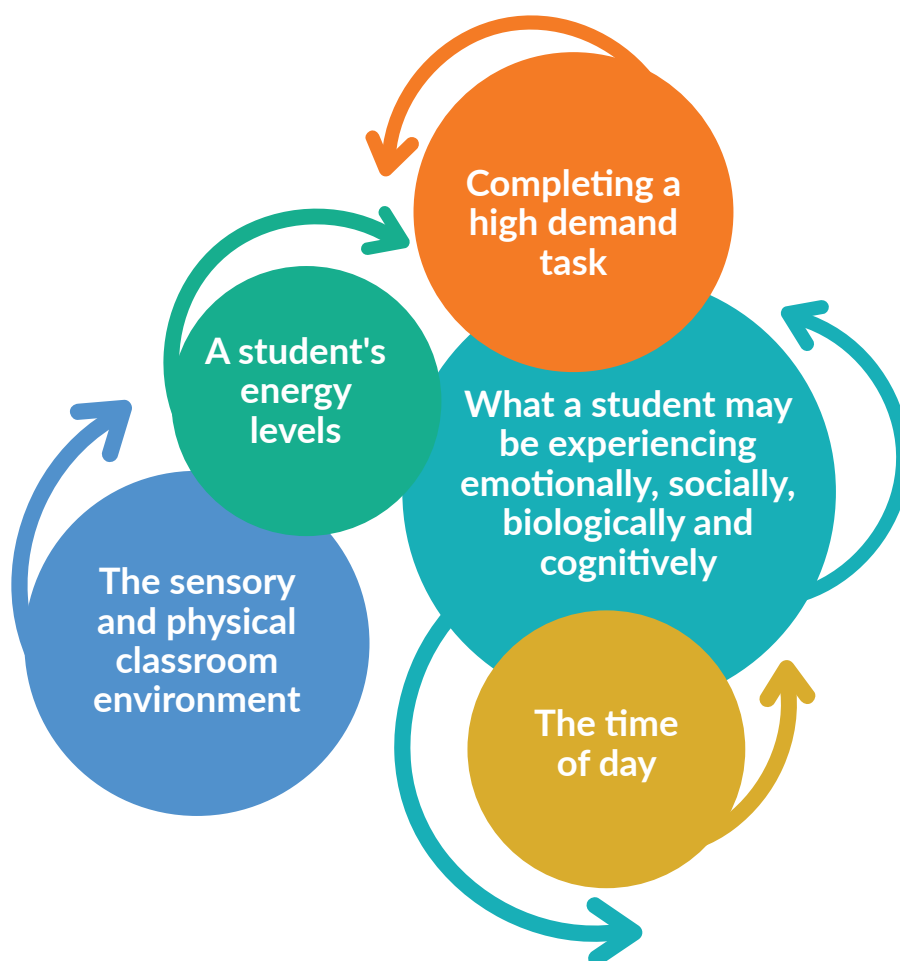
Let's look at an example of an activity you and your students do frequently – washing your hands. There are lots of sensory stimulation that we consciously pay attention to and lots of stimuli we may filter out. Depending on the individual, what we pay attention to and what we filter may differ.



Sensory Differences

As we all have unique neurological systems, our sensory preferences and how we process sensory information varies from person to person (Brown, 2001; Dunn, 2007). Sensory processing differences occur when you experience too much or too little stimulation from your senses (Child Mind Institute, 2024). Difficulties interpreting sensory information can have an impact on how we feel, how we think and how we behave. As no two students are the same, it is impossible to identify all the reasons when, why, where and how your students could become dysregulated by sensory stimuli. However, your students' difficulties processing sensory stimuli can depend on a number of other factors that your students may be tolerating. These factors can impact their nervous system and their ability to remain regulated and in a calm state.

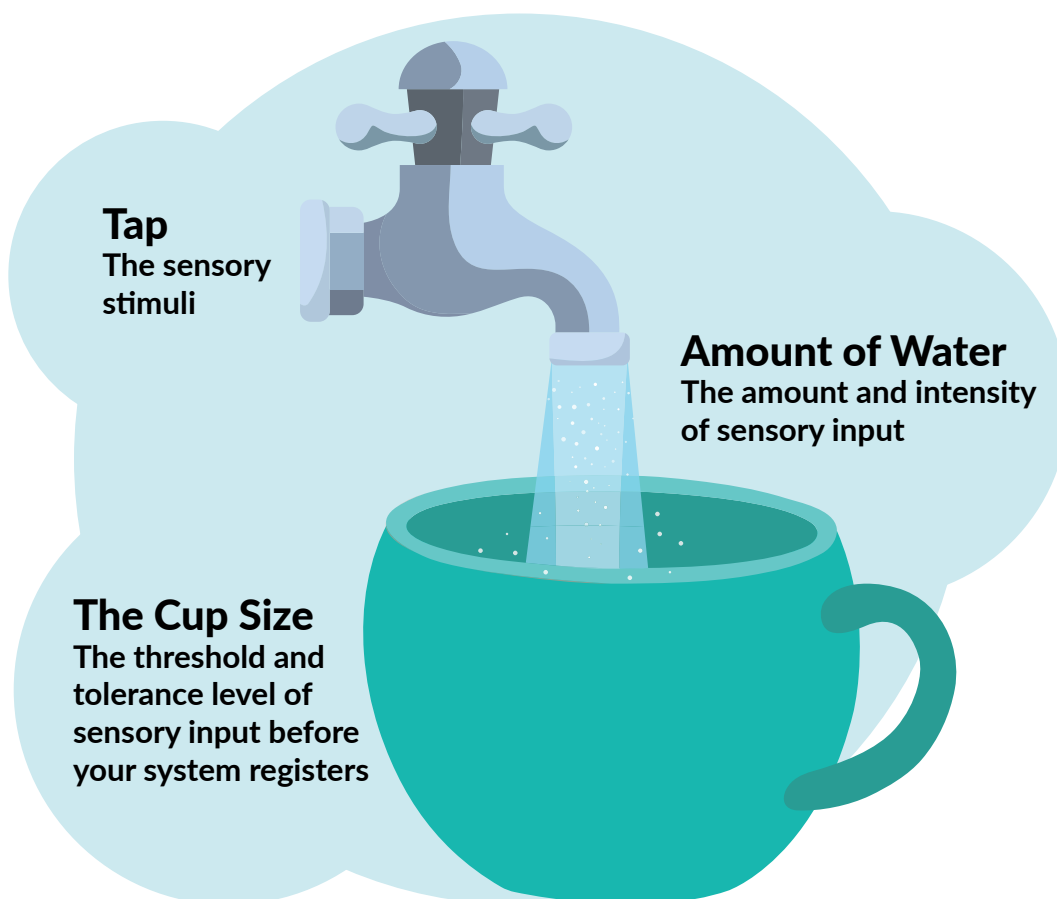
Factors that may impact how students process their sensory world



Our sensory preferences and differences evolve during our development. How we process sensory experiences results in our unique behaviours in managing an 'undersupply' or an 'overload' of sensory input (Fletcher *et al.*, 2023). Based on our unique life experiences, we may have muted or intense experiences to different types of sensory input.

Muted Sensory Experiences

Students who have **muted sensory processing** to certain stimuli are **hypo-responsive**. It is much more difficult for sensory stimuli to register in their system. In other words, they have an undersupply of stimuli and a really big 'sensory cup' to fill up. They may require more **intense sensory input** to register and engage within their learning environment.



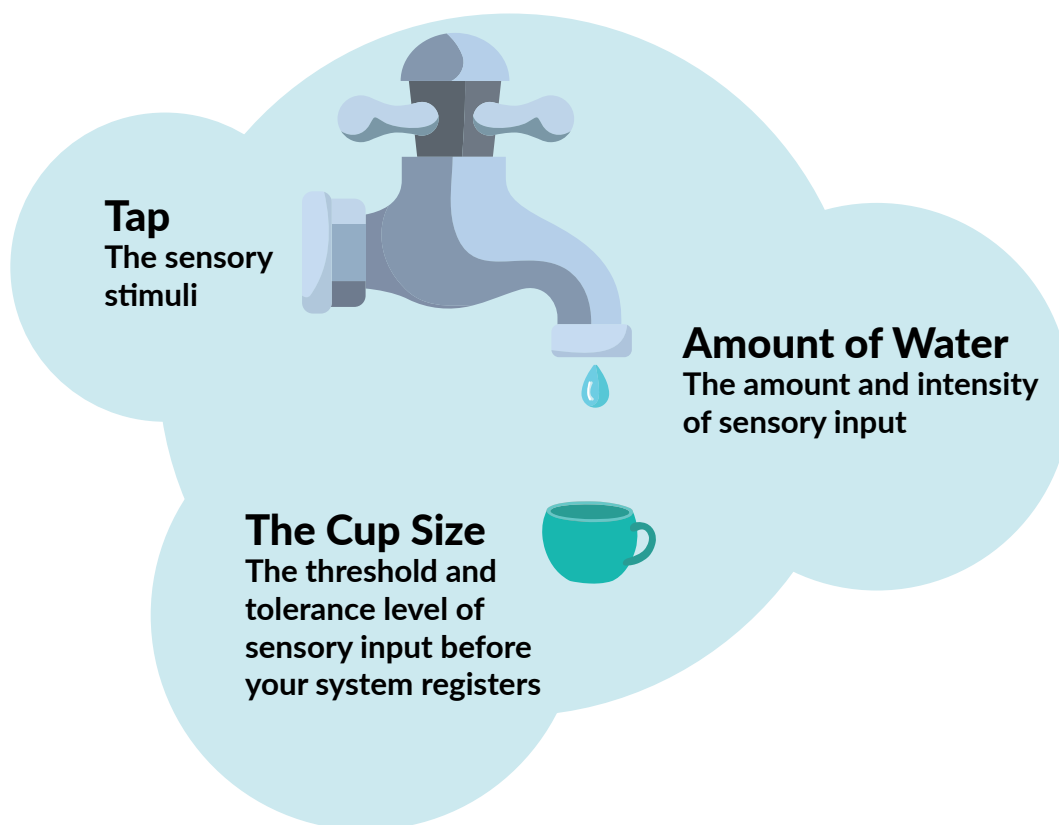
Students who have **muted** sensory experiences may:

- Be slower to respond.
- Have a high pain threshold.
- Not notice or completely miss out some sensory stimuli.
- Enjoy deep pressure.
- Seek out a lot of sensory input. For example, students seeking movement input may wiggle, rock or seek rough and tumble play. Those seeking touch may be fidgety, stroking the wall as they walk down the hallway (He *et al.*, 2023).

These types of sensory responsive behaviours could be an attempt to gain more sensory input and fill their cup so they can register, process and respond in their environments (Star Institute, 2021).

Intense Sensory Experiences

For students who have **intense** sensory processing experiences, they are **hyper-responsive** to stimuli, meaning they have a low threshold to certain stimuli. It takes very little for their sensory cup to overflow or for their sensory system to ‘overload’ (He *et al.*, 2023).



For these students, certain body signals may be too big and overwhelming. Sometimes many sensations are happening all at one time. For some students, there may be one sensation that is so overpowering that they can't notice anything else. They are **at risk of being overwhelmed by the stimulation** coming at them at once, resulting in sensory overload.

Students who have intense sensory experiences may:

- Cover their ears.
- Have a big reaction to stimuli.
- Be overly fearful or hesitant.
- Reluctant to take part in certain tasks.
- Avoid certain rooms or people.
- Engage in repetitive behaviour such as stimming, sticking to one area of the classroom, engaging in play with the same toy.

These behaviours may develop over time in order to avoid new and unfamiliar activities, referred to as a 'felt safety' mechanism (Porges, 2024). Or some students may engage in those repetitive behaviours as a means of blocking out distressing stimuli.

What Can We Do to Support These Differences?

Adopting a Regulation-First approach

These sensory processing differences may impact students for their whole lives. Therefore, it is important to **always view sensory seeking or sensory avoiding behaviours as a student's sensory preference**. Rather than trying to stop these behaviours, we need to shift our focus towards supporting students' sensory needs with a '**regulation-first**' mind-set. Creating an inclusive school can start with normalising sensory differences and focusing on building supports so all our students can meaningfully participate in learning and school life (Dean, *et al.*, 2022).



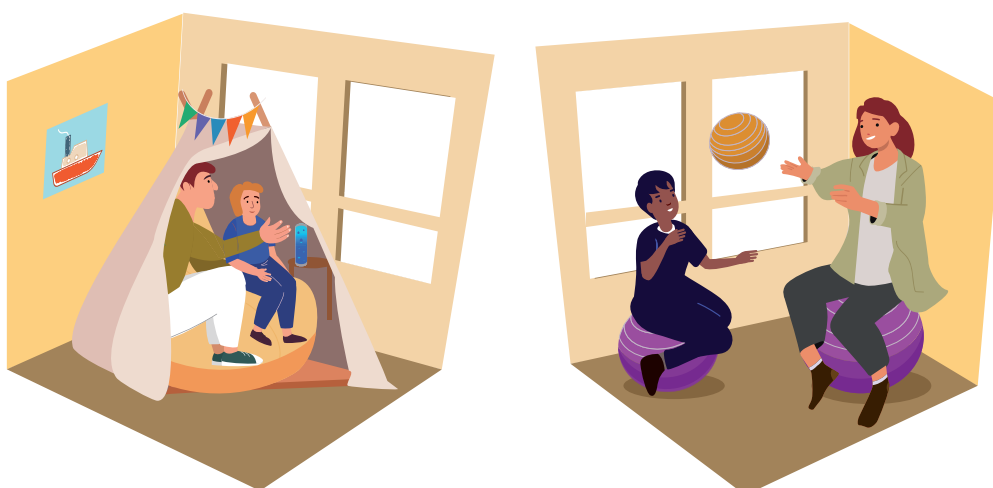
What is a Sensory Space?

A sensory space is a designated area within a school which can support a student with the individualised sensory input they need to regulate, so they can be better prepared for learning and engaging with others (NCSE, 2021). The overall goal of a sensory space is to optimise learning and participation in the school environment.

Sensory spaces can play an important role in supporting students to access the input they need to regulate their bodies and their minds. However, **the everyday teaching environments can equally enhance regulation, learning, engagement and participation for all students.** Visiting a sensory space compliments proactive foundational whole-class and whole-school approaches, but should not replace them.

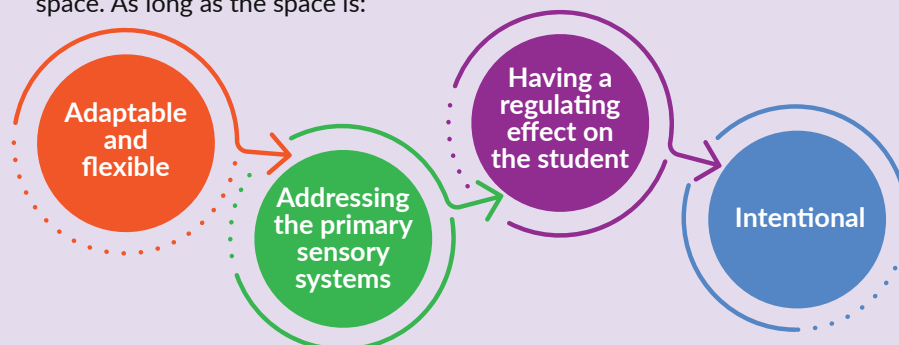
Sensory spaces can:

- Be a calming and predictable environment, providing a space that offers reduced sensory input.
- Be a stimulating and alerting environment, offering increased multi-sensory feedback (Middletown, 2021).



When it comes to sensory spaces, **there is no one size fits all.** There is no formula for setting up a space that will work for every individual student who enters. Humans are variable and our energy levels fluctuate and our needs change; therefore, so should the space. In order to meet the needs of students, the sensory space should be adaptable (NCSE, 2021). The more flexibility within a space, the more of your students needs it will support.

A sensory space does not need to be a state-of-the-art expensive room or space. As long as the space is:

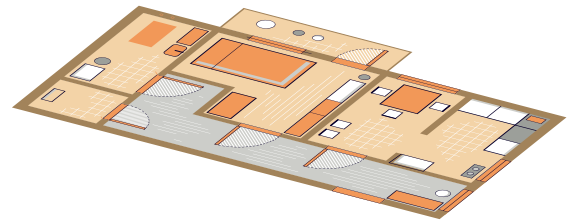


Setting Up Your Sensory Space

Location

When setting up a sensory space, consider where would be a good location to position the sensory space based on your school and your students' needs.

- Setting up a sensory space in a busy hallway, such as opposite the gym or library can make transitioning to and from the space a stressful process (Grace, 2020).
- Some students may benefit from a space they can access freely and quickly, therefore a sensory space within the classroom may be the most appropriate.
- Some schools may want to ensure better maintenance and upkeep of the space. Therefore, locating it near administrative offices can help with this (Grace, 2020).



Timetabling

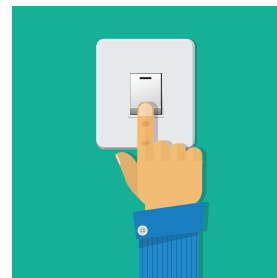
If your school are timetabling visits to the sensory space, it is important that the time slot is meaningful to the student.

- Consider if the student's sensory and regulation needs can be met by strategies/supports within their everyday learning environment rather than in the sensory space.
- Sensory spaces are most effective when used proactively to maintain an optimal state of regulation.
 - Reflect on the student's regulation throughout the day to identify a time that would optimise their visit to the sensory space, making it worthwhile.
- Teachers and students should engage in regular reflection to ensure the visits to the sensory space are continuing to meet the students' needs.
- Consider how your sensory space is set up in advance of each student visiting.
 - Ensure that sufficient time is allocated to facilitate setting up the space in a way that is meaningful and individualised to the student's needs.
 - Be responsive to the student's arousal state and regulation needs at the time of the visit, as well as being mindful of what is coming up for the rest of the day.
- Consider the length of time that would work best for the student.
 - There is no specified guideline on the length of time a student should spend in a sensory room. Some days, students may need more or less time, depending on how regulated their nervous system is. By observing and offering choice to the student while also by being responsive and reflective to their needs will guide your practice.
 - It may be efficient to schedule slots of equal times for organisational and logistical purposes. However, the student does not have to remain in the sensory space for that allocated time.
 - The remaining time may be more valuable for cleaning up, setting up or be made available for any unplanned impromptu visits.



Gradual Introduction to Space

It is important when using the sensory space, that things are switched on/ taken out one at a time and the student is monitored throughout. This will reduce the risk of the student becoming over-stimulated or overwhelmed.



Prioritise Storage

- Have a place to store all sensory space items and equipment situated close to the sensory space. This ensures that the room can be set up appropriately based on the functional purpose behind the student visiting the space on that day. It will also ensure that the space can be set up with intentional student-specific regulating items.
- Assign someone to oversee the monitoring of equipment supplies and the conditions of the items.
- Always have a supply of batteries, cleaning spray and cloths.



Equipment

- Having lots of variety in your sensory space can support any student with what their body needs at that time. **The ability to personalise experiences to individuals is an essential characteristic of a sensory room** (Grace, 2020). All our sensory systems are unique and what may be alerting to one student, is calming for another.
- Reflect on what your students enjoy doing when they are in the space and how they interact. This will help build your confidence in offering meaningful choices to your students.
- Consider the students who will visit the space and the desired functional outcomes you hope the space will provide. This will support you to identify the materials, equipment and/or furniture to include in this space.
- Below is a list of some ideas to get started:



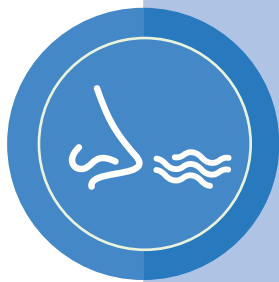
Auditory

- Speakers
- **Alerting:**
 - Up-tempo music
 - Loud, fast paced
- **Calming:**
 - Slow, quiet soothing music
 - Noises from nature
- Cause and effect items that make a noise (for example, musical instrument, big mac)
- Sensory tools that make noise
- Instruments
- Rain sticks
- Sensory boxes
 - Items that shake, move slow or fast within the box.
 - objects that make noises such as crackle, squelch, rustle, snap, click
- Wind chimes



Visual

- Projector
- **Alerting:**
 - Lots of bright lights
 - Flashing
 - Fast moving objects
- **Calming:**
 - Slow moving objects
 - Soft colour tones, for example; under the sea
- Lighting
- **Alerting:**
 - Disco ball
 - Flashing
 - Bright colours
- **Calming:**
 - Soft slow twinkling
 - Lava lamps
 - Glow stick
- Battery-powered candles
- A way to cover any natural light
- Cause and effect lighting
- Items that can fall or float slowly, for example feathers, bubbles



Smell

- Ensure room can be ventilated between students
- It is recommended to liaise with parents when it comes to smell and introduce smell with caution
- A diffuser may be appropriate and beneficial for some students
- Invite the student to choose the smell
- Certain smells could trigger dysregulating sensory memories for your students



Tactile

Items and furniture that offer various textures, temperatures, consistencies, weight and tactile experiences:

- Cushions (sequins, weight, vibration, fluffy etc.)
- Flooring
- Sensory tools
- Sensory boxes (kinetic sand, rice, pasta, etc.)
- Playdough
- Sandpaper
- Velcro
- A variety of textures, for example:
 - rough
 - smooth
 - fluffy
 - soft
 - grainy



Proprioception

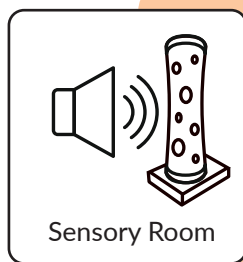
- Body sox
- Heavy cushion
- Tunnel
- Resistance bands
- Bean bags
- Foam roller
- Yoga ball or peanut ball (to be rolled over body)
- Yoga mat (to be rolled up in)
- Proprioceptive activities have an alerting and calming effect



Vestibular

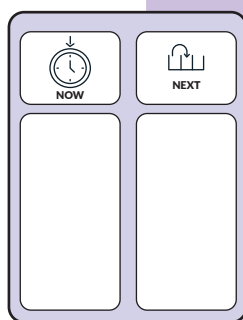
- Anything that offers bouncing:
 - Mini trampoline
 - Yoga ball
 - Space hopper
 - Anything that offers jumping:
 - Stepping stones
 - Moon boots
 - Balance board
 - **Calming:**
 - Items that offers slow linear rhythmic movement:
 - Rocking chair
 - See saw
 - Rolling on yoga ball
 - Hammock
 - **Alerting:**
 - Scooter board
- Equipment that facilitates spinning, inverting and swinging is best done under OT guidance

Tools to Support Transitioning



Visuals

- Supports students' understanding of where they are going.
- Gives students the opportunity to decline.
- Supports students' understanding of what is expected of them, the space and of the activity.



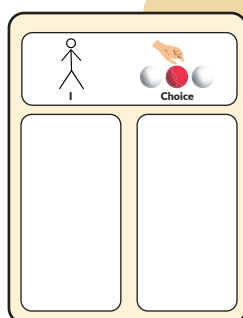
Now Next Boards

- Supports smooth transitions.
- Provides predictability of an activity or series of activities.
- Helps students to prepare themselves and process what is coming up.
- Communicates what is expected of their time in the sensory space.
- Allows students to protest or make a different choice.
- Allows students to regulate their body accordingly depending on whether the upcoming activity is alerting or calming.



Visual Timers

- Prepares students for when they are going to the sensory space.
- Indicates how long they have in the sensory space.
- Provides structure during unstructured time within the sensory space. For instance, five minutes with the bubble tube then five minutes in the hammock.
- Gives the opportunity for choice. For example, does the student want five minutes or six minutes in the ball pit?
- Supports the understanding of time.



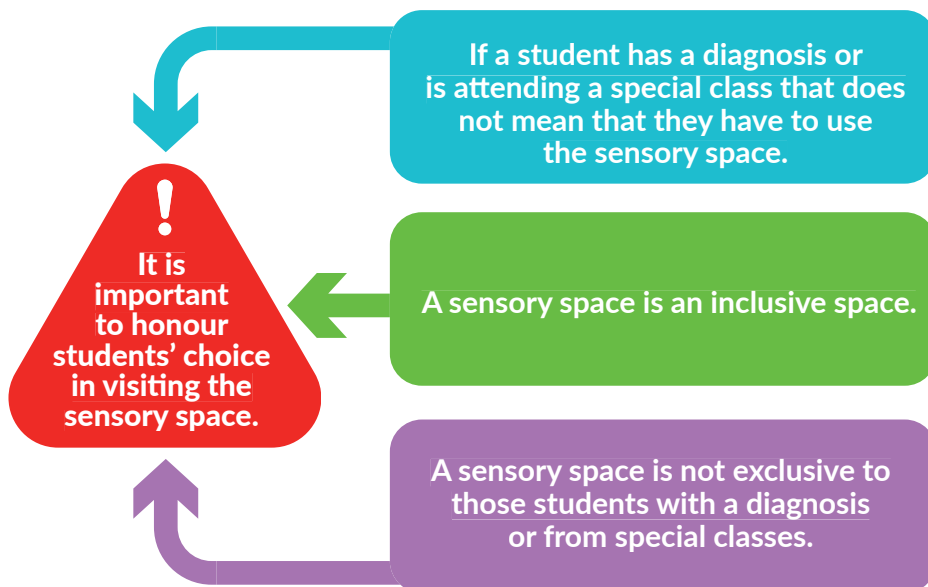
Providing Opportunities of Choice

- Supports a student's sense of autonomy and ownership within the space.
- Develops executive functioning skills through cause and effect. For instance, what the student chooses, will happen.
- Helps the student discover their own sensory preferences.
- Helps the adult learn more about the student's sensory preferences.

Effective Use of Sensory Spaces

Student-Centred

- The student, their sensory preferences, their means of communication, their ways of engaging and participating in learning are accommodated for while using the sensory space.
- Providing choice and following the student's lead are important opportunities to learn about a student's sensory preferences. This knowledge will be supportive in making the student's experience within the sensory space and within the classroom more meaningful.
- It is important to check in with the student and monitor their state of regulation before and after using the sensory space to assess if visiting the sensory space is meeting the student's needs.



Reactive vs Proactive

- If a student goes to a sensory space in a regulated state, their time in that space will be more valuable for the ongoing development of their sensory system and their self-regulation.
- There will be times where the sensory space may be an environment used to make a student feel safe and calm. However, if a student is only accessing this space when they are dysregulated, the learning environment needs to be reviewed to identify what stressors are contributing to the student's dysregulation.
- Our aim is to reduce the stress load and the demands within the learning environment, so that the student is using the sensory space in a regulated state.

Punishment and Rewards

- A sensory space is a regulatory tool. Students should not be brought to this space as a punishment or reward for behaviour.
- Students should not have to 'earn' their regulatory supports.



The Role of the Adult

People and environmental factors are identified as the main contributors to meaningful participation for children with disabilities (Willis *et al.*, 2016). Whether your school has a large or small budget for a sensory space, research has shown that the adult in the sensory space determines the positive outcomes seen. Therefore, the biggest investment made to your sensory space should be the staff (Ashdown, 2013). **“The most important piece of kit in a sensory room is always the person leading the session”** (Grace, 2019).

Co-regulation occurs when one nervous system calms another nervous system. Co-regulation transmits a sense of safety and comfort to one another. It involves the adult:

- Being calm
- Being reliable
- Being present
- Modelling regulation to the student (Whiting *et al.*, 2023)

The adults in this space need to be regulated, as **the most beneficial equipment in a sensory room is not the kit, but the interpersonal contacts** (Hulsegege *et al.*, 1987).

Some students may seek and need a quiet and peaceful environment. For other students, the sensory space may be a valuable time to support their interactions, play skills and social emotional learning. Whatever the student needs, it is recommended that the **adult's role is active and engaged.**

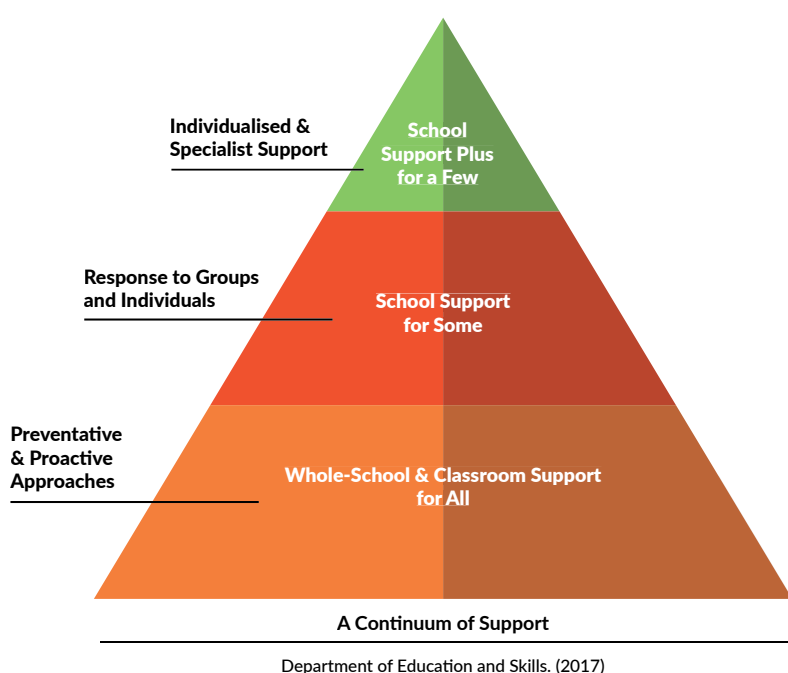
Universal Approaches to Supporting Regulation

Sensory spaces are often used to support a student's regulation at school. However, for a sensory space to be most effective, there needs to be **proactive regulating strategies** taking place across the continuum of support in tandem to students visiting the sensory space. Sensory spaces are one of many sensory and regulating approaches that can be practiced in schools. As well as a plan for utilising the sensory space, equal consideration of the supports being practiced within the classroom and whole school need to take place.

When we are dysregulated, our capacity to fully and meaningfully engage in learning is impacted. This includes how we respond, manage and tolerate the sensory information from the environment and within our bodies. Supporting students to be in a regulated state is crucial to enable them to be ready for meaningful participation and engagement in learning (Whiting *et al.*, 2023). Strategies and practices to support sensory needs for individual students that are in place at a whole class level will be **essential for few, but will be beneficial for all students** (CAST, 2021).

In line with Universal Design and Universal Design for Learning principles, implementing regulation and sensory supports at a whole class and whole school level results in benefits for not only the intended few, but also others whose needs have not been identified or observed (Meyer *et al.*, 2014).

The Sensory Integration Education organisation (2023) discuss how sensory inclusive classrooms build on universal design (UD) by making the environment accessible from a sensory perspective. Sensory inclusive classrooms empower all individuals to fully participate and engage with the physical space. The bonus is that all students benefit from a sensory inclusive classroom that is comfortable and welcoming.

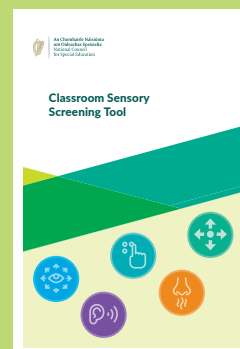


How to Create a Regulation-Friendly Classroom

1 Sensory Audit

Conduct a **sensory audit** of your classroom environment to identify potential sensory stressors that may be challenging students' regulation.

Check out the NCSE's Classroom Sensory Screening Tool for ideas on how to create a more sensory comfortable environment for all students. This can be accessed in the Useful Resources section on page 31 of this booklet.



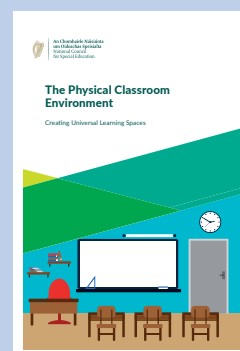
2 Physical Classroom Set Up

Consider the **physical layout** of your classroom.

Consider how you use the space and set up furniture and materials.

Check out the NCSE's **Physical Classroom Environment** booklet that provides evidence-informed suggestions to support all students' engagement and participation.

This can be accessed in the Useful Resources section on page 31 of this booklet.



3 Predictability

Establish **predictability** in the classroom so students experience a sense of felt-safety. These strategies will reduce some of the cognitive demands on students, creating more capacity for them to manage any sensory differences that cannot be removed or reduced. This may involve using:

- Visual schedules.
- Clearly zoned classroom spaces.
- Clear routines.
- Regular calming and low demanding activities after a transition. For example, after re-entering the classroom after lunch, students can do a puzzle while listening to calming music.
- Providing warnings for things that are not usually included in the routine, for example a fire alarm.

Daily Timetable



Gaelge



Art



Small Break



English



Lunch

4 Quiet Space

Create an accessible quiet space or sensory corner that all students can utilise if they require a noise break or a regulating break, as needed during the day. Quiet spaces are comfortable, simple and calming spaces (Rajotte *et al.*, 2024). These spaces are set up ideally within the classroom, zoned within the main classroom space.

Setting clear classroom expectations of the purpose and proper use of this space will make the space more successful and functional. For example:

- The number of students allowed in the space at any given time.
- The length of time a student can stay in the space.
- The items that can be used within the space.

When setting up the space, it is recommended to invite your students to consider what they may find useful within the space.

When setting up a quiet space consider the environment:

- Furniture could be used as a partition from the teaching and learning space, for example a bookshelf.
- A curtain could separate the space from the main room.
- Painting the corner of the room a calming colour can visually zone the space.
- The space could consist of a table with cloth draped over it, or a pop-up tent.
- Position the space in a quiet part of the classroom that has less foot traffic passing.



5 Universal Design for Learning (UDL)

Adopt principles of **UDL** to provide opportunities for students to make real and meaningful choices in how they access, engage, represent and express their learning.

This supports a sensory difference affirming classroom. Students can opt for learning in ways that caters to their sensory needs. For example:

- working in a quiet corner.
- working in different positions. By doing this, students can adjust and move their body during the learning in a way that supports their regulation. For example: standing, kneeling, laying on their bellies.
- working close to natural light.

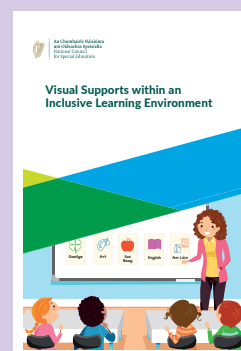


6 Total Communication Approach

Adopt a **total communication approach** (TCA) to reduce the language load students are bearing. A TCA involves modelling, accepting and validating all means of communication, including using objects, gestures, symbols and devices. You can practice using a TCA by:

- Using visual schedules.
- Writing the steps of the activity/ instructions on the board.
- Using gestures.
- Using props and objects to show what you are talking about.

Check out the NCSE's **Visual Supports within an Inclusive Learning Environment** resource on page 31 in the Useful Resources section of this booklet.

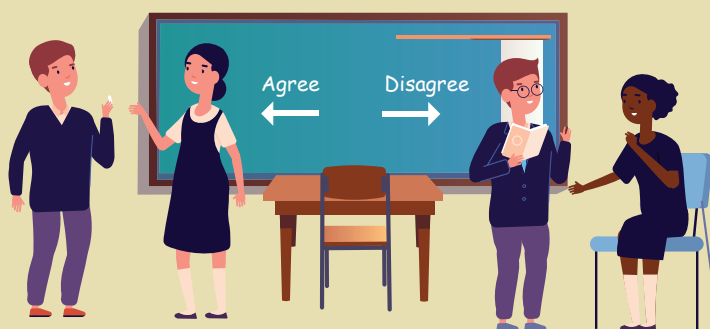


7

Incorporate
Sensory
Opportunities

Enrich the sensory qualities of learning experiences to support all students to regulate energy, attention and emotions.

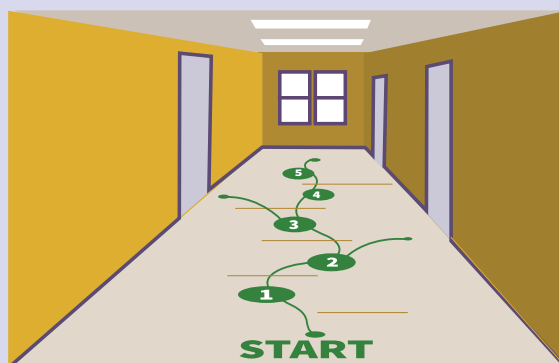
Integrate multi-sensory learning throughout the day. **Multi-sensory learning** is when students use their senses when learning about a topic. Multi-sensory learning helps by activating different pathways in the brain, supporting retention, future recall, and application (Morin *et al.*, 2024). Examples include using objects of reference and props, incorporating audio and videos, experiential learning, role playing, using a wide range of materials.



8

Sensory
Corridors

For students who may benefit from frequent movement or increased sensory input, simple items could transform a typical corridor into an inclusive sensory space. All students and adults alike can engage with the **sensory corridor** as they transition to different rooms throughout the day.



9 Outdoor Spaces

Connecting with the outdoors offers great opportunity for regulation, as it soothes the nervous system. Creating a sensory friendly garden or **outside space** can be done by applying the same principles as setting up an indoor sensory space.

- Pupils should be encouraged to interact with plants, touching, watering and smelling them.
- Create a space to sit down, picnic, grow vegetables, sketch, watch wildlife and listen to sounds.
- This is an environment to be enjoyed by all and developed over time by the school (School Design Guide, 2021).



Conclusion

What are the Key Messages to Take Away?

- We are all sensory beings and it's important to adopt a regulation-first approach by honouring a student's sensory preferences.
- The sensory space is one environmental tool to support a student's sensory needs. The everyday teaching environments can equally enhance a student's sensory development and experience.
- Proactive regulation strategies and supports within the classroom may be essential for some but will be beneficial for all students.
- Sensory spaces are inclusive spaces. All students are welcome to use the space or to decline visiting the space.
- A sensory space does not have to be state-of-the art. As long as it is an adaptable and flexible space that can be responsive to a student's sensory needs.
- Follow the student's lead by offering them choice and honouring their 'voice' (however they express themselves).
- The most important piece of kit in a sensory room is the adult. Adults play a vital role in co-regulation. The adults in the sensory space are the most important part of the environment.



Sensory Space Use: Reflective Tool

These statements within this reflective tool will support you to:

- Identity the universal practices that you can embed to support the regulation needs of all students in your classroom.
- Determine if the use of the sensory space is the best way to meet your student's needs.
- Ensure that sensory space visits are meaningful and intentional.

Universal Approaches to Supporting Regulation

Start by considering what proactive strategies can take place within the classroom.

The following proactive regulation strategies are already happening in the classroom to support regulation:

- ☐ The environment is predictable and consistent
- ☐ There is structure and routine
- ☐ A total communication approach is being used
- ☐ Positive teacher student relationships have been established
- ☐ The student has been asked about their experiences of the classroom
- ☐ A sensory audit has taken place
- ☐ Identified sensory stressors have been reduced
- ☐ Strategies have been explored from The Physical Classroom Environment and Visual Supports within an Inclusive Learning Environment booklets

The desired outcome expected from the student visiting the sensory space is:

- ☐ To be more regulated
- ☐ To increase meaningful participation in learning
- ☐ To alert or calm the student's arousal level
- ☐ For a break from the classroom
- ☐ For some quiet time
- ☐ To be provided sensory input
- ☐ For development of skills, for example motor skills, play skills, social skills
- ☐ Other



Can this outcome be achieved within the classroom environment instead?
Please review what other proactive regulation strategies can be implemented in the classroom to support the student.

Additional Comments:

Visiting the Sensory Space

If the universal and targeted strategies have already been tried in the classroom and it has been decided that the student would benefit from access to the sensory space, consider the following:

Has the student agreed to go to the space?

- ☐ Choice has been provided
- ☐ If the student has requested a visit, this has been honoured (student voice)

What is the student's current state of regulation entering the sensory space?

- ☐ The visit is proactive
- ☐ The visit is reactive
- ☐ The student's regulation needs are considered when deciding when the student accesses the space
- ☐ The adults are regulated and creating a sense of felt-safety for the student

Is there a plan of what is going to happen in the sensory space?

- ☐ The room has been set up to achieve the desired outcomes
- ☐ The student is aware of this plan
- ☐ Clear expectations of the student's time in the space have been shown and explained to the student
- ☐ The student has been given choices

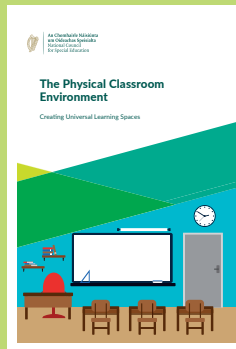
What supports for transitions will be used?

- ☐ Visual timers
- ☐ Visuals
- ☐ Objects of reference

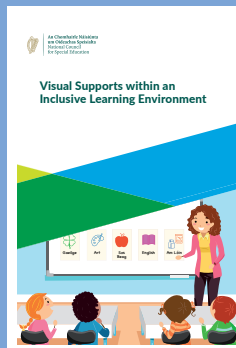
Additional Comments:

Complementary Resources

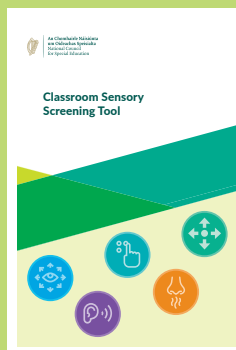
The Physical Classroom Environment: Creating Universal Learning Spaces



Visual Supports within an Inclusive Learning Environment



Classroom Sensory Screening Tool



References

- Addy, L. (2016). How to support pupils with sensory processing needs. *Learning Disabilities Association*: Hyde, Cheshire.
- Ashdown, R. (2013). 'Multi-sensory environments'. *PMLD LINK: sharing ideas and information*, 25(74), 7-9.
- Brown, C., Tollefson, N., Dunn, W., Cromwell, R. & Fillion, D. (2001). "The adult sensory profile: measuring patterns of sensory processing". *American Journal of Occupational Therapy*, 55(1), 75-82. <https://doi.org/10.5014/ajot.55.1.75>
- Bornstein, M. & Esposito, G. (2023). Coregulation: A Multilevel Approach via Biology and Behaviour. *Children MDPI*, 10(8), 1323 <https://doi.org/10.3390/children10081323>
- Centre for Excellence in Universal Design. (2024). Definition and Overview of Universal Design (UD). Centre for Excellence in Universal Design. <https://universaldesign.ie/about-universal-design/definition-and-overview>
- Centre for Applied Special Technology. (2018). *Universal Design for Learning Guidelines version 2.2*. UDL Guidelines. <https://udlguidelines.cast.org/>
- Child Mind Institute Inc. (2024). *Sensory Processing Disorder Explained*. <https://childmind.org/article/sensory-processing-issues-explained/>
- Dean, E., Little, L., Tomchek, S., Wallisch, A. & Dunn, W. (2022). Prevalence Models to Support Participation: Sensory Patterns as a Feature of All Children's Humanity. *Frontiers in Psychology*, 13. <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.875972/full>
- Department of Education and Skills. (2017). Guidelines for Primary Schools: Supporting Pupils with Special Educational Needs in Mainstream Schools. https://ncse.ie/wp-content/uploads/2022/04/Guidelines_P.pdf
- Department of Education and Skills. (2019). *Wellbeing Policy Statement and Framework for Practice*. www.education.gov.ie.
- Department of Education. (2021). School Design Guide, Primary & Post Primary School Specialist Accommodation for Pupils with Special Education Needs. <https://assets.gov.ie/131217/25e3cdb0-f720-44d6-82c0-8298f7391dbc.pdf>
- Dunn, W. (2014). *Sensory Profile 2: Strengths Based Approach to Assessment and Planning*. San Antonio: Pearson Publishing.
- Dunn, W. (2007). Supporting Children to Participate Successfully in Everyday life by Using Sensory Processing Knowledge. *Infants & Young Children*, 20(2), 84-101. <https://doi.org/10.1097/01.IYC.0000264477.05076.5d>
- Dunn, W. (2001). The 2001 Eleanor Clarke Slagle Lecture. The sensations of everyday life: empirical, theoretical, and pragmatic considerations. *American Journal of Occupational Therapy*, 55(6), 608-620.

- Fletcher, T., Chen, A., Norris, A., Pizarro, E., Tran, J. & Tripp, M. (2024). Guidelines for Sensory Havens in Autism and Sensory-Friendly Events. *TEACHING Exceptional Children*, 57(1), 34-42. <https://journals.sagepub.com/doi/10.1177/00400599231171715>
- Grace, J. (2020). Multisensory rooms: essential characteristics and barriers to effective practice. *Tizard Learning Disability Review*, 25(2), 67-75. <https://DOI.org/10.1108/TLDR-10-2019-0029>
- Grace, J. (2019). *Multiple Multisensory Rooms: Myth Busting the Magic*. Taylor & Francis Group <https://doi.org/10.4324/9780429324369>
- Hartman, D., O'Donnell-Killen, T., Doyle, J. K., Kavangh, M., Day, A., & Azevedo, J. (2023). *The Adult Autism Assessment Handbook: A Neurodiversity Affirmative Approach*. Jessica Kingsley Publishers.
- He, J.L., Williams, Z.J., & Harris, A. (2023). A working taxonomy for describing the sensory differences of autism. *Molecular Autism*, 14(15). <https://molecularautism.biomedcentral.com/articles/10.1186/s13229-022-00534-1>
- Hulsegge, J. & Verheul, A. (1987). *Snoezelen: Another World*. Rompa, Chesterfield.
- Kielhofner, G. (2008). *Introduction to the Model of Human Occupation*. Third Edition. Baltimore. Lippincott Williams & Wilkins (pg. 5).
- Lestrud, M. (2013). Sensory Stimuli. In: Volkmar, F.R. (eds) *Encyclopaedia of Autism Spectrum Disorders*. Springer: New York, NY. https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1698-3_1597
- Maciver, D., Rutherford, M., Arakelyan, S., Kramer, J. M., Richmond, J., Todorova, L., Romero-Ayuso, D., Nakamura-Thomas, H., ten Velden, M., Finlayson, I., O'Hare, A., & Forsyth, K. (2019). Participation of children with disabilities in school: A realist systematic review of psychosocial and environmental factors. *PLOS ONE*, 14(1). <https://doi.org/10.1371/journal.pone.0210511>
- Meyer, A., Rose, D. & Gordon, D. (2014). *Universal Design for Learning: Theory & Practice*. Wakefield, MA: Cast Professional Publishing (pg. 81-83).
- Middletown Centre for Autism. (2023). Neurodiversity. *Research Bulletin*, 40. <https://www.middletownautism.com/files/uploads/d6a329f7ae93032cf8d8dce8b9b29560.pdf>
- Morin, A. & Wilson, B. (2024). What is Multisensory Instruction? <https://www.understood.org/en/articles/multisensory-instruction-what-you-need-to-know>
- National Council for Special Education. (2021). Sensory Spaces in Schools. NCSE. <https://ncse.ie/wp-content/uploads/2021/10/NCSE-Sensory-Spaces-in-Schools-2021.pdf>
- National Council for Special Education. (2024). An Inclusive Education for an Inclusive Society Policy Advice Paper on Special Schools and Classes. NCSE: Trim [An Inclusive Education for an Inclusive Society – Policy Advice Paper on Special Schools and Classes \(ncse.ie\)](https://www.ncse.ie/publications/An-Inclusive-Education-for-an-Inclusive-Society-Policy-Advice-Paper-on-Special-Schools-and-Classes)
- Neurodiversity Ireland. (2024). What is neurodiversity. <https://neurodiversityireland.com/what-is-neurodiversity/>
- Porges, S. & Dana, D. (2024). Clinical Applications of the Polyvagal Theory: Trauma, Attachment, Self-Regulation and Emotions. Course Presentation. PESI.

Rajotte, E., Grandisson, M., Coutre, M.M., Desmarais, C., Chertien-Vincent, M., Godin, J. & Thomas, N. (2024). A Neuroinclusive School Model: focus on the School, Not on the Child. *Journal of Occupational Therapy, Schools, & Early Intervention*, 1-19.
<https://doi.org/10.1080/19411243.2024.2341643>

Salamon, M. (2024). Co-regulation: Helping children and teens navigate big emotions. [Harvard.edu](https://www.harvard.edu)

Sensory Integration Education, (2023). Sensory Integration Education News and Blog. *Sensory Snapshot: Sensory Friendly Schools*. <https://www.sensoryintegrationeducation.com/pages/news?p=sensory-snapshot-sensoryfriendly-schools>

Shanker, S. (2013). *Calm, alert, and learning: classroom strategies for self-regulation*. Pearson.

Star Institute. (2021. April). SPD and ADHD: Implications for Sensory Based Practice. Webinar.

UNESCO. (2020). Global education monitoring report, 2020: Inclusion and education: all means all. <https://doi.org/10.54676/JJNK6989>

Whiting, C.C., Schoen, S. A. & Niemeyer, L. (2023). A sensory Integration Intervention in the School Setting to Support Performance and Participation: A Multiple-Baseline Study. *American Journal of Occupational Therapy*, 77(2). <https://doi.org/10.5014/ajot.2023.050135>

Willis, C., Girdler, S., Thompson, M., Rosenberg, M., Reid, S. & Elliot, C. (2016). Elements Contributing to Meaningful Participation for Children and Youth with Disabilities: A Scoping Review. *Disability and Rehabilitation*, 3(17), 1771-1784.
<https://www.tandfonline.com/doi/full/10.1080/09638288.2016.1207716>

Notes









**An Chomhairle Náisiúnta
um Oideachas Speisialta**
National Council
for Special Education

Web: www.ncse.ie