

Therapeutic Support for Neurodivergent Learners

Laura Oliver – Senior Occupational Therapist at Witherslack Group

With special thanks for sharing their knowledge to:
Jessica Lofthouse – Senior Speech and Language Therapist
Joel Drury – Occupational Therapist



Aims of the webinar:

- To consider what is meant by the terms *neurodiversity* and *neurodivergent*
- To reflect on how the classroom environment might feel for a neurodivergent child at school
- To discuss some therapeutic tools that could be useful to introduce into your learning environment



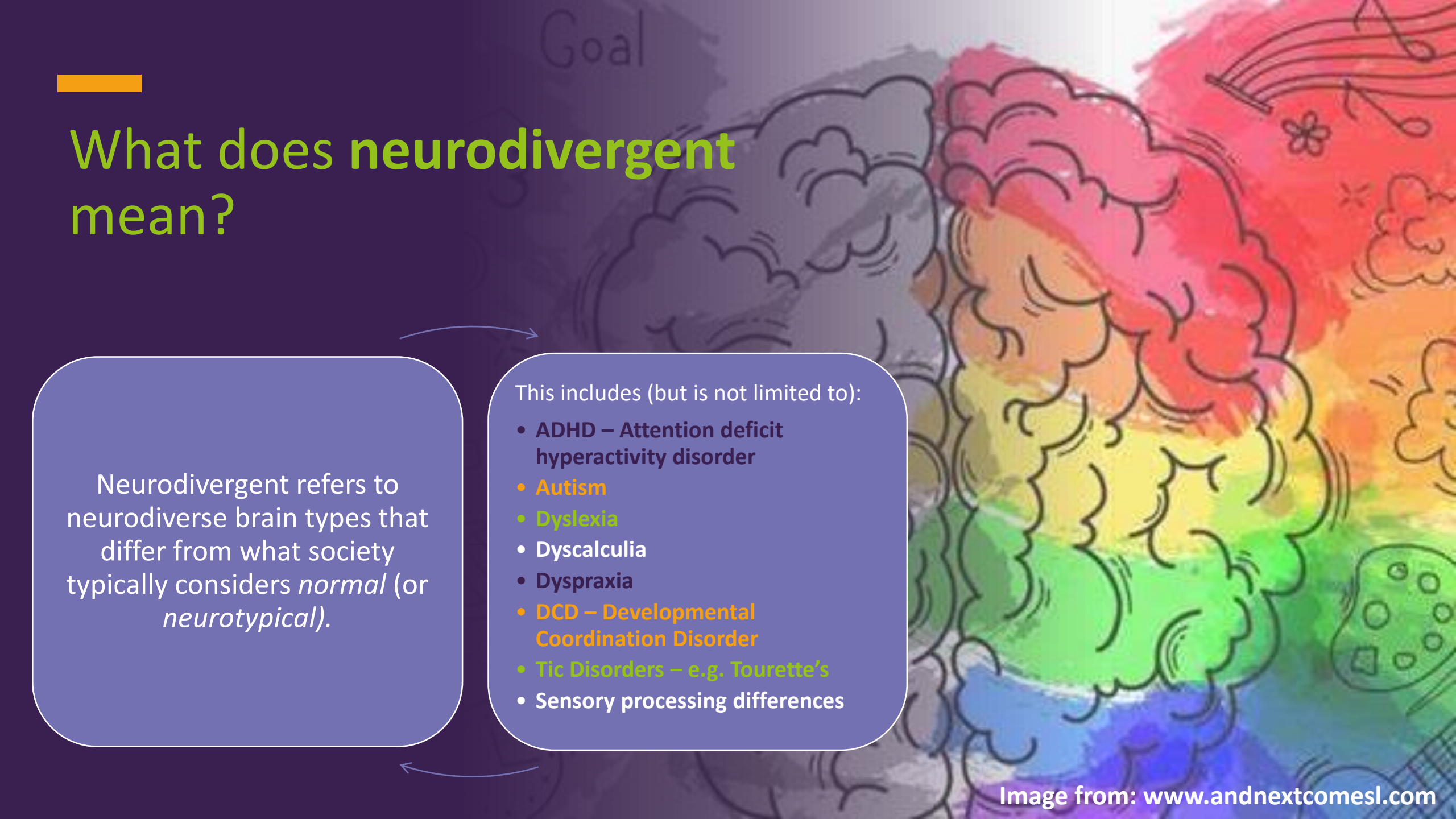
Laura Oliver

- Senior Occupational Therapist (OT) at Witherslack Group
- 18 years OT experience, the majority of which has been working with children and young people with a number of physical, mental health, neurodiverse and sensory differences
- Sensory Integration Practitioner (PG Cert)
- Special interest in interoception differences and the impact on function and participation
- Trained in Bobath techniques

What do we mean when we say neurodiversity?

“We all experience and interact with the world in a way that makes sense to us. Neurodiversity highlights the idea that there’s no one right way to think, learn, behave or feel. Neurodiversity is used as a way to describe the different ways human brains work because there’s no single definition of ‘normal’ when it comes to the brain.”





What does neurodivergent mean?

Neurodivergent refers to neurodiverse brain types that differ from what society typically considers *normal* (or *neurotypical*).

This includes (but is not limited to):

- ADHD – Attention deficit hyperactivity disorder
- **Autism**
- **Dyslexia**
- **Dyscalculia**
- **Dyspraxia**
- **DCD – Developmental Coordination Disorder**
- **Tic Disorders – e.g. Tourette's**
- **Sensory processing differences**

Some statistics:

- **It is estimated that around 1 in 7 people (more than 15% of people in the UK) are neurodivergent (ACAS 2016)**
- **There are over 180,000 autistic students in England, 73% of whom are in mainstream schools (National Autistic Society (NAS) – Education Report 2023)**
- **Students with ADHD are estimated to make up 2-5% of learners in schools (around 1 in 30 students) (National Institute for Health and Care Excellence (NICE) – Attention deficit hyperactivity disorder: diagnosis and management. Guideline [NG87] March 2018)**
- **10% of the UK population are dyslexic (British Dyslexia Association (BDA) October 2023)**
- **Dyspraxia / DCD affects around 5% of school aged children (Dyspraxia Foundation 2024)**
- **Tourette Syndrome affects 1 school child in every 100, which typically starts around 6/7 years of age and tends to peak in early adolescence (Tourettes Action 2024)**

Neurodivergence in school

“schools can be an anxiety-provoking environment for neurodivergent children and young people.

Many pupils can face cognitive, sensory and social challenges in the school environment, which is usually designed primarily with neurotypical pupils and staff members in mind”.

“neurodivergent people can often feel as though they need to suppress natural behaviours, conform to social norms and force themselves to behave ‘typically’. This is known as masking.

This can be exhausting and cause increased anxiety and burnout”.

While some neurodivergent students might need specialist support, many will benefit from **changes to the environment**, and **better understanding and support** from their peers and school staff.

Neurodiversity Celebration Week

This is an excellent, annual opportunity to include information sharing and learning about neurodiversity and neurodivergence – though don't just limit learning to this one week!

- Talk about and celebrate differences
- Support students to develop their knowledge and understanding of neurodiversity in all forms
- Generate ideas around neuro-inclusion and what this looks like for your class and school

18th – 24th March 2024



Neurodivergence – what might you see in class or school?

Visual sensitivity

Challenging smells

Need to fidget and move

Struggling with impulses to call out answers

Anxiety when things change

Auditory sensitivity

Not enough time to process information

Misunderstandings in friendships and relationships

Frustrations with reading and/or writing

Difficulty in communicating feelings

...and more!

What can we do to help?

“Successful, inclusive education needs to cater to the naturally occurring variability that is an inevitable part of humanity.

An expectation of varying needs and resources to accommodate those [needs] should be baked in to our school systems, rather than overlaid as optional extras”

Dinah Aitken and Sue Fletcher-Watson ~ The British Psychological Society

Recognise that the support needs of neurodivergent individuals can be dynamic, depending on multiple factors which might include the environment, individual wellbeing, or relationships with those around. Skills and needs can fluctuate accordingly, and supporting people should recognise and accept this by responding with empathy and understanding.



Emotional Regulation and Wellbeing:

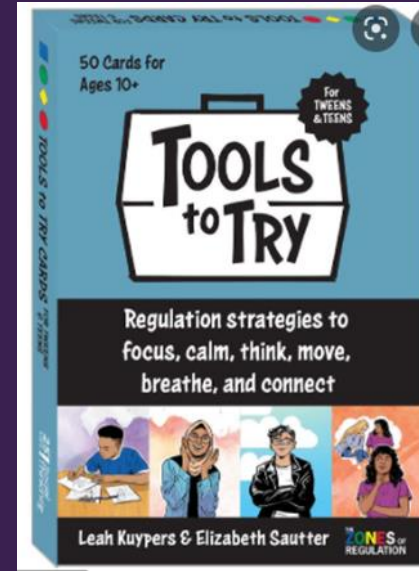
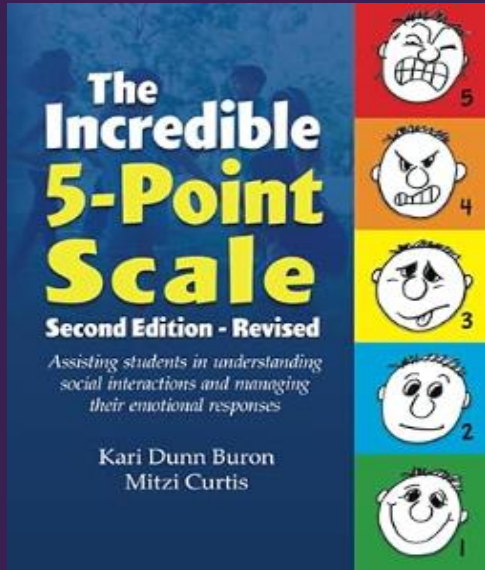
Make the environment structured, predictable and easy to understand to reduce anxiety. This could include:

- **Use of visual supports to back up verbal information**
- **Clearly defined areas for different activities**
- **Well organised spaces with materials and resources consistently stored in/on designated shelves/cupboards or drawers**

Ensuring a low-arousal environment.

- **Modify the environment to take into consideration sensory needs. You can use a checklist to help you think about what adaptations might be needed.**

Emotional regulation and wellbeing supports:



The **ZONES** of Regulation®

BLUE ZONE	GREEN ZONE	YELLOW ZONE	RED ZONE
Sad Sick Tired Bored Moving Slowly	Happy Calm Feeling Okay Focused Ready to Learn	Frustrated Worried Silly/Wiggly Excited Loss of Some Control	Mad/Angry Terrified Yelling/Hitting Elated Out of Control

It is beneficial for all students to have the opportunity to express and discuss their feelings, and be supported to regulate (in a safe and effective space, or with a trusted adult) so as they have the best opportunity to access their learning in school.

These therapeutic tools have been designed to support children and young people with special educational needs to express and address their emotional regulation and wellbeing.

Sensory Differences:

Sensory discomfort and overwhelm in the classroom can have a significant impact on the wellbeing of a neurodivergent student, and greatly affect their ability to participate and function in the classroom.

This can include:

- **Noise** that the individual experiences as loud or uncomfortable, or persistent and distracting
- **Touch experiences** that can be troubling or disturbing – e.g. messy play, the feel of clothing textures, sitting on and itchy carpet or cold floor
- **Smells** that can feel unsettling or intrusive – e.g. food, paint, glue, PE equipment, bodily odours (including perfumes or deodorants)
- **Visual discomfort** – e.g. the environment is too bright, busy, or there is too much movement



Sensory Supports:

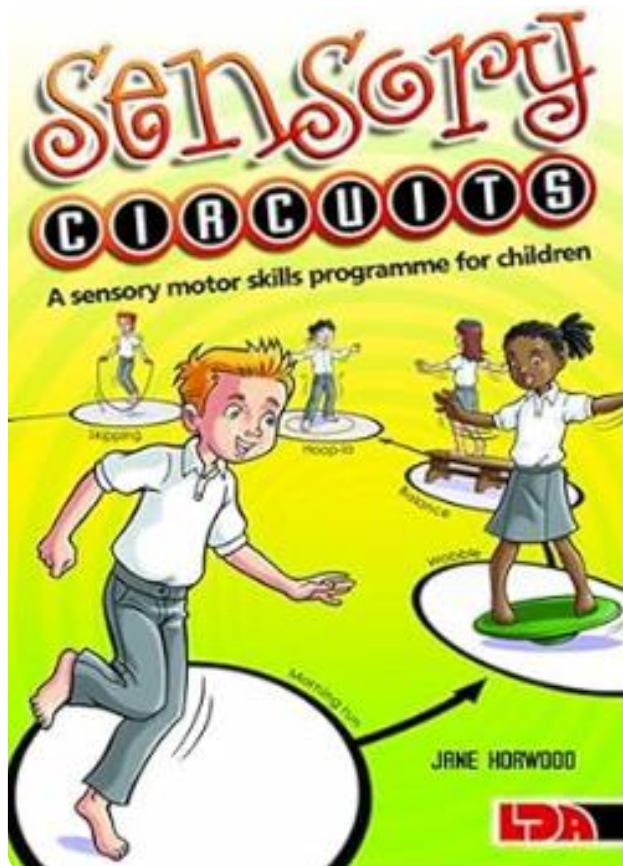
A few simple adjustments to the environment and addition or facilitation of sensory supports can have a huge and positive impact.

Talk to the child and their family or carers about what support tools can help in school.

This might include:

- Weighted products* to improve body awareness and feeling grounded – this can also positively impact fidgeting for short periods (*consult an OT where possible)
- Tools that build in movement – e.g. foot cycles, therapy balls, scooter boards, resistance band on chair legs, wobble cushions, body socks
- Wearing sunglasses, having access to dimmable or non-direct lighting
- Using ear-defenders or noise reduction ear-plugs
- Having a calm and quiet area to go to for sensory comfort, or rest and reset
- Fidget tools to use during listening tasks, or periods of increased concentration
- Having alternative seating options – e.g. rocking chairs, beanbags, wobble stools or standing desks
- Making accommodations to school uniform





Movement!

Planned and supported movement breaks can have a really positive impact on all students.

Children with sensory differences can benefit from engaging in sensory circuits throughout the school day to regulate their sensory-motor systems in order to facilitate learning.

Sensory circuits are structured activities that follow a pattern of alerting, organising, and calming the sensory systems in preparation for engaging in class.

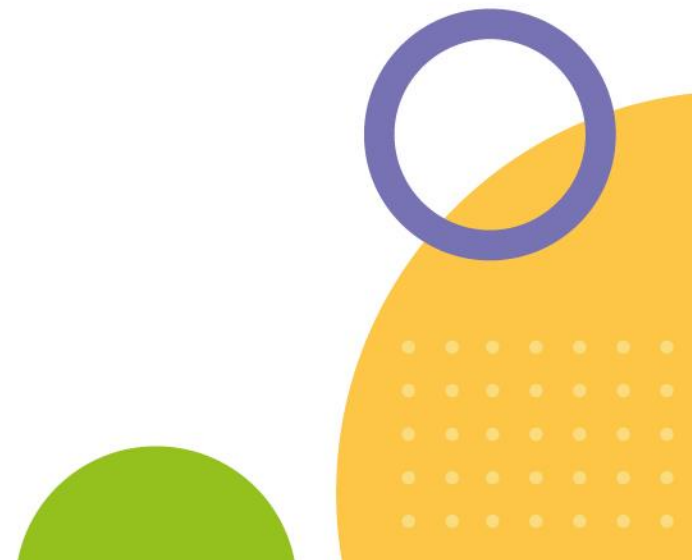
Motor Skills Differences:

Neurodivergent children and young people can often present with differences in **their gross and fine motor skills**. This can impact how they engage in lots of everyday activities, and difficulties with participation can impact self-confidence, self-esteem and self-efficacy.

They may need additional time to complete tasks with a motor skills element, or tasks may need to be broken down into manageable chunks or graded to support individual ability.

This can include challenges around:

- Dressing tasks
- PE
- Playtimes
- Mealtimes



Motor Skills Support:

Advice from a neurodiversity affirming professional is advisable for supporting an individual with motor skills differences (e.g. an OT or Physiotherapist), but a helpful school resource to facilitate the adaptation or inclusion of graded motor skills activities is **Motor Skills United**

...a motor skills programme designed by Occupational Therapists to use in school to develop motor and perceptual skills.



Communication Differences:

REF: Emily Price - Autistic Speech and Language Therapist

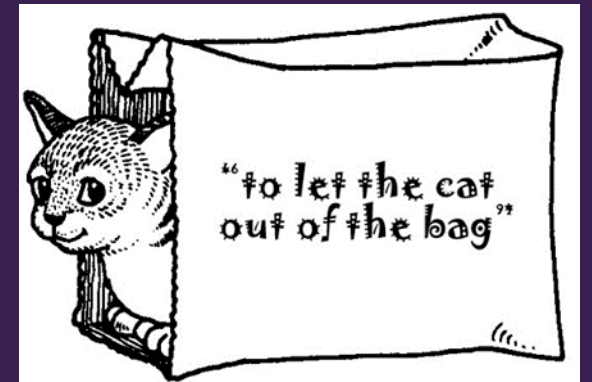
Neurodivergent individuals may experience a number of communication differences which can impact their engagement in school.

This might include:

- Being non-speaking all or some of the time, or semi-speaking
- Needing additional time to process information before responding
- Not making eye-contact when speaking (which can be interpreted as being rude or aloof if not appropriately understood)
- The way their 'use of language' is interpreted - pragmatics - language in context: interpreting body language, knowing when it's your turn to speak in conversations and jump in, initiating interactions, how to ask questions, understanding language in context, picking up on socio-emotional cues. Pragmatics involves inferring information and reading between the lines. Whilst it is incorrect to say this aspect of language is impaired for neurodivergent individuals, it can be a challenging aspect of communication and may require sensitive support whilst avoiding strategies that aim to 'normalise' .
- Understanding abstract language / figurative language such as idioms, metaphors, double meanings, and sarcasm.

Supporting Communication:

- Never aiming for 'normalisation'
- Use young person's name before giving information
- Give plenty of time to process information, at least 10 seconds
- If repeating information, use the same words
- Use visual supports – written, photo, symbol, diagram, Talking Mats
- Avoid verbal language at times of high anxiety
- Consider use of non-literal language (individual young person and your relationship)
- Modify your language based on young person's needs in at the time



Supporting Communication (Continued...)

- Don't insist on eye contact
- Use interests to build positive relationships
- Value young person's wishes in terms of friendships and style of interaction
- Say what you mean and do what you say – builds trust
- Don't rely on non-verbal cues to get message across
- Teach about alternative perspectives, compromise and agreeing to disagree



Communication Supports:

- **Comic Strip Conversations** – Comic strip conversations are a helpful tool when exploring both people's perspectives and feelings of situations e.g. disagreements, misunderstandings, conflict.
 - **Social Stories** – Social Stories are a great way to support understanding, reduce anxiety about situations and to build perspective-taking. They should not be written to teach compliance, and should be individualised for the child with language and images pitched at the right level.
 - **Talking Mats** – Talking Mats are a communication tool to which pictures can be attached and re-arranged as required. Talking Mats can help people with communication differences have a greater understanding about the chosen topic. Talking Mats can increase engagement and can enable individuals to make informed choices.
 - **Visual supports** – e.g. whole class visual timetable, labels for equipment and supports, task plans, checklists, visual representation of classroom expectations and safety rules
 - **Alternate methods of communication** for non-speaking or semi-speaking individuals
- 

Executive Functioning Differences:

Neurodivergent individuals can present with differences in their executive functioning skills.

This includes challenges with:

- Impulse control
- Emotional control
- Flexible thinking
- Working memory
- Self-monitoring
- Planning and Prioritising
- Task initiation
- Organisation

EXECUTIVE FUNCTIONING



Executive Functioning Support:



Visual reminders and checklists e.g. morning routine.



Set time limits with visual timers.



Support to use a planner/diary.



Explain the rationale for the strategy.



Explore different ways of learning e.g. jotting down notes.



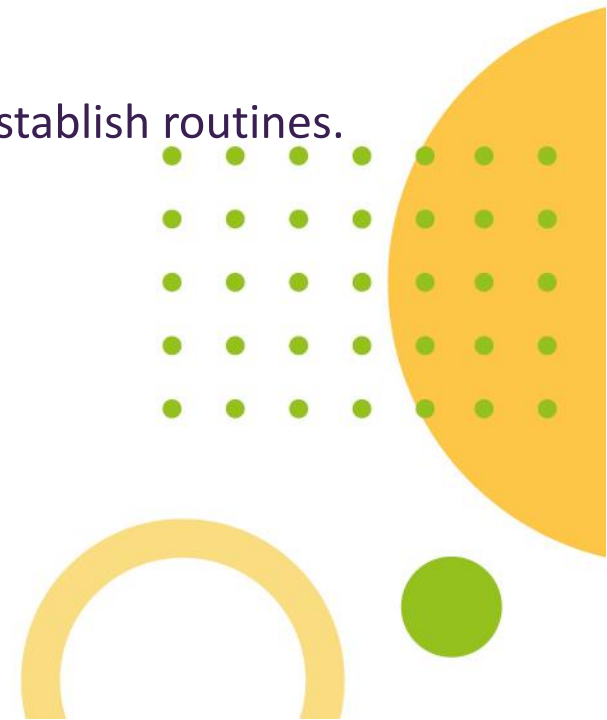
Establish routines.



Use short instructions and keep language simple.

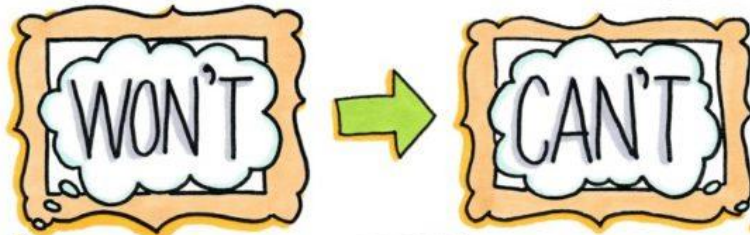


Give extra time to process information.



REFRAME THE BEHAVIOUR

"KIDS DO WELL IF THEY CAN"
~ ROSS GREENE



"SEE A CHILD DIFFERENTLY, YOU SEE A DIFFERENT CHILD"
~ Dr. Stuart Shanker

When kids exhibit challenging behaviour we can be "STRESS DETECTIVES"... finding and removing barriers.

- FIND STRESSORS → REDUCE THEM
 - FIND UNMET NEEDS → MEET THEM
 - FIND SKILLS DEFICITS → TEACH THEM
- @kwiens62

REF: @kwiens62
Kirstin Weins – Inclusion
Coach

Final thought from a neurodivergent individual...

“By acknowledging and celebrating the strengths of SEN students, we can begin the seismic shift of changing the way students with special needs are perceived and treated at school and also change the way neurodivergent students feel about themselves.”

Siena Castellon, The Spectrum Girl's Survival Guide



References:

- “Neurodiversity – affirmative education: why and how?” – Dinah Aitken and Sue-Fletcher-Watson, December 2022.
<https://www.bps.org.uk/psychologist/neurodiversity-affirmative-education-why-and-how> The British Psychological Society
- “Neurodiversity” – Anna Freud Mentally Healthy Schools
<https://mentallyhealthyschools.org.uk/factors-that-impact-mental-health/vulnerable-children/neurodiversity/>
- “NAS Education Report 2023” - National Autistic Society [NAS Education report 2023 \(dy55nndrxke1w.cloudfront.net\)](https://www.nas.org.uk/resources/nas-education-report-2023)
- “Teaching and managing students with ADHD: Systems, strategies solutions” – Shire, August 2018
- “What is Neurodiversity?” – togetherall, September 2022
<https://togetherall.com/en-gb/support-articles/what-is-neurodiversity/>
- “Autistic Communication” – Emily Price, Autistic Speech and Language Therapist. November 2023
<https://www.autisticslt.com/communicationdifficulties>



Useful resources:

- <https://education.gov.scot/media/i3nm5bkt/sensory-audit-tool-for-environments.pdf>

Sensory Audit for Schools and Classrooms – Autism Education Trust, National Autism Standards (supported by Department for Education)

- <https://www.neurodiversityweek.com/2024-events>

Neurodiversity Celebration Week 2024

- **The Incredible 5-Point Scale. Assisting Students in Understanding Social Interactions and Managing their Emotional Responses. Second Edition – Revised.**

Kari Dunn Baron and Mitzi Curtis



Useful resources:

- **Zones of Regulation. A Curriculum Designed to Foster Self-Regulation and Emotional Control.**

Leah M. Kuypers (Social Thinking.com)

- **Sensory Circuits: A Sensory Motor Skills Programme for Children.**

Jane Horwood (LDA)

- **Motor Skills United**

Sally Holmes and Wonnie Barry (Special Direct)

- **Comic Strip Conversations: Illustrated interactions that teach conversation skills to students with autism and related disorders**

Carol Gray (1994)



Useful resources:

- **Social Stories: Carol Gray**

<https://carolgraysocialstories.com/>

- **Talking Mats**

<https://www.talkingmats.com/>



**Thank you for listening and for
your time today!**

Any questions?