
Neurodiversity



TAMESIDE
EDUCATIONAL PSYCHOLOGY SERVICE



Agenda

01

Defining
neurodiversity

02

Legislation

03

Neuroinclusion

04

Classroom
strategies

05

Neuroinclusive
workplaces

06

Resources and
further reading

Before we start

- We acknowledge that we all think, process information and therefore experience training differently.
- We would like you to engage with the training in a way that suits you.
- If you want to ask a question, please stop us at any point.
- If you need a break, please take one.
- If you need additional time to process the information discussed, feel free to stay afterwards and ask any questions or email us later.

Session aims



To understand what is meant by neurodiversity and neuroinclusive settings.



To raise awareness, promote inclusivity, and challenge misconceptions.



To plan next steps to become more neuroinclusive in our work.



To consider practical strategies that can be used in the classroom.





Biodiversity

- What does it mean?
- Is it applied to an individual organism or a collective group?

Definitions

Neurodiversity – the many different ways of thinking and learning that make up a group or population of people.

Neurodivergent – means having a brain that functions in ways that diverge significantly from the dominant societal standards of “normal.”

(Walker, 2021)



Models of disability

Medical model of disability:

- Disability is difference in need of treating/changing even if it does not cause pain or illness.
- Views disability/difference as a deficit.
- Focuses on what a person can't do.

Social model of disability:

- Disability is a result of society being inaccessible and designed for the majority.
- People can be different/have a disability and still have strengths.
- Looks at the whole person, including their unique skills and needs.

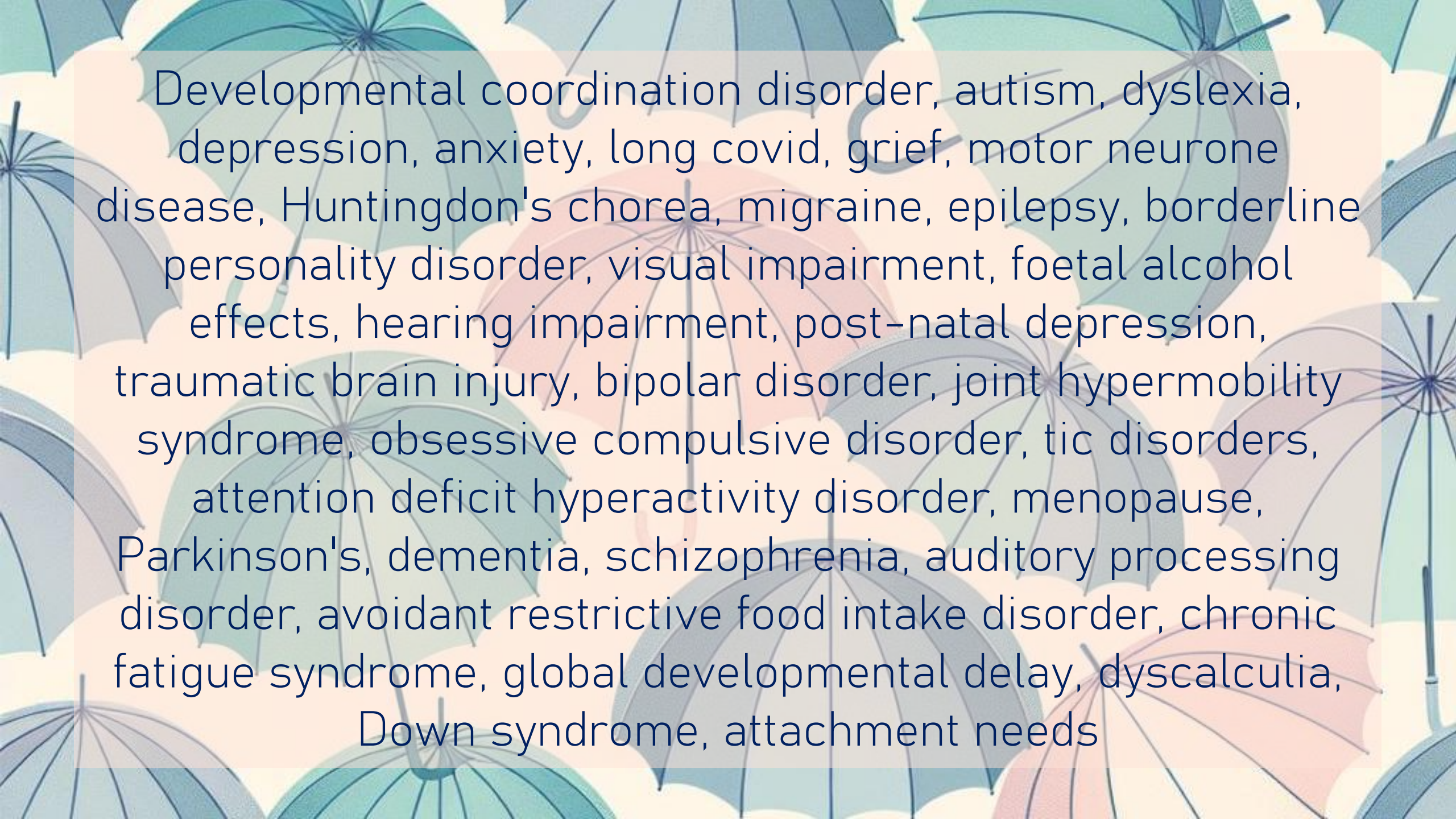
A note on percentages

- Autism – UK Government estimate 1 in 100, but recent research suggests 1 in 57 (Roman-Urrestarazu et al., 2021)
- ADHD – Global prevalence in children estimated to be 5% (BMJ Best Practice (2017a))
- Dyslexia – UK Government estimate around 10%
- Dyscalculia – National numeracy society estimate 3% population
- Dyspraxia – National dyspraxia foundation estimate 5% school-age children

How many different types of neurodivergence can you think of?



3-minute task



Developmental coordination disorder, autism, dyslexia, depression, anxiety, long covid, grief, motor neurone disease, Huntington's chorea, migraine, epilepsy, borderline personality disorder, visual impairment, foetal alcohol effects, hearing impairment, post-natal depression, traumatic brain injury, bipolar disorder, joint hypermobility syndrome, obsessive compulsive disorder, tic disorders, attention deficit hyperactivity disorder, menopause, Parkinson's, dementia, schizophrenia, auditory processing disorder, avoidant restrictive food intake disorder, chronic fatigue syndrome, global developmental delay, dyscalculia, Down syndrome, attachment needs

Can you think of any strengths that are associated with neurodivergence?



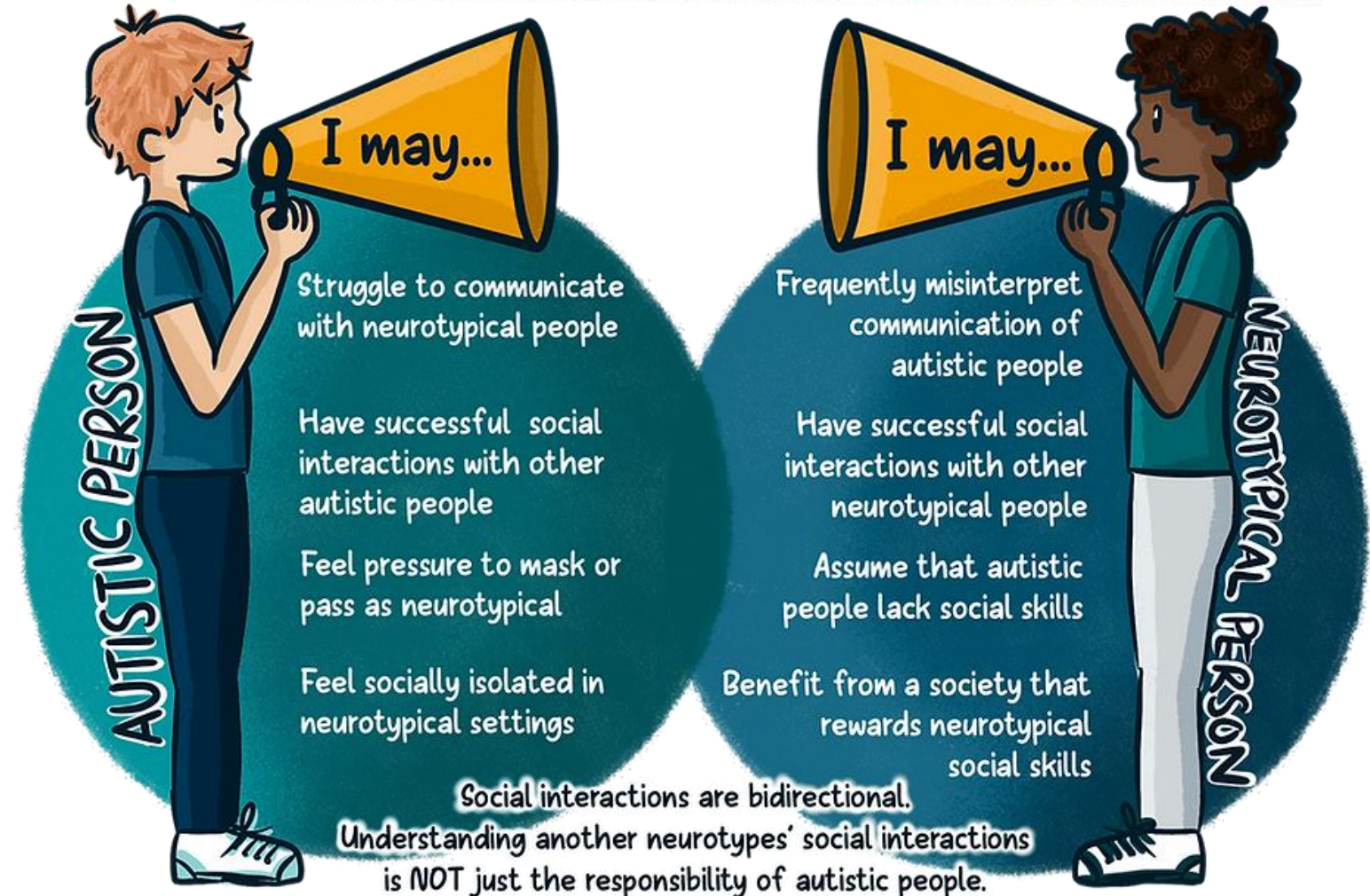
2-minute task

Some strengths of neurodivergent people

Empathy, humour, persistence, resilience, maths calculations, physical skills, problem solving, creativity, systematic thinking, lateral thinking, novel thinking, pragmatism, organisation, hyperosmia, attention to detail, logical thinking, hypersensitivity, hearing, communication, strength, support for others, ability to plan, clarity of thought, unique perspective, articulateness, risk assessment, auditory perception, visual acuity, processing speed, deep focus, long term memory, short term memory, advocacy, ability to experience joy, attention span, motivation, enthusiasm, ability to see connections

A note on the double empathy problem

THE DOUBLE EMPATHY PROBLEM



Legislation

- SEND CoP (2015) “A child or young person has SEN if they have a learning difficulty or disability, which calls for special educational provisions to be made for him or her.”
- The Equality Act 2010 states “A person has a disability if he or she has a physical or mental impairment that has a substantial and long term adverse effect on his or her ability to carry out normal day to day activities”.



Principles of neuroinclusion

Develop awareness of neurodiversity.

Develop schools, settings, systems that support all neurocognitive differences.

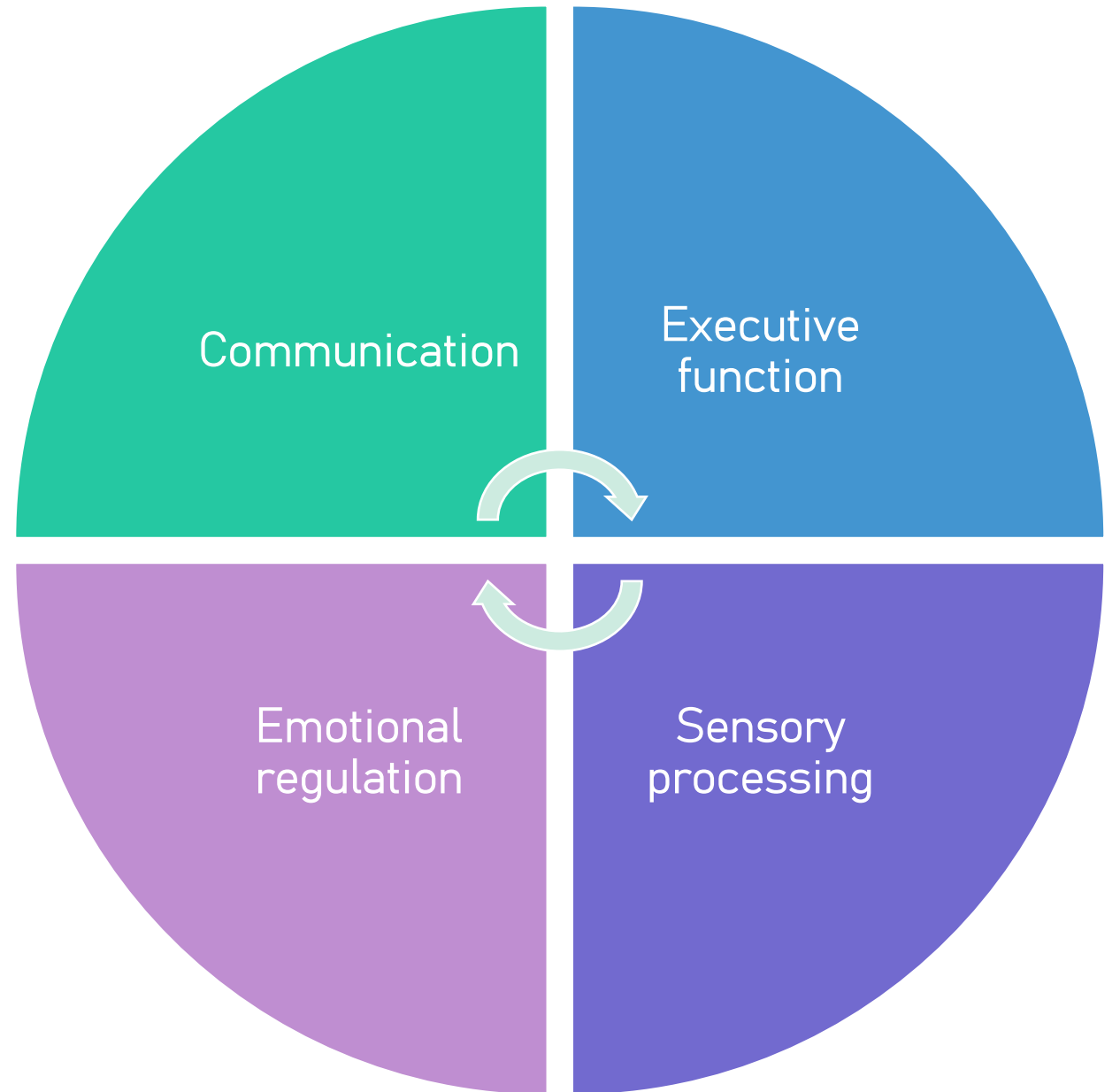
Everybody benefits – whole class strategies are best.

No need to wait for a diagnosis to put in support.



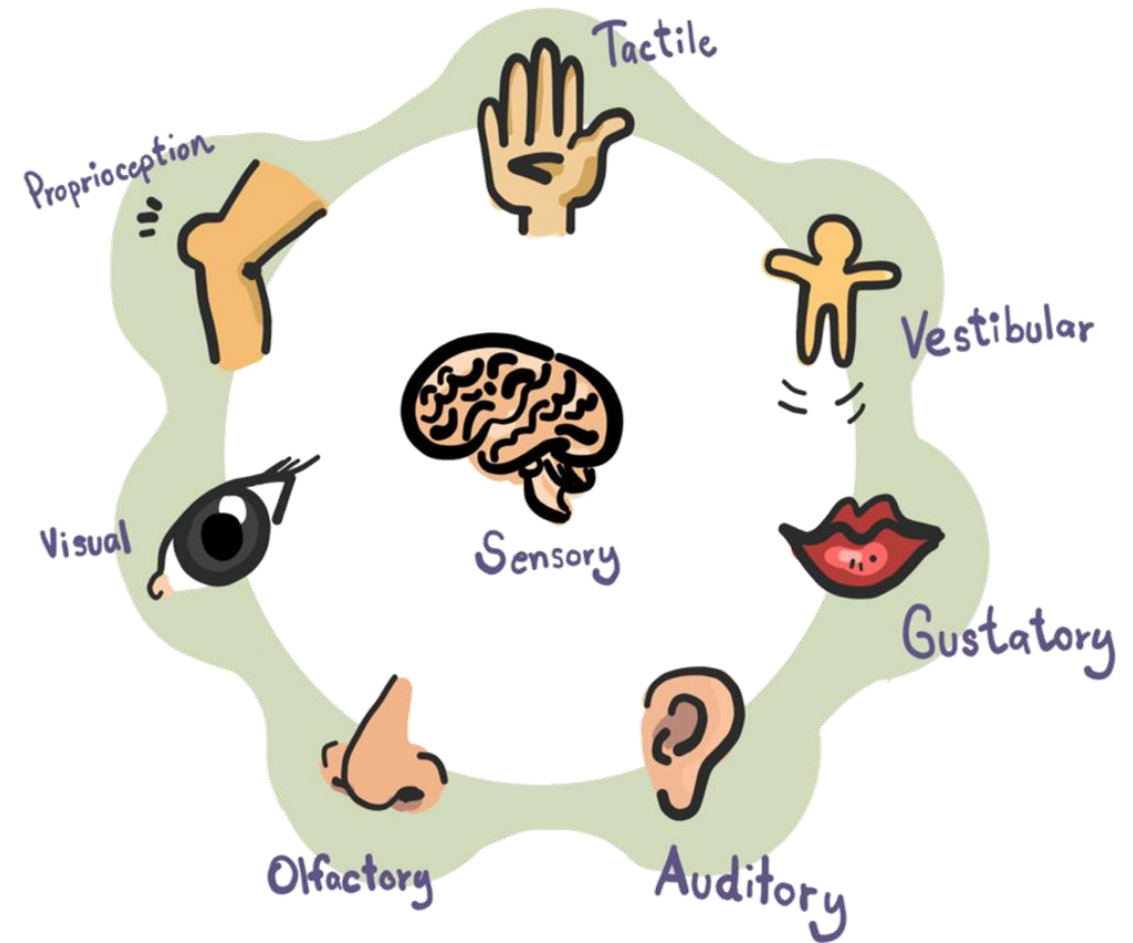
Model of Neuroinclusion

(Adapted from Starling's model)



Sensory Processing

- The way the body receives and interprets information from our environment through our senses.
- This information helps us to know how to interact appropriately with the world around us.
- Some neurodivergent people find the information that they receive through their senses challenging.
- This can be because sensory information is interpreted more or less sensitively.



Sensory Processing

Sensitive to..	Strategies early years / primary	Strategies secondary
Noise	Ear defenders, quiet / calm space e.g. tent, time out pass, avoid shouting, social stories to plan times when you might encounter noise e.g. swimming lessons	In-ear noise cancelling headphones, music on headphones, allowed to wear a hood up, time out pass to access quiet zone, pass to leave lessons early and avoid busy times on the corridor, avoid shouting, jazz hands / finger clapping instead of hand clapping, control over where to sit / how much to attend of noisy events
Light	Avoid harsh colours on PowerPoints, use natural light, consider seating position and sunlight, consider sunglasses	
Touch / textures	Staff and pupil awareness, badge explaining dislike of being touched Allow adjustments to uniform	Staff and pupil awareness, pass to leave lessons early and avoid busy times on the corridor, allow adjustments to uniform
Smells	Allow to eat away from lunch hall, use preferred smells on fabric to breathe in	
Seeking sensory input	Manage safety, consider a range of sensory activities to provide input being sought, including movement breaks, vestibular input (swinging, rocking, rolling), proprioception (massage, stamping, rolling on an exercise ball), soothing smells (lavender etc.), calming heavy work (e.g. gardening, lightly weighted objects – use with caution)	

Emotional Regulation

- The ability to recognise, manage, and respond to your emotions.
- We can't assume this is a skill our CYP have (many adults aren't skilled at this).
- Neurodivergent CYP may be more likely to struggle with emotional regulation for a number of reasons.
- Some of these may be additional demands of sensory processing, more likely to experience trauma or events as traumatic.



Emotional Regulation

Area for support	Strategies early years / primary	Strategies secondary
Anxiety	Visual supports: now and next, visual timetable, key adult, check in and check out, Reducing Anxiety Management Plan (RAMP), home link book	Teach grounding strategies in PSHE, mindfulness, key adult, emotion check in (form time) and check out, timetable check,
Separation anxiety	Warm up nurture activity, transition object (e.g. teddy / blanket) in school, photo / keyring of family, key adult, visual timetable with who is collecting, home link book	Key adult, photo keyring, phone call home, time to text
Becoming overwhelmed	Quiet / calm space e.g. tent, time out pass, co-regulation (hugs!), mindfulness, emotion coaching, sensory soothers, record Antecedents, Behaviour and Consequence (ABC), Reducing Anxiety Management Plan (RAMP), home link book	Time out pass, pass to leave lessons early, safe room, teach grounding strategies, record triggers (ABC) and support during identified lessons, complete a Reducing Anxiety Management Plan (RAMP) with YP
Peer conflict / friendships	Cooperative learning structures, playground buddy, friendship bench, key adult, check in after unstructured times, Comic Strip Conversations	Safe place / lunchtime clubs at unstructured times, cooperative learning structures, key adult, Comic Strip Conversations

Approaches



ABC CHART

Student name: _____ Class: _____

	Antecedent	Behaviour	Consequences	Outcome
	Conditions or context in which the problem behaviours occur	Responses or actions of concern exhibited by the student	Events and behaviours that follow the occurrence of the problem behaviour	
	Time, class, subject, person, activity, demand, task	Describe in objective terms how the student behaved	What did staff do in response?	
Date:				
Time:				
Staff:				

Astrea Educational Psychology Service

5 Steps to Emotion Coaching

1 **Tune in, become aware.**
 Be on the look out for and recognise behavioural cues that indicate that the child or young person is experiencing strong and/or difficult feelings and tune in when you spot the signs.

2 **Utilise the situation as an opportunity for connection and learning ('coaching').**

3 **Listen empathically and validate their feelings.**
 Connect before you correct
 Calm and curious not fast and furious
 Use wondering questions to help the child or young person to recognise and label their emotions (i.e. "I have noticed x, I wonder if you might be feeling x...")

5 **Problem-solve together.**
 Support the child to think of possible strategies and/or alternative solutions that they could try in order to avoid the same situation/outcome in the future.

 Depending on their age and understanding, some children and young people may require more support with this than others; use visuals and offer suggestions and choices where this helpful.

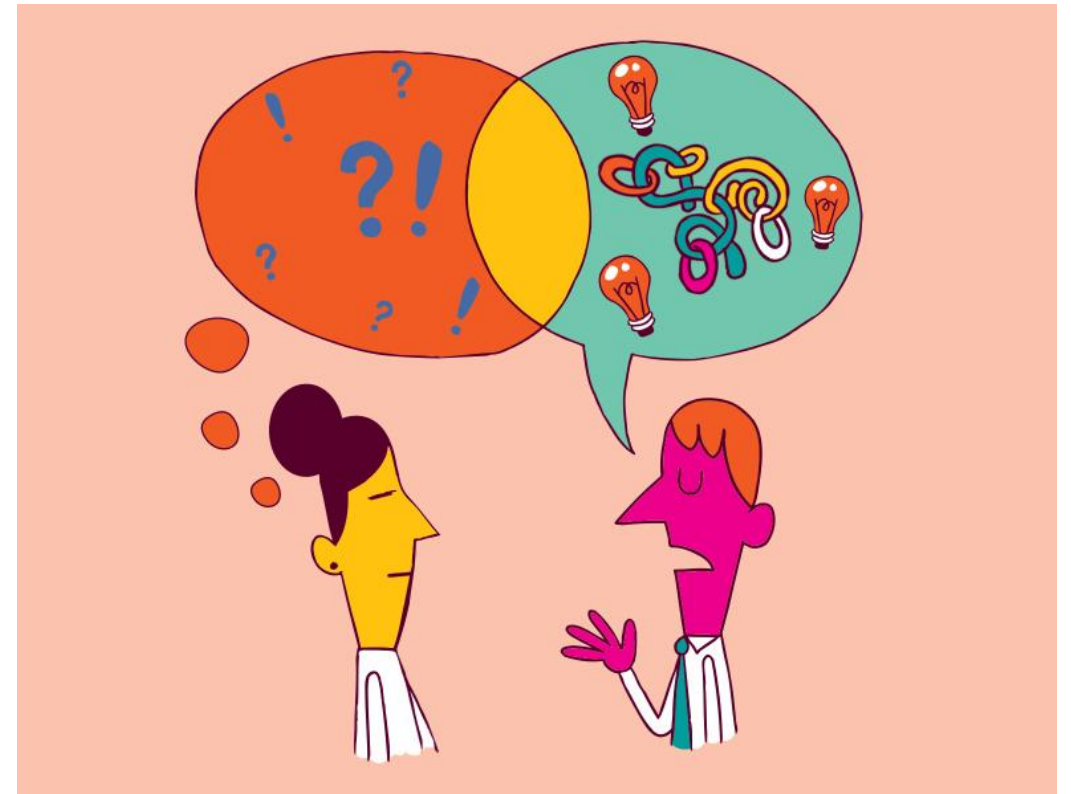
4 **Set limits. (if necessary)**

 If necessary, remind the child or young person about the expectations for behaviour (e.g. "we use kind words when we speak to each other in school", "it is against school rules to hit").

 It is important not to judge or shame the child, this is about nurturing your connection with them and helping (i.e. coaching) them to learn alternative, prosocial ways to manage their feelings and emotions.

Communication

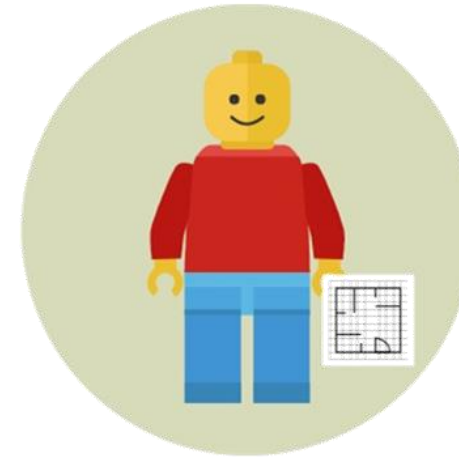
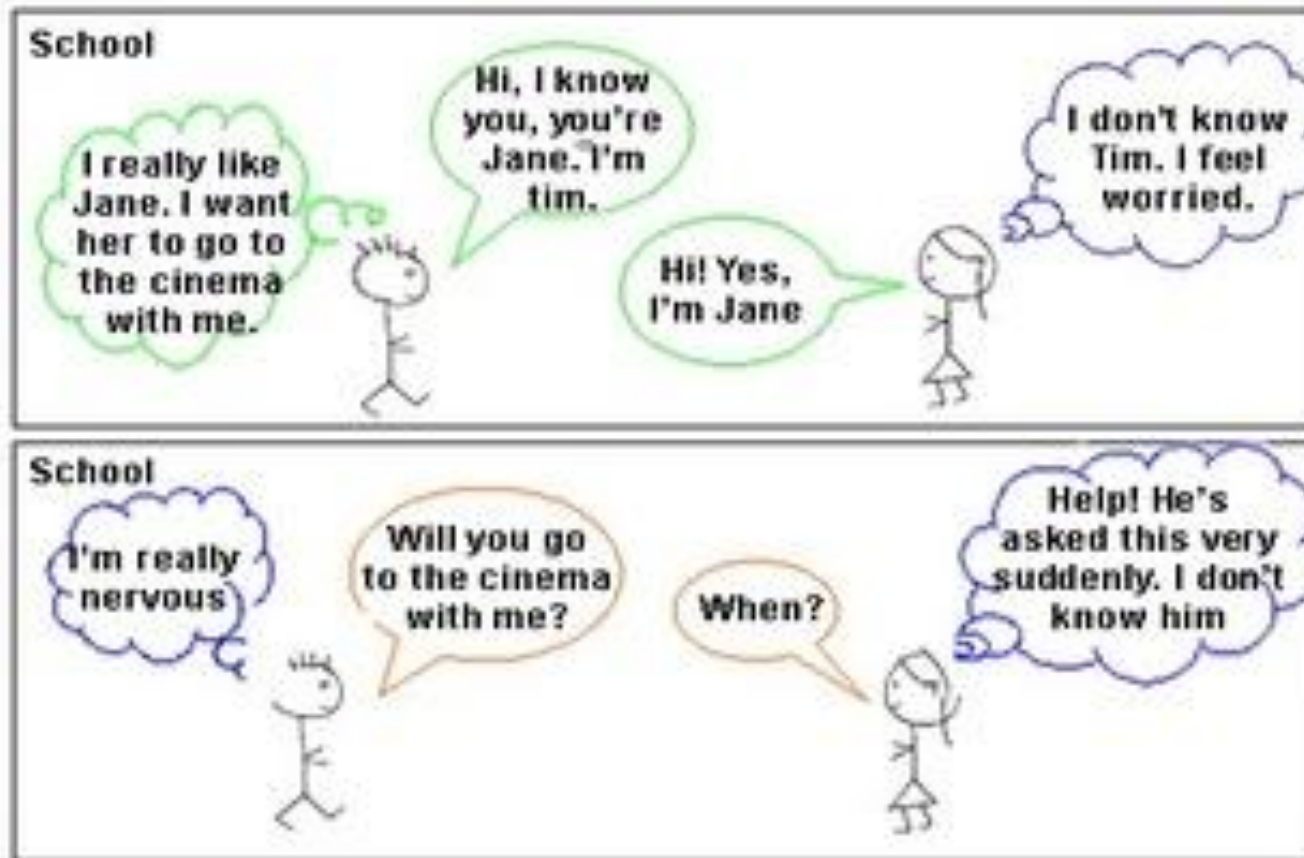
- People who are neurodivergent often communicate differently.
- Neurodivergent children and young people may benefit from support with their use and understanding of language, as well as their non-verbal communication and social understanding.
- They may benefit from others adjusting their expectations of 'appropriate communication'.



Communication

Area for support	Strategies early years / primary	Strategies secondary
Receptive language (understanding)	Comment including on play, use objects of reference, visuals alongside all instructions, now and next, visual timetable, teach key words by asking child to hold up the card with the word when they hear it	Pre-teach vocabulary (send home though virtual platform), chunk instructions, give written alongside verbal instructions, speak clearly, one page profile
Expressive language (use of language)	Plan opportunities for classroom talk, talk partners, cooperative learning structures, games with set verbal responses	Give opportunities to speak in classrooms with low pressure, give thinking time, avoid putting on the spot
Social communication	Don't demand eye contact, cooperative learning structures, use clear language and avoid sarcasm, Lego Therapy, comic strip conversations	Cooperative learning structures, use clear language and avoid sarcasm, provide key adult, use comic strip conversations, teach alternatives to eye contact
Selective speaking	Use comments not questions, provide unpressured opportunities for the child to speak and don't react if they do, provide non-verbal ways to ask for help, key adult	Use comments not questions, provide unpressured opportunities to speak and don't react, provide non-verbal ways to ask for help including time out card, key adult

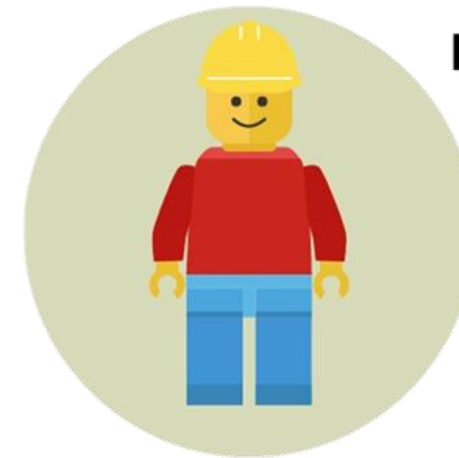
Approaches



Engineer



Parts Supplier



Builder

Executive Function

- Executive function and self-regulation skills are the mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully.

How many executive functioning skills can you think of?

There are eight behind this box.



RED

GREEN

RED

YELLOW

GREEN

RED

Stroop Test

In pairs, we are going to do a task that requires a number of executive functioning skills. You will be shown two lists of words written in colourful inks:

- List 1 (Congruent Colours).
- List 2 (Incongruent Colours).

Goal: Complete each list quickly and accurately while focusing only on the ink colour, not what the word says.

Congruent Colours (List 1)

RED

GREEN

RED

BLUE

BLACK

GREEN

YELLOW

GREEN

RED

YELLOW

BLACK

BLACK

BLUE

ORANGE

ORANGE

ORANGE

BLUE

GREEN

RED

YELLOW

GREEN

BLUE

BLUE

BLACK

ORANGE

YELLOW

YELLOW

ORANGE

YELLOW

GREEN

BLACK

RED

BLUE

BLACK

RED

ORANGE

BLACK

RED

YELLOW

GREEN

ORANGE

BLUE

Incongruent Colours (List 2)

BLUE

RED

RED

GREEN

GREEN

BLACK

YELLOW

GREEN

YELLOW

BLACK

BLUE

ORANGE

BLACK

ORANGE

YELLOW

RED

BLUE

ORANGE

YELLOW

ORANGE

RED

GREEN

BLUE

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RED

RED

YELLOW

BLUE

BLUE

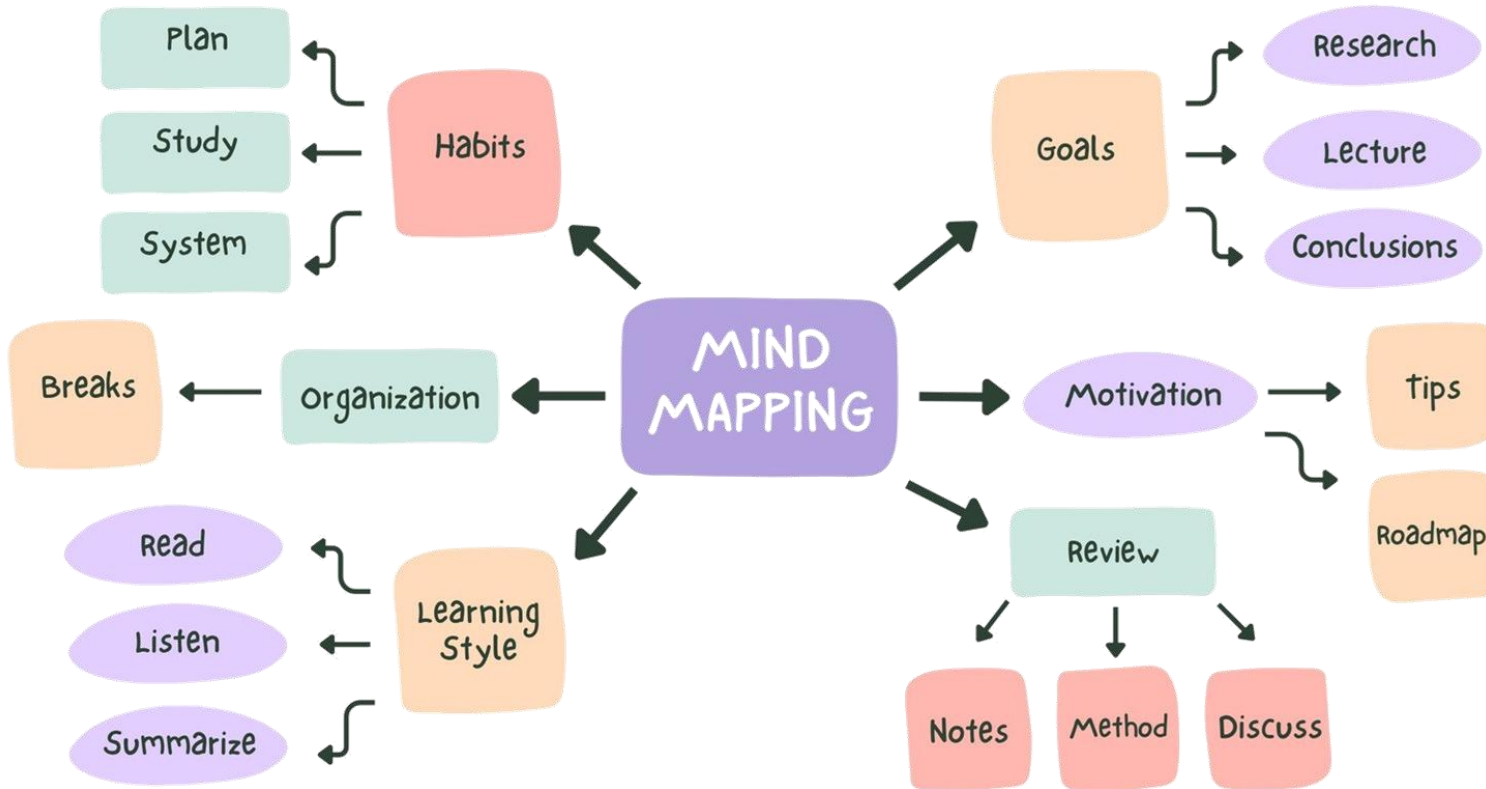
GREEN

ORANGE

BLACK

Area for support	Strategies early years / primary	Strategies secondary
Attentional control	Use name before giving instructions, now and next, visual timetable, ask child to hold up key words when they hear it, chunk tasks, praise attention, ask to repeat instructions	Task planners, chunked learning tasks, regular breaks, attention-grabbing topics, exciting delivery style, give clear instructions and exemplar pieces of work, use Pomodoro apps for revision, use highlighters
Planning	Task planner, use a visual timetable for sequences such as dressing for P.E., model planning out loud	Use mind maps, task planners to fill in independently, visual organisers, verbal prompts, use voice notes and reminders on phone
Organisation	Use visual planners for equipment for each lesson, have personal equipment in a drawer or pencil case with a laminated list to tick, use the same routine at home and in school	Support with use of planners and timetables (colour coded), provide a homework and equipment check in in the morning, provide or look after equipment, use voice notes and reminders on phone
Working memory	Use short clear instructions with visuals and gesture, consider using sight word methods for reading, concrete objects in maths	Provide all information in written alongside verbal format, repeat instructions, chunk tasks, monitor for memory overload (giving up, frustration) concrete objects in maths
Impulse control	Praise managing impulses, provide sensory outlets for energy, new day new start, differentiate behaviour policy, e.g., additional reminders	Plan how to manage risk with YP, new day, new start, differentiate behaviour policy, e.g., additional reminders

Approaches

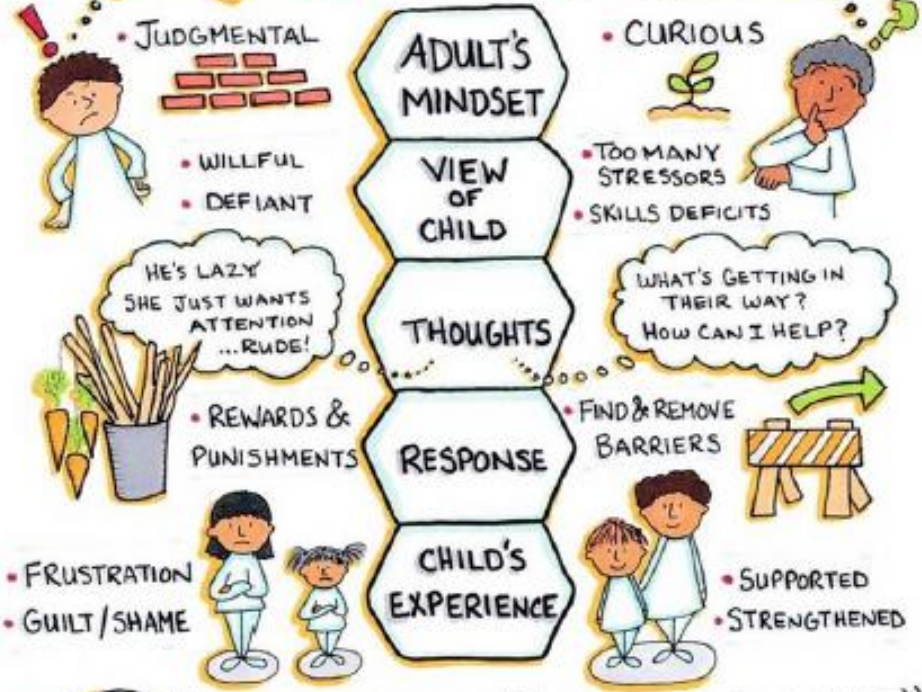
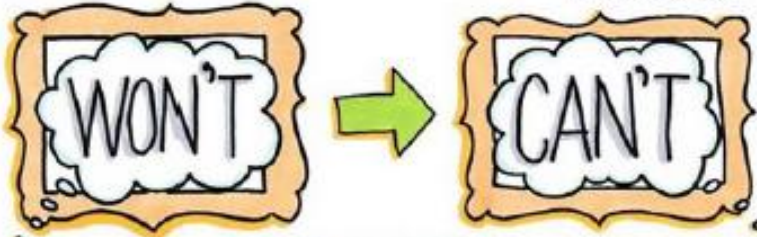


Task Management Board

I am learning to...		→	What equipment do I need?	
1		↓		
2				
3				
4				
5				
I will be finished when...				○

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 @kwins62

Source: Dr Ross Greene, <https://livesinthebalance.org/>

Reframing

Social & Behaviour Issues in Neurotypicals

twoemb.medium.com

Too touchy-feely, poor sense of personal space

Poor sensory awareness, blunted sensory & emotional experiences

Unusual sense of humour -- may not understand neurodivergent jokes or sarcasm

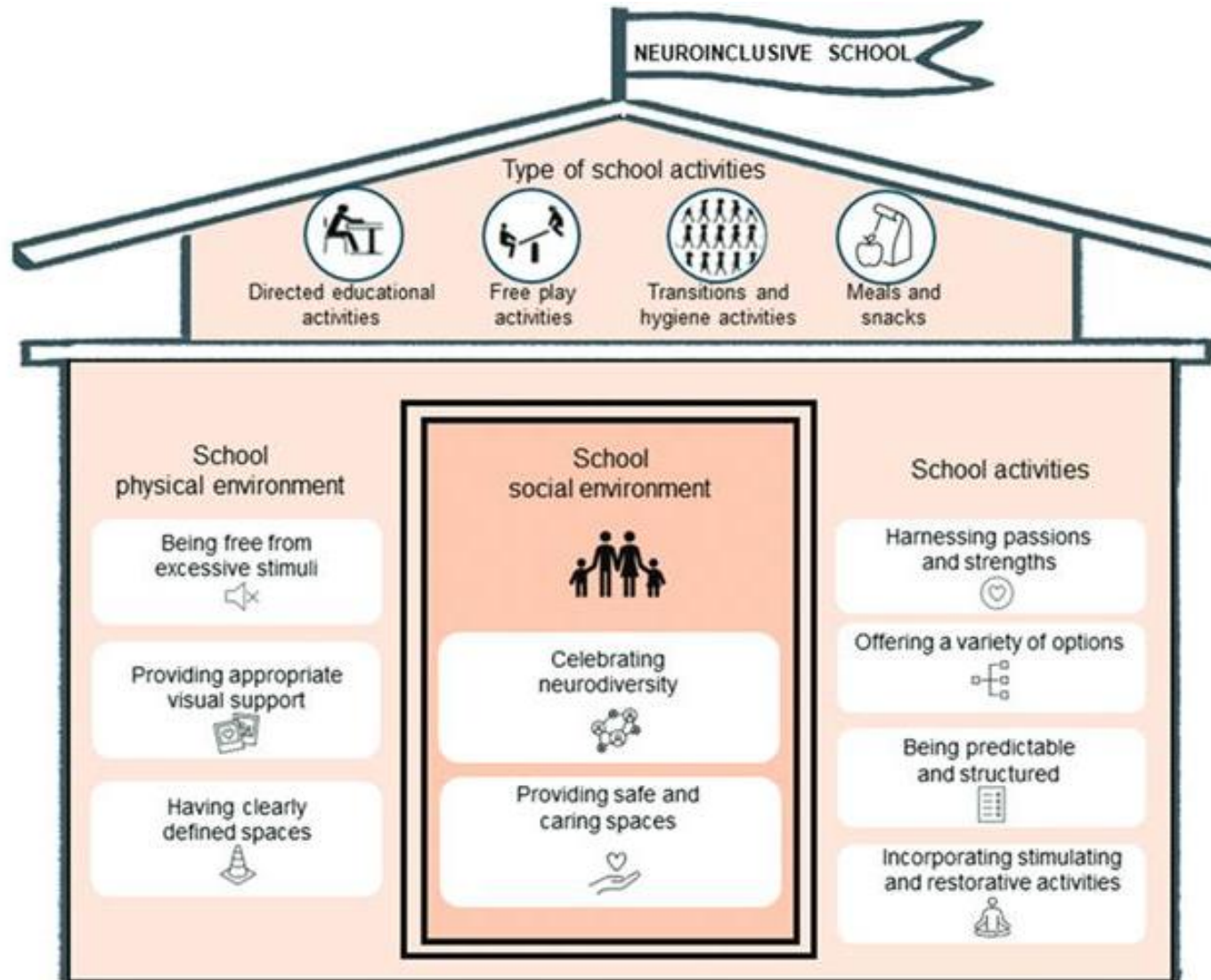
Pathological need to be liked and accepted by everyone

Unusual obsession with eye-contact

Narrow/rigid expectations and ideas of communication, behaviour, and social "norms"

@ADHD2EPro

Suppresses urge to stim, despite these behaviours being calming and regulating



A Neuroinclusive School Model

The model includes nine desirable features of school environments and occupations that support the meaningful participation and the well-being of neurodivergent students.

(Rajotte et al., 2024)

Neuroinclusive workplaces

01

Are we walking the walk? How neuroinclusive are our workplaces?

02

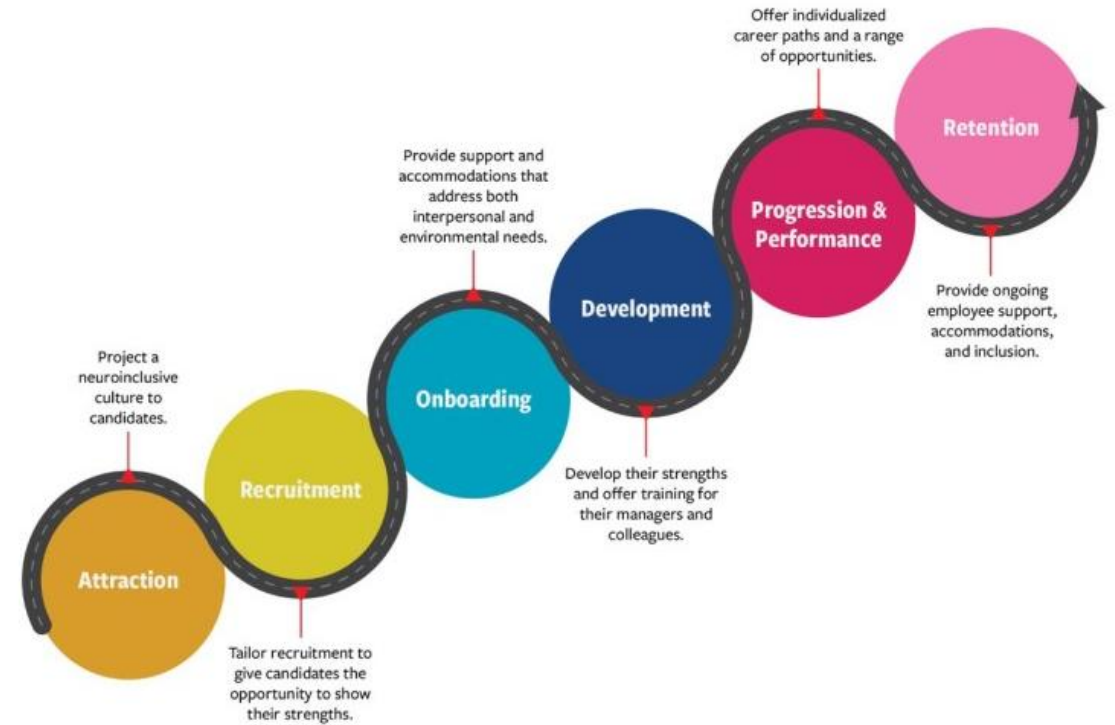
How neuroinclusive are our policies and practices?

03

Do we support a wide range of working styles?

Neuroinclusive workplaces

- A neuroinclusive workplace is one that:
 - actively supports and accommodates neurodivergent individuals.
 - embraces the diversity of neurotypes, creating an environment where all employees, including those who are neurodivergent, feel comfortable, supported, and can thrive, leveraging their unique strengths.



Source: "Helping Neurodivergent Employees Succeed"
By Emily R. Russo et al., *MIT Sloan Management Review*, May 2023
sloanreview.mit.edu/x/64414

What would a
neuroinclusive working
environment look like in
a school?

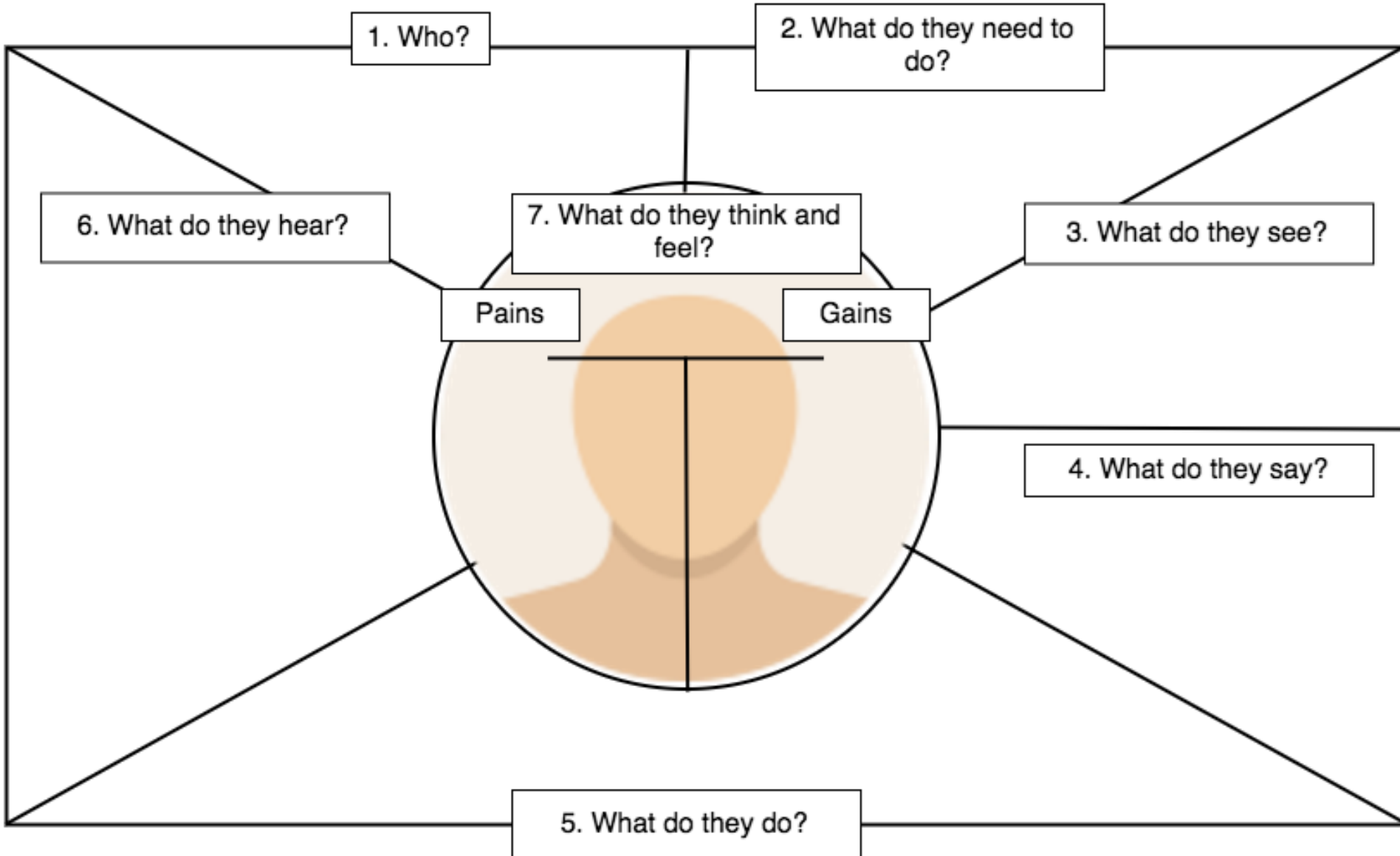


2-minute task

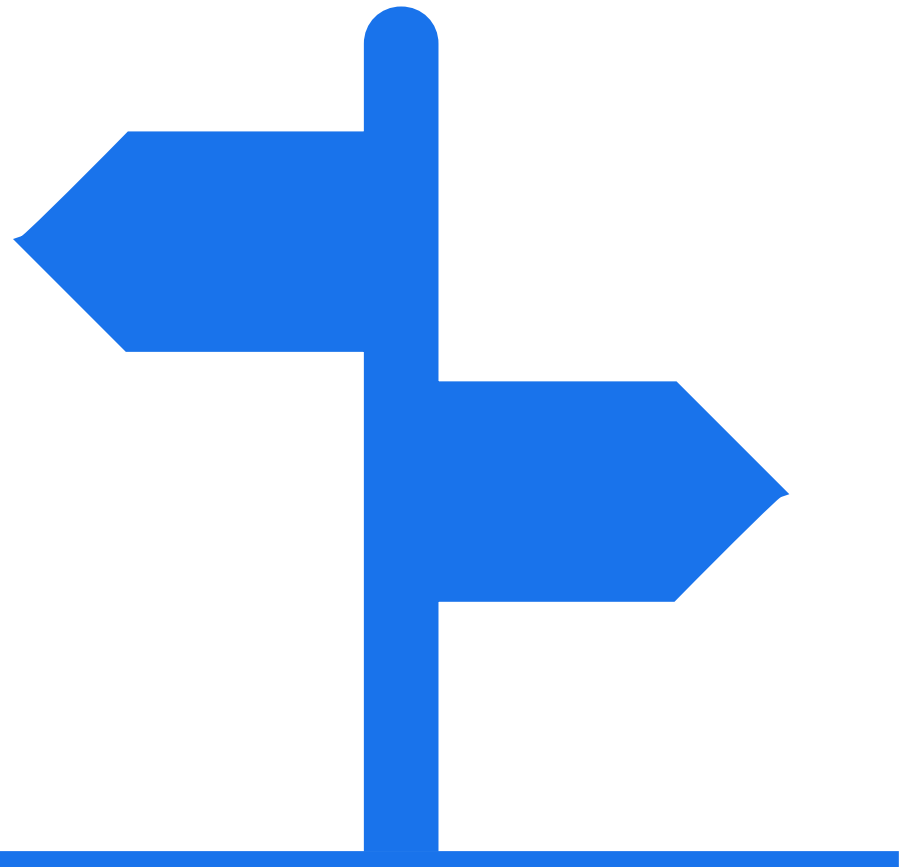
'Hard to reach' parents

- Research findings highlight a number of barriers facing certain parents in supporting their children's learning.
- The research showed that schools rather than parents are often 'hard to reach'.
 - **Communication Issues:** Schools often use language and communication methods that are not accessible to all parents. This can include jargon or assumptions about parents' familiarity with educational processes.
 - **Perceptions of School Environment:** Some parents perceive schools as unwelcoming or intimidating, which can discourage them from engaging. This perception can be reinforced by past negative experiences with educational institutions.

Empathy mapping



Where to
look for
resources...



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THE NEST APPROACH

N **NURTURE**
If needed, help a young person to become more calm and relaxed.

E **EMPATHISE**
If someone is struggling, assume there is a good reason why. We should try and learn what their reasoning is.

S **SHARE CONTEXT**
Why do you want to solve the problem? What is the impact of what has happened?

T **TEAMWORK**
Now you have fully explored the issue, you can get to problem solving!

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THE NEST APPROACH

Support autistic young people with meltdowns

Important:
It is impossible to follow the NEST Approach when you are highly stressed yourself! Self-care is an essential foundation to supporting young people in distress.

This guide is heavily influenced by the work of Studio 3, the CPS model and the PDA Society.

Written by autistic adults, in equal partnership with autistic young people
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<http://spectrumgaming.net>



SEND Children Thrive document

SEND Children Thrive
Matching Provision to Need

SEND Children Thrive
Matching Provision to Need
School Age

SKILL	GETTING ADVICE	GETTING HELP	GETTING MORE HELP
<p>Social Communication</p> <p><i>Pupils with social communication needs can often have sensory processing differences – please also see the Sensory and/ Or Physical Needs section</i></p>	<p>Provide the children with a Visual Timetable/Written Schedule. Tell them in advance about any significant changes to the daily school routine and illustrate this with the visual timetable. The visual timetable can also demonstrate timings of lessons.</p> <p>Use of first/then visuals to support understanding of tasks/routine.</p> <p>Use the environment to support understanding of expectations around work and behaviour. For example clearly label learning zones/ curriculum areas within the classroom. Provide visual reminders of classroom rules. Twinkl, Boardmaker and Widgit provide a wide range of visuals and symbols which can be used around the classroom environment, for displays, and to create visual timetables. Be consistent in symbol use, e.g. avoid using Twinkl picture for one symbol and Boardmaker for another.</p> <p>Ensure expectations around work and behaviour are clearly structured and presented visually (e.g. Good looking, sitting listening prompts).</p> <p>The TEACCH approach is a way to provide high levels of visual structure and clarity to support</p>	<p>Provide a more personalised curriculum allowing flexibility in the organisation of the learning environment and the school day. For example, you could offer access to a low stimulus, distraction-free base either within or outside of the classroom for certain tasks.</p> <p>Use of personlised visuals (e.g. timetables, tasks plans). If a child has a personalised Visual Timetable they will need to be told as early as possible about any changes to their routine.</p> <p>Access to staff training on the use of visuals to support communication.</p> <p>Adaptations to teaching materials, such as written/ visual task lists and timers.</p> <p>Use of first/then visuals to support understanding of tasks/routine.</p> <p>Visuals to support emotional regulation and mood e.g. "feelometers".</p> <p>Use of a Sensory Checklist and environmental adaptations to minimise impact of sensory</p>	<p>Provide a highly personalised curriculum allowing increased flexibility in the organisation of the learning environment and the school day (e.g. offering access to additional adult support to enable children to participate in the less structured parts of the school day such as break time, and provide access to a quiet, distraction-free place in school if children feels anxious.</p> <p>If a pupil has a personalised Visual Timetable they will need to be told as early as possible about any changes to their routine.</p> <p>Visuals in place for the child to use to access break rooms (e.g. "I need a break").</p> <p>Regular staff briefings centred around the child's strengths and support needs (e.g. A One Page Profile) may help communicate this.</p> <p>Provide Social Stories to help explain upcoming changes in timetable / expected behaviours in certain situations and 'social grey's. They are short descriptions of a particular situation, event or activity, which include specific information about what to expect in that situation and why.</p>

Further reading and resources

- Autism Education Trust - <https://www.autismeducationtrust.org.uk/resources>
- How can schools better support neurodivergent young people? GM Youth Combined Authority Meeting Briefing (2022) - <https://drive.google.com/file/d/1DMbqNV3M8xEFXiCbpSHPEd1PRA5Hdfc-/view>
- Neurodiversity Celebration Week - <https://www.neurodiversityweek.com>
- Spectrum Gaming - <https://www.spectrumgaming.net/>

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