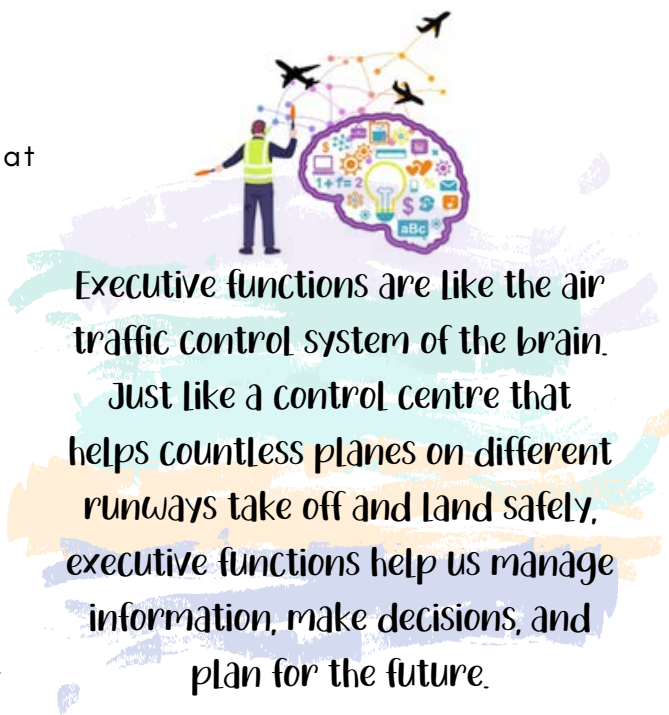


Executive function: A guide for families and educators

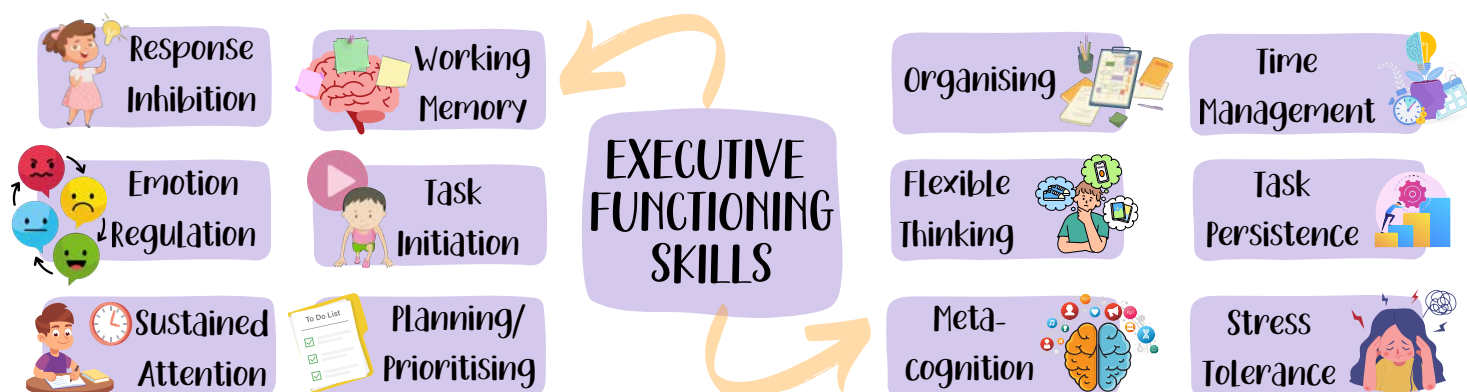
What is executive functioning?

Executive functioning is an umbrella term that describes the set of mental skills and processes that help us organise our thoughts, motivations, and actions in order to achieve goals. Challenges with executive functioning can look like difficulties staying organised and managing time, struggling with planning, sequencing and prioritising, and finding it hard to maintain attention, control impulses, and regulate emotions and behaviour. Research demonstrates that executive functioning skills are a key aspect of daily life and challenges with executive functioning can significantly impact self-esteem and confidence, increase social challenges, and cause chronic stress.



What are the executive functioning skills?

12 executive functioning skills and their impact on our daily lives are described below. While these skills are described individually, it is important to remember that in real life, these skills are rarely used in isolation; we are always using a combination of executive functioning skills to get things done and achieve our goals.



Executive functions

1. Response Inhibition

Response inhibition (or impulse control) refers to our capacity to think before acting. Our ability to resist the urge to respond to distractions, or stop an action that is inappropriate or unnecessary.



Children who struggle with this skill may interrupt others, struggle to wait their turn, rush through tasks or activities, make careless mistakes, struggle to maintain focus, struggle with boundaries or appear to overreact emotionally. They are also more likely to engage in risky or inappropriate behaviours.

3. Emotion Regulation

Emotion Regulation is our ability to manage our emotions so that we can pursue our goals, complete tasks, or control and direct behaviour.



Children who struggle with this skill may appear to 'overreact' to seemingly insignificant situations, go from '0 to 100', or have trouble dealing with criticism. They are likely to experience their emotions more intensely, and these intense emotional experiences can negatively impact task performance.

5. Sustained Attention

Sustained attention is our ability to maintain attention on current tasks for a required period of time, despite distraction, fatigue, or boredom.



Children who struggle with this skill may have difficulties finishing activities, regularly appearing distracted or distracting others, or struggle to work independently. Poor sustained attention can result in feelings of guilt, shame, and low self-esteem and self-worth.

2. Working Memory

Working Memory is our ability to consciously hold information in our mind while working with it. We rely on working memory 'post-it notes' to remember instructions and complete multi-step tasks.



Children who struggle with this skill may have difficulties following multi-step directions even with repeated instruction, forget what they're doing, or be more likely to go off-track. They may struggle to remember the rules of a game or activity, struggle to apply previous learning in new situations, or appear confused when attempting to complete complex tasks.

4. Task Initiation

Task Initiation is our ability to independently start tasks in an efficient and timely manner, without undue procrastination.



Children who struggle with this may freeze up as they have no idea where to begin, use avoidance strategies, or express not knowing what to do even when just given directions. Struggles with task initiation can often look like intentional avoidance behaviours, defiance or challenging behaviours as children struggle.

6. Planning/prioritising

Planning and prioritising is our ability to identify the steps needed to complete a task, prioritise them, and develop a plan of action to accomplish that task.



Children who struggle with this skill may have difficulty gathering the right materials for tasks, have difficulty planning or completing a multi-part activities, have challenges identifying how to sequence information, or may struggle to prioritise tasks based on importance or due date.

Executive functions cont.

7. Organising

Organising is our ability to develop and maintain logical systems and routines. It allows us to keep track of information, ideas and materials.



Children who struggle with this skill may regularly lose or forget where they left items. They might lose their train of thought when having conversations, or they might have trouble recounting an experience or making an argument because their thoughts don't flow in a logical manner.

9. Flexible Thinking

Flexible thinking is our ability to revise plans or adjust our thinking in the face of obstacles, setbacks, new information, feedback or mistakes.



Children with rigid thinking (opposite of flexible thinking) may experience distress, anxiety or frustration when plans or routines are changed, have difficulty with transitions especially when switching from a preferred task to a non-preferred task, and have 'black-and-white' thinking or be rigid with rules or expectations.

11. Meta-Cognition



Meta-cognition is our awareness of what we know and ability to use that information to help us plan, monitor, evaluate, and make changes to our learning behaviours.

Children who struggle with this skill may have trouble applying appropriate strategies to solve a problem, not recognise when their strategies are not working, have difficulty learning from mistakes, have careless errors, have trouble self-correcting, be surprised by negative feedback, struggle to complete tasks independently, or have difficulty asking for help.

8. Time Management

Time management is our ability to plan ahead and estimate how long tasks will take, make schedules for ourselves and meet assignment deadlines effectively.



Children who struggle with this skill or have what is often called "time blindness" may under- or over-estimate how long a task will take, fail to complete activities in a timely manner, struggle to estimate how long it takes to get ready in the morning, or not notice how much time has passed.

10. Task Persistence

Task persistence is our ability to plan and follow through with a task and not give up, even when it becomes challenging.



Children who struggle with this skill may give up easily. They may procrastinate or avoid tasks, particularly those that are repetitive, not inherently interesting, or not their choice. They may move on to other, more interesting activities, avoid activities or tasks they have previously failed or don't perceive themselves as being 'good' at.

12. Stress Tolerance



Stress tolerance is our ability to thrive in stressful situations and cope with uncertainty, change and performance demands.

Children that struggle with this skill tend to get frustrated with difficult tasks and have difficulties managing their frustration. Children with low stress tolerance may spend more time in a fight, flight or freeze state and may find it harder to move out of that state. They may appear irritable or 'on edge' more often, or they may experience increased anxiety or panic attacks.

Executive function and neurodivergence

While everyone has varying strengths and weaknesses across these executive functions, neurodivergent individuals tend to experience executive functioning challenges in much more significant ways. Research shows that neurodivergent individuals, particularly ADHDers and autistic people, have differing neural processes which impact how their brain manages these executive functions. They tend to show consistent patterns of executive function challenges that impact impulse control, learning, academic performance, relationships, self-care, and much more.

The capacity of neurodivergent individuals to effectively use their executive functioning skills is also dependent on other variable factors like how overwhelming the sensory environment is, their perceptions of safety, previous experiences and trauma, health and wellness, and current energy and stress levels. Thus, executive functioning capacity **fluctuates** when these things are not optimal. This means that an individual may be able to complete a task one day, and then be unable to complete that same task the next. It's not for a lack of trying or because they just can't be bothered, it's a **genuine lack of capacity**.

Follow @neurowild for many amazing affirming resources!

www.believeandbecome.com.au
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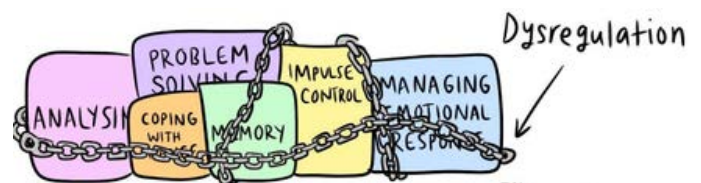
Autism is a dynamic Disability.

Part of that Disability is having difficulty with EXECUTIVE FUNCTION skills.

When I am WELL-REGULATED, I am often able to access + demonstrate the Executive Function skills that I have.



When I am DYSREGULATED, I cannot effectively access the Executive Function skills that I have.



I will need accommodations and support for the Executive Function skills that I am lacking. Additionally - I hope my adults can show me empathy and kindness when I struggle. It can be upsetting for me when my best isn't good enough.

Many Neurodivergent people have differences when it comes to Executive Function skills. Even when I try my best, I may not be able to demonstrate these skills.



Executive function differences

Children with executive functioning differences often struggle with many day-to-day tasks and activities, including organising items and materials, regulating emotions, setting schedules and sticking with tasks in ways that meet their own, or others' expectations. They might:

- misplace possessions and needed materials, or struggle to keep track of personal items.
- be overwhelmed by distractions and have trouble focusing on just one thing.
- focus too much on just one thing.
- struggle to move from one task to another.
- struggle to manage or estimate time.
- have difficulties recalling or following multi-step instructions.
- have differences in how they analyse and process information.
- have difficulties planning or carrying out a task because they struggle to visualise the finished product or goal.
- struggle with thinking before they talk, causing them to blurt out the first thing that pops in their head without considering that it might hurt someone's feelings.
- have difficulties explaining their thought process clearly because they understand it in their head but putting it into words for others feels overwhelming.



This, unfortunately, leads to those with executive functioning differences more often being labelled things like lazy, unmotivated, naughty, spacey, forgetful, distractable, under-achievers, incompetent, resistant, messy, day-dreamers, manipulative, disruptive and more, all of which can be a source of stress, shame, and anxiety, and have detrimental impacts on self-esteem, self-worth, motivation, and mental health.



Individuals who have executive functioning differences are often very aware of these differences. Children only have to look around at their peers to see that they don't experience the same struggles, or look to the behaviour chart to see their name at the bottom *again*. Despite what it may look like to others, our children are usually trying really hard to *just* keep up with those around them. Getting curious and listening to the voices of those who actually experience executive functioning differences can help us understand what is going on for that individual.

Executive function differences and relationships

While friendship and relationship impacts are often overlooked for more obvious executive functioning challenges, like organisation, planning, and impulse control, when it comes to maintaining friendships and interpersonal relationships, executive functioning challenges can have significant consequences. For neurodivergent children, this might include:



- interrupting conversations with friends, or blurting out their thoughts, without pausing to consider if it is appropriate. Or wanting to get their idea across before they lose their train of thought.
- trying really hard to wait their turn, so holding their idea in their head, but concentrating so hard on not forgetting that they are unable to take in anything else discussed in that moment.
- struggling with making plans and following through.
- forgetting birthdays or things important to others like forgetting to ask how their first game of football went.
- making plans to play with someone the next day and getting distracted with something or someone else.
- always running late - OT Katie Kerley talks about her friends having what they called a "Katie buffer", where they would tell her a time half an hour before the meeting time, so she would be on time.
- not remembering to reply to messages or emails - out of sight out of mind - or if a message comes at an inconvenient time, it can be really hard to respond.
- having difficulties staying focused on the conversation.
- not remembering rules for made-up games in the playground.
- struggling to manage changes in play or having new rules introduced during the game.
- having difficulties joining in, missing out on social activities, or getting easily overwhelmed due to heightened sensitivity to sensory stimuli.
- misunderstanding social situations or friendship cues due to challenges in recognizing or expressing emotions (alexithymia).
- having social challenges due to more intense emotional experiences.



These challenges can impact childrens' abilities to maintain friendships and positive relationships with peers and adults. They can result in children being avoided, ridiculed, or rejected by peers, as well as behavioural consequences like time outs and repeated negative criticism, provoking feelings of shame, embarrassment, disappointment, and confusion.

Supporting executive function

Supporting executive functioning requires more than just implementing a blanket list of strategies and supports for every neurodivergent child. While there are some strategies that will benefit every child, it is important to keep in mind that **every child is unique, and each child will have different executive functioning support needs**. While neurodivergent children will have difficulties with most executive functioning skills, they are likely to have strengths and weaknesses. Getting curious and noticing which tasks or which parts of a task are particularly challenging for each child can help pinpoint those areas that need specific supports.



Executive functioning supports and strategies should:

- provide the opportunity for children to make their own choices and decisions, and do things for themselves – the child should be at the centre of all decisions regarding how best to support them, they are after all the experts in their executive functioning challenges.
- be individualised for each child – what works for one, won't necessarily work for all. It is important to listen to children when they are struggling (remembering verbal communication isn't the only form of communication).
- empower children to take some responsibility for identifying and addressing their needs – give them opportunities to identify their own accommodations (which also promotes self-advocacy skills).
- validate and respect the neurodivergent experience.



When supporting neurodivergent children, it is important to:

The more you know about your little plant...



the BETTER you can help them THRIVE!



- recognise that as executive functioning capacity fluctuates, support needs are likely to vary task to task, or day-to-day. Just because they could do it yesterday, does not mean that they have the capacity to do it today.
- ensure that there are a variety of tools and strategies available at all times.
- question your assumptions – why is something not allowed? Is there a genuine reason or is it 'just the way it always has been'.
- be open to trial and error, some things will work and some won't, and some things will work some of the time and not all of the time, and this can be dependent on the activity, task, environment, or context.

Strategies to support executive function

Providing executive functioning supports and strategies can help reduce the extra mental energy neurodivergent children need to put into activities. This allows our children to focus and put more energy into their tasks, as well as helping them experience successes more often and feel like they are on the same level as their peers.



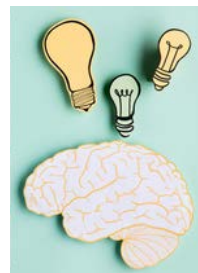
Providing supports can look like:

- Creating consistency in the home through the use of routines. This provides children with predictability and helps with planning, organising and time management skills.
- Making expectations, such as meal or bed time routines, clear and consistent.
- Providing fidget items and sensory tools like stress balls and headphones.
- Understanding movement is necessary for engagement for many neurodivergent children; providing opportunities for movement during focused-based tasks, such as using wobble cushions during meal or homework times, or having a movement routine before bed.
- Recognising children might need extra time for tasks.



- Providing information in multiple ways, such as giving verbal instructions with a visual schedule, or making an audio recording.
- Using visual timers to support transitions and promote self-monitoring and self-responsibility.
- Removing expectations around sitting still and making eye contact.

- Breaking instructions, tasks or longer activities into smaller, more achievable chunks, providing step-by-step instructions, or using checklists.
- Helping your child visualise what "done" looks like and working with them to determine the steps needed to get there. Providing a look at the 'big picture' can help children understand 'why' or visualise the end result.



- Maintaining ongoing discussions and listening to what children say around supports that they need to feel successful.
- Providing warnings prior to transitions and changes so children can finish what they're doing and mentally prepare for the change.

- Explicitly stating that it's okay to ask for help when you are stuck, and modelling this in different contexts. You can help your child develop a plan for when/how/who to ask for help. It can be really scary to ask for help, especially if past experiences have been negative - having a clear plan can reduce anxiety.



- Always assuming it's a lack of skills and strategies instead of "bad behaviour" - no kid wakes up saying "I'm going to have an awful day, I'm going to be bad at everything".

Supporting self-advocacy

An important way to support our children is to help them develop the skills and confidence necessary to advocate for their needs. Self-advocacy is the ability to communicate your need, wants, limits and boundaries. While this is an important topic of its own, when it comes to supporting executive functioning differences, helping our children recognise and communicate their needs is crucial.



Some things we can do to support self-advocacy include:

- supporting children to develop their self-awareness and self-knowledge
 - we can't advocate for what we need until we know what that is.
- communicating what challenges you see and listening to **their experience** of those challenges - their experience might be different to what you think it is.
- working together to find strategies/tools that support their identified challenge.
- modelling, modelling, modelling - letting your children see you struggling and using tools and strategies to support yourself.
- vocalising your needs/challenges and the strategies you use to support them:
 - "I need to use this [strategy/tool] because I'm really struggling with [this challenge]" or
 - "today I'm finding hard to [do the challenging thing], I'm going to try [this strategy]" or
 - "[this tool] isn't working for me today, I'm going to try [this tool] instead".
- explicitly teaching what self-advocacy is, and that it is ok, valid and important.
- validating all attempts at self-advocacy - for example:
 - when your child who struggles with working memory **asks** for instructions to be repeated for the third time, providing those instructions without judgement (or finding a better way to support their needs in that moment).
 - when your child uses non-verbal communication to ask for/indicate they need help, such as using facial expressions or noises. You can verbalise their need by saying "your [face/noise/body] is telling me you need some help, thanks for letting me know".
- providing opportunities to advocate for themselves and their needs.
- acknowledging all forms of communication - direct verbal communication is hard, especially for neurodivergent individuals. Gestures, moving away or toward something, writing requests, etc. are all valid forms of self-advocacy communication.



It is also important to remember that **self-advocacy can feel risky** - when children have been made to feel shame for expressing their needs, they are unlikely to take that risk again.

Celebrate micro-successes

One of the most important things we can do for our neurodivergent children is to look for, and **celebrate**, all of their little successes.

Neurodivergent children are more likely to experience negative interactions and disapproval. They are more likely to feel embarrassed, worthless, and believe they can't do anything right. They are more likely to feel shame. They are more likely to repeatedly fail to meet the expectations of others. In fact, it is estimated that by the age of 10, ADHDers will have received 20,000 corrective or negative messages.



It is crucial that we support our neurodivergent children to feel successful, to feel good about themselves, and to feel valuable and valued. One way we can do this is by celebrating their **micro-successes**. Micro-successes are any little things they do well - accomplishing a task or part of a task, having a go on their own especially if it's hard for them, trying something new, being creative, recognising they're struggling and asking for help or using a strategy, returning to a task, taking initiative, clarifying what they need to do, etc.

To do this we start by **noticing**. Intentionally looking for any little accomplishments, and focusing on what they have achieved rather than what they haven't - half completed a worksheet, recognise the effort they've put in to complete that much. We can also provide opportunities for success by having the child engage in an activity they are good at, or reducing the amount of work they need to do in order to achieve their goal.

We then need to **focus** the child's attention on their accomplishment. Our children can get stuck on what they haven't achieved or mistakes they've made. It's important to help them see the success they have had. One way to do this is to use "look how...". When a child is stuck in that negative self-talk, like "I can't do it", "I didn't finish", "I got it wrong", we can *reframe* it by saying "look how far you've come", "look how much you did", "look how hard you tried". Help them see the positive, and over time you'll see them do it again and again.



Celebrate by taking the opportunity to acknowledge their success and accomplishment, praising the effort and energy they've put in. By helping neurodivergent children celebrate their accomplishments, we can build up their self-awareness, positive self-image, and sense of value and worth.

NOTICE
what the child has accomplished,
regardless of how small it is

FOCUS
the child's attention on
their accomplishment

CELEBRATE
the effort and energy they've put
in - help them FEEL successful



Resources

Webinars

These are some fantastic free neuro-affirming webinars that we highly recommend:

Katie Kerley, an AuDHD Occupational Therapist discusses 'Executive functioning in Autistic Adults' in an AsIAM Ireland Autism Charity webinar, that provides a really useful overview of the challenges neurodivergent individuals experience - <https://www.youtube.com/watch?v=zsBt7VRDS0I>

InclusionED, in the 'Neurodiversity in the Classroom' webinar, discusses how to best support your neurodivergent students with Dr Emma Goodall, Trudy Bartlett, and Geraldine Robertson - https://www.inclusioned.edu.au/webinars/neurodiversity_in_the_classroom *InclusionED also has other webinars in the series

Reframing Autism has a fantastic webinar on 'Neuro-Affirmation in the Classroom', presented by Sue Fletcher-Watson - <https://reframingautism.org.au/neuro-affirmation-in-the-classroom-with-sue-fletcher-watson/>

Reframing Autism also has an amazing free self-paced online course called 'Autism Essentials', that provides an overview of autism in a neuro-affirming way - <https://reframingautism.org.au/service/autism-essentials/>

Emily Kircher-Morris at the Neurodiversity University has an excellent course on 'Creating a Neurodiversity-Affirming Classroom' (that was free when this was developed) - <https://neurodiversity-university.circle.so/c/crash-course/>

Social Media

- @neurowild
- @neurodivergent_ally
- @play.learn.chat
- @onwardsandupwardspsych
- @neurodivergent_researcher
- @meaningful_speech
- @neuroclastic
- @neurodivergent_lou
- @neurokinection
- @theneurodivergentot

Podcasts

- The Neurodivergent Woman
- Think Inclusive
- Yellow Ladybugs Podcast
- Exploring Neurodiversity
- The Neurodiversity Podcast
- Divergent Conversations
- Beautifully Complex
- Neurodiversity Support Podcast
- Two Sides of the Spectrum
- All Things Sensory
- Square Peg Round Whole

NEURODIVERSITY

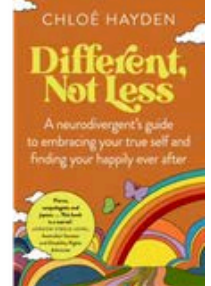
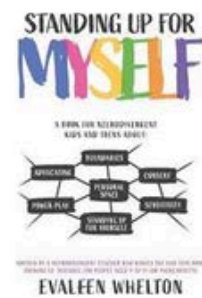
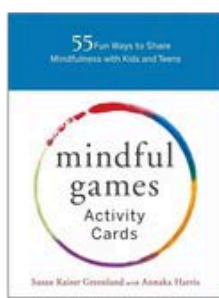
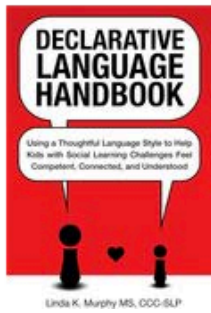
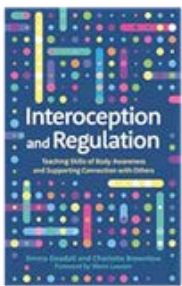
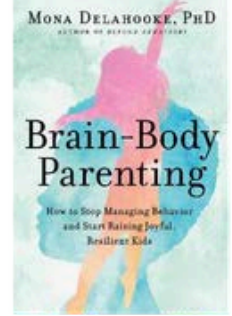
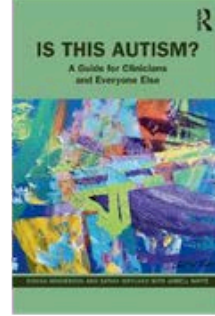
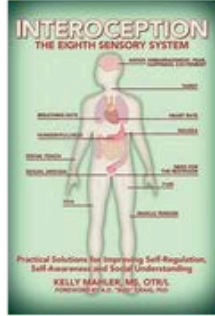
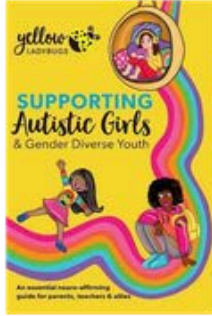
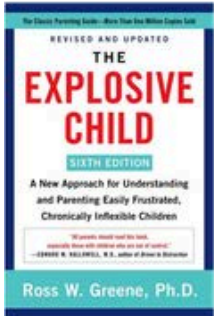


Websites and online resources

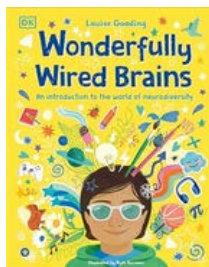
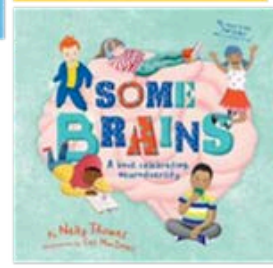
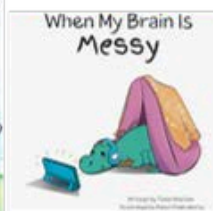
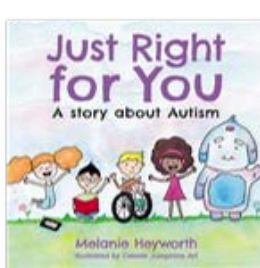
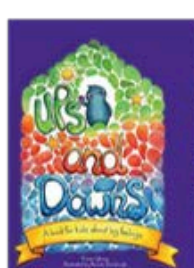
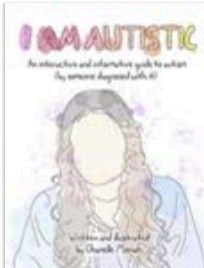
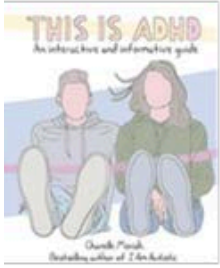
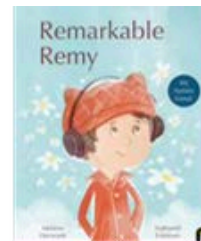
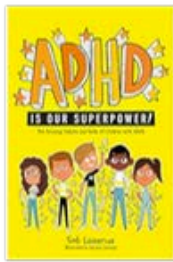
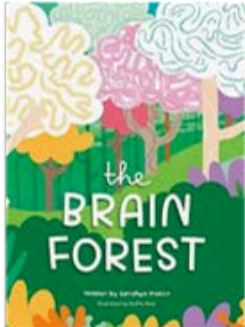
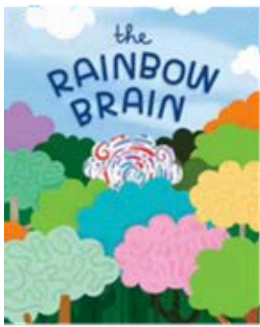
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- <https://www.yellowladybugs.com.au/>
- <https://ausometraining.com/>
- <https://icannetwork.online/>
- <https://livesinthebalance.org/>
- <https://www.autismlevelup.com/>
- <https://www.inclusioned.edu.au/>

Resources

Book for Adults



Book for Kids and Teens



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