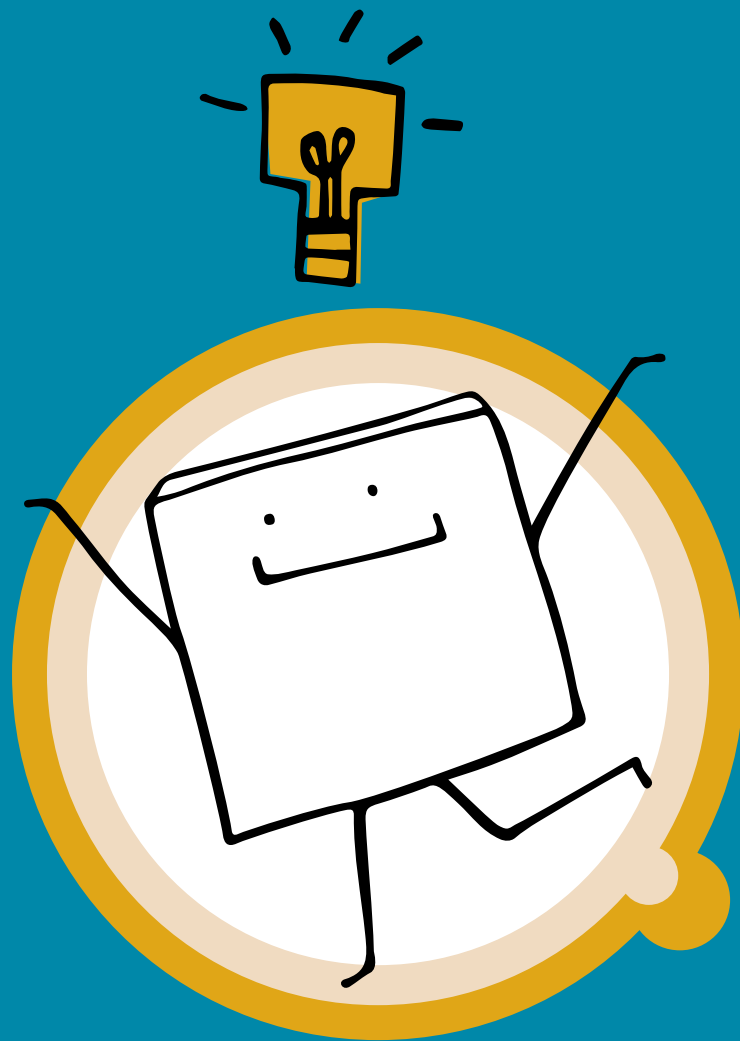


Understanding the Strengths and Difficulties of Neurodivergent Children: A guide for teachers



**Edinburgh Psychoeducation Intervention
for Children and Young People[©] (EPIC)**



THE UNIVERSITY
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EPIC Booklets

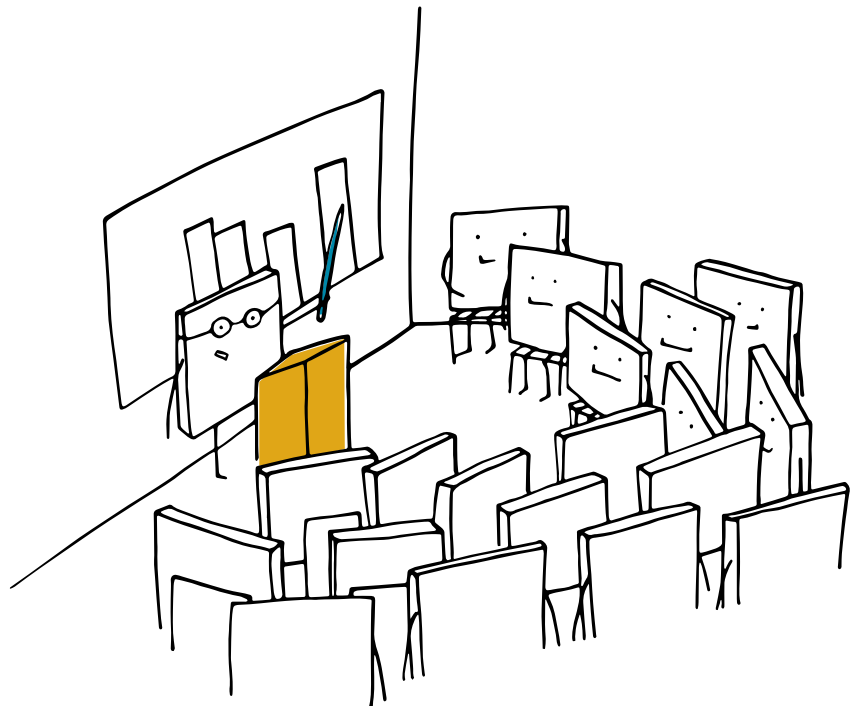
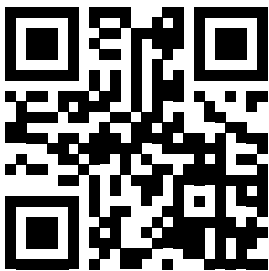
There are two types of EPIC booklets:

- 1) The **EPIC Strengths and Difficulties** booklets.
- 2) The **EPIC Strategy** booklet.

This is the **EPIC Strengths and Difficulties** booklet for **Understanding Neurodivergent Children**

If you would like to read more about strategies for developing skills and managing difficulties see the **EPIC Strategy** booklet.

EPIC Website:
<https://edin.ac/3AVrq3h>



There are also additional articles and resources on our EPIC Blog:
www.epic-information.com

Who is this booklet relevant for?

We hope this guide will help you to understand neurodivergent children and give you some more ideas of how to support them.

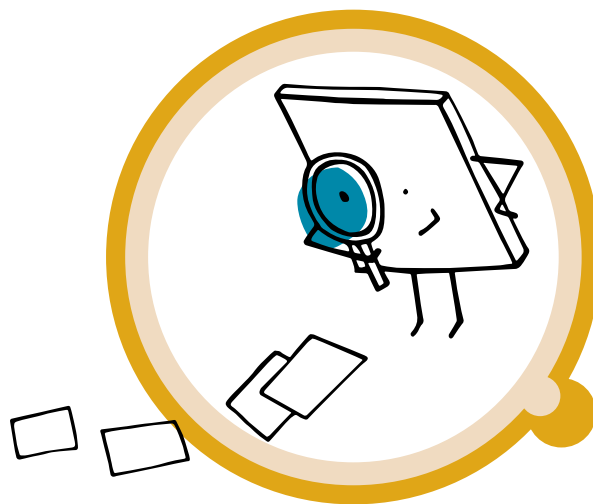
This booklet has been designed to facilitate understanding of neurodivergent children. 'Neurodivergent' refers to a broad range of conditions including for example autism, ADHD, DCD/Dyspraxia, FASD amongst other diagnoses. Use of this booklet need not be restricted to those with a diagnosis. This booklet is relevant for those children who have thinking differences that arise from another reason. The ideas may be relevant to:

1. Children on a Neurodevelopmental assessment waiting list.
2. Children struggling with difficulties in attention, planning, making friends, starting tasks, motor skills, organisation skills, sensory overload, amongst others.
3. Children who were born prematurely or who have epilepsy.
4. Children with an existing diagnosis such as autism, DCD/Dyspraxia, dyslexia, dyscalculia or a child born prematurely.
5. The ideas described in this booklet are mainly applicable to primary school aged children, and are also relevant for adolescents as well.
6. Understanding the concepts in this booklet can benefit the whole class by maintaining a positive environment and supporting children to reach their potential.

Some key terms

Executive Functions: a set of thinking skills that include organisation, self-control, self-monitoring, working memory, time management, flexible thinking and planning. Difficulties with executive function can make it hard to focus, learn, follow directions, and handle emotions.

Working Memory: sometimes called short-term memory, is the mental workspace where you hold and organise information for a brief time.



Inhibition Difficulties: difficulty with avoiding distractors and generally controlling responses (e.g. gets distracted by noises outside, struggles to stop and think before speaking/taking action, finds it hard to wait their turn).

Some children have **sensory processing differences**.

Sensory avoiding: finding bright light, noises, smells, tastes and textures uncomfortable, overwhelming, or painful, e.g. leaving the classroom when it is too loud.

Sensory seeking: being under sensitive to input and look for more sensory stimulation. Sensory input can help children regulate their sensory processing system and then engage with learning, e.g. fidget spinner, or wiggle chair.

A lot of children have a combination of both.

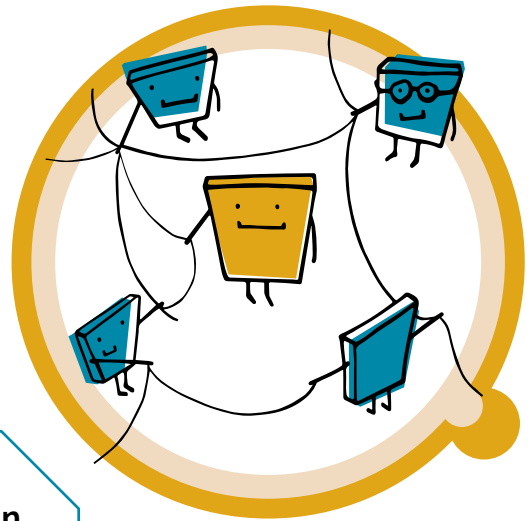
Facts about Neurodivergent Children

Neurodivergent children can have a range of difficulties.

Balance and coordination

Social and sensory difficulties

Attention and impulsivity



Being neurodivergent is not something a child will “outgrow”.

Most people are diagnosed in childhood and difficulties persist into adulthood

But there are things that can help children manage their difficulties

Children who are neurodivergent may have difficulties...

Remembering information

Organising information

Planning

Controlling actions

Using their attention flexibly

Facts about Neurodivergent Children

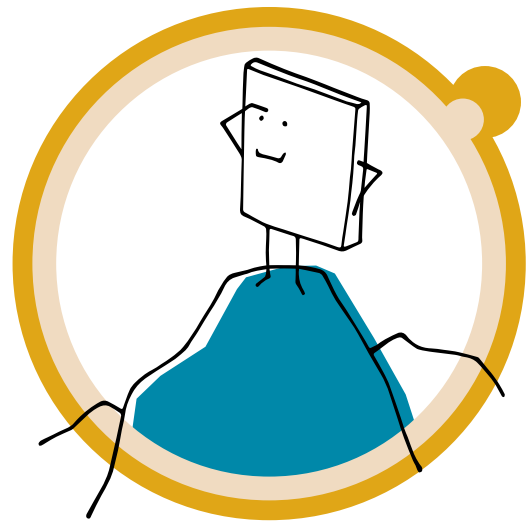
Children who are neurodivergent often have difficulties in regulating their emotions. They often need help to recognise and monitor...

What they are thinking

How they are feeling

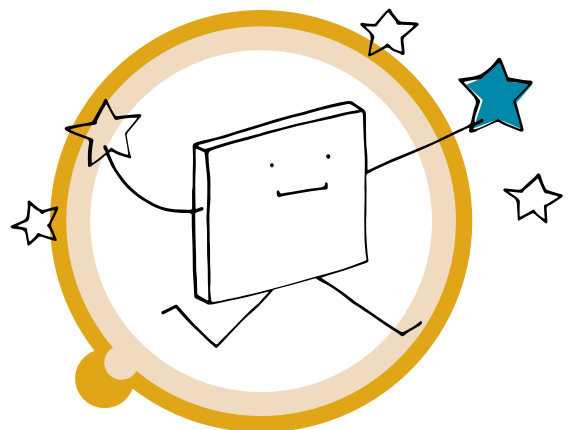
How they are acting

Children who are neurodivergent may have difficulty understanding and controlling their actions. Behaviour is often the first thing we notice. It is important to look past this external behaviour and focus on the thinking difficulties.



Understanding the neurodivergent child

Neurodivergent children can have lots of different strengths. It is important to think of a child in relation to areas of strength as well as their areas of difficulties and needs.



Understanding the neurodivergent child

Neurodivergent children are different from one another and they may experience a range of difficulties.

Planning ahead

Staying focused

Adapting to sensory changes

Following instructions

Sitting still for a long time

Communicating

Keeping track of the time

Thinking before they speak

Sleeping

Processing emotions

Thinking flexibly

Remembering to use a strategy

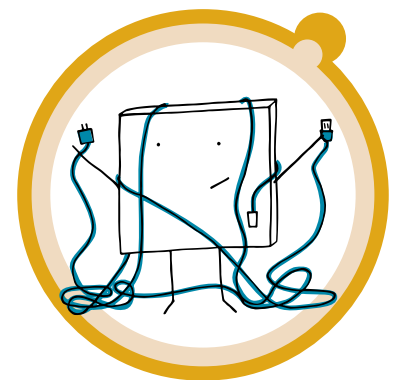
Starting or finishing a task

Waiting their turn

Moving from one task to another

Remembering things

Making friends



Understanding the neurodivergent child

Thinking and Learning

Some neurodevelopmental differences are caused by underlying processes in the brain called “**executive functions**”.

Many neurodivergent children also have executive function difficulties.

For example, some may have a difficulty controlling their attention while others are impacted by difficulties in memory or planning. It is important to identify which areas are underlying the child’s difficulty with learning

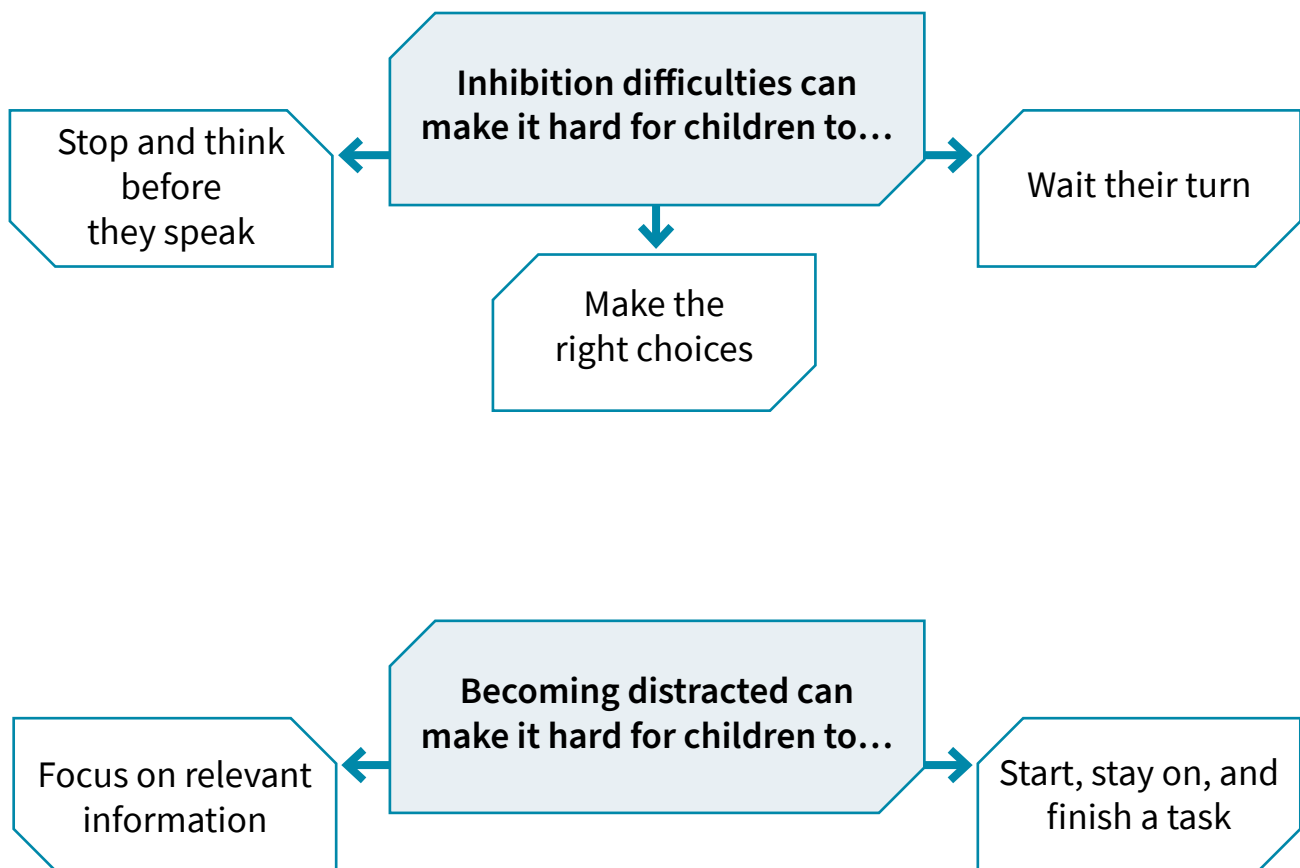
Executive functions:

- **Inhibition**
- **Attention**
- **Working memory**
- **Planning**
- **Self-regulation**

Understanding the neurodivergent child

Inhibition

Difficulty with avoiding distractions and generally controlling responses are sometimes features seen in neurodivergent children.

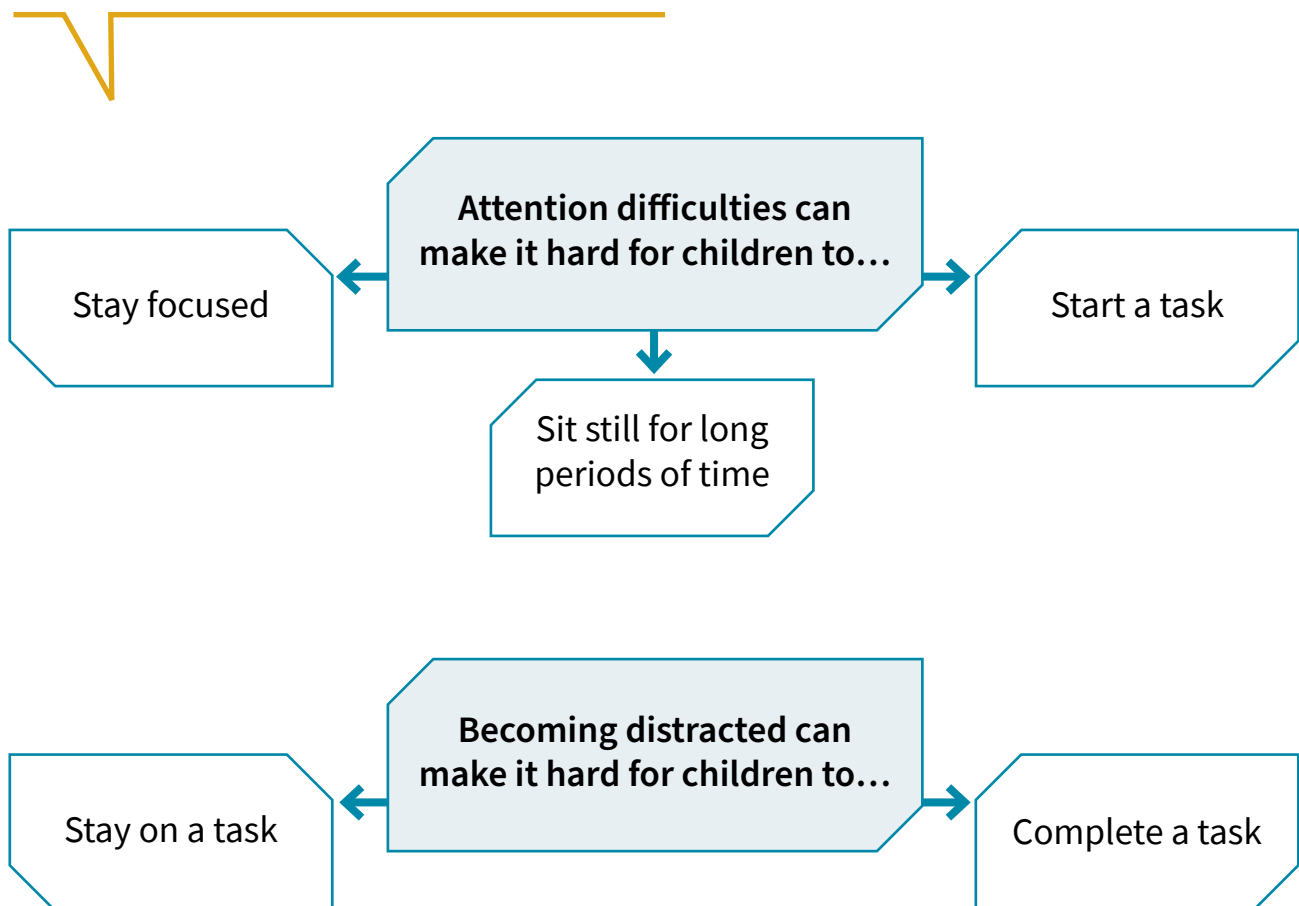


See pages **10-11**, **36**, and **39** in the **EPIC Strategy** booklet for strategies to help with inhibition control.

Understanding the neurodivergent child

Attention

Attention difficulties are a common feature of neurodevelopmental conditions.



Important Note:

Not all neurodivergent children have an 'attention' problem but other executive function difficulties can look like poor attention, e.g. sometimes a child seems like they are not paying attention but actually the issue is working memory.

See pages **12-16**, and **36** in the **EPIC Strategy** booklet for strategies to help with attention.

Understanding the neurodivergent child

Working memory

Working memory (sometimes called short-term memory) is the mental workspace where you hold and organise information for a brief time.



What does poor working memory look like?

Often we have to hold multiple items in our mind at a time. For some children there is **limited space** to hold all of the information. They may only remember the first or last part of an instruction if it has multiple parts.

Information may **disappear more quickly** from memory unless rehearsed or aided with another strategy. Many have a difficulty **organising information in memory** or if asked to reverse the order of information in memory such as in some maths problems e.g. reversing a multiplication sum to divide it.

These difficulties can make it hard to:

- **Follow instructions**
- **Complete sums in the mind**
- **Follow a story**

Having poor working memory can therefore impact lots of different aspects of life.

It is particularly important strategies are in place to support children with poor working memory in school.

See pages **25-32, 37, and 40** in the **EPIC Strategy** booklet for strategies to help with working memory and long-term memory.

Understanding the neurodivergent child

Planning

The ability to plan ahead is important for lots of different actions and activities at school.



Planning is important for:

- Starting and completing a task
- Time management
- Setting goals

Children who are impulsive often also find it hard to **stop and think** about what they are going to do or say in advance.

This can make it difficult to get started on a task, or finish a task because they haven't thought about the steps they need to take to achieve this. Planning is important at the end of the task not just at the beginning.

Neurodivergent children are often less likely to check the work they do and reminding them to plan can help it become more routine.

See pages 20-24, 36 and 38 in the **EPIC Strategy** booklet for strategies to help with planning.

Understanding the neurodivergent child

Remembering to use a strategy

Using a strategy to help complete a task is usually an automatic behaviour for children. Neurodivergent children often do not think of using a strategy.



Strategy use is important for:

- **Accuracy and speed in completing a task**
- **Remembering all relevant information or steps**

In our strategy booklet we outline a wide range of internal thinking strategies, e.g. rehearsal and using mental imagery. We also detail useful external resources, e.g. mind-maps and diaries that can be used to support learning.

Regularly reminding the child at the start of a task to use a strategy will help them to use strategies more routinely. They may also need help practising how to identify the right strategy for different task demands.

See page **41** of the **EPIC Strategy** booklet for an example of using dialogue to explain using strategies to a child.

Understanding the neurodivergent child

Self-regulation

Self-regulation is about being able to **recognise and monitor** task demands and to respond appropriately and flexibly.

Self-regulation requires:

- **Stopping and Thinking**
- **Planning your Response**
- **Monitoring of Progress**

If a child cannot alter their responses to the demands of a task they may perform it too quickly, affecting their accuracy. Alternatively, they may complete the task more slowly without any added benefit and negatively impact time management.

We know that stimulant medication often improves self-regulation. There are also strategies that can be used to encourage the child to regulate to task demands and to the environment they are in.

See our blog at www.epic-information.com for more information on medication.

See pages **17-19** in the **EPIC Strategy** booklet for strategies to help with self-regulation.

Understanding the neurodivergent child

Emotional well-being

Emotional-regulation involves being able to **recognise and monitor** what you are **thinking, feeling** or how you are **acting**. Neurodivergent children often don't 'Stop and Think' about how they are feeling before responding.

To facilitate good emotional regulation the child should be encouraged to:

- **Be aware of their reactions to the environment**
- **Monitor their responses**
- **Self-reflect**

If a child cannot recognise what they are thinking or feeling, this can impact how they behave. This can lead to **frustration** as they may not fully understand why they acted the way that they did.

A child may benefit from **sensory or movement breaks** to give them **time to reflect** on how they are feeling.

See pages **33-34** and **42-43** in the **EPIC Strategy** booklet for strategies to help with emotional regulation and well-being.

Understanding the neurodivergent child

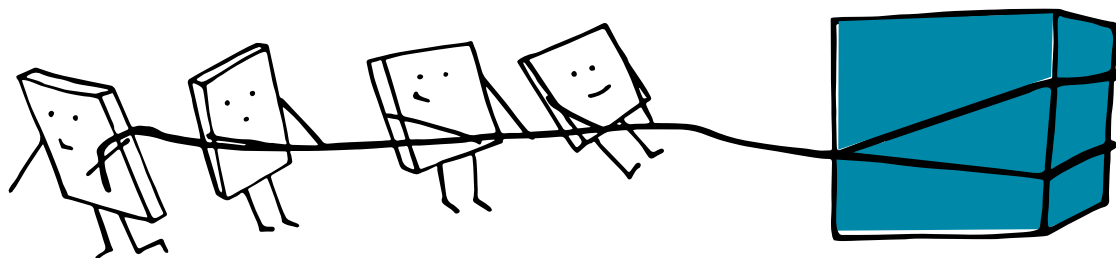
Supporting neurodivergent children in the classroom

There are many strategies that can be used that may help neurodivergent children.



They may work for some children but not others so it is important to first understand what the child's individual difficulties are.

You can use the previous pages to identify what difficulties a child might have and then try some of the strategies in the **EPIC Strategy** booklet that target those skills.



Understanding the neurodivergent child

Edinburgh Psychoeducation Intervention for Children and Young People[©] (EPIC)

A guide for teachers

EPIC is co-produced with children, young people, parents, clinicians, and educational professionals.

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We hope this guide has been useful in giving you some ideas of how to help a child with their strengths and difficulties.

We very much welcome feedback on our resources: please contact Dr. Sinead Rhodes at sinead.rhodes@ed.ac.uk with any comments.

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