



**achieving
for children**

Delivering services to the children and young people
of the Royal Borough of Windsor and Maidenhead

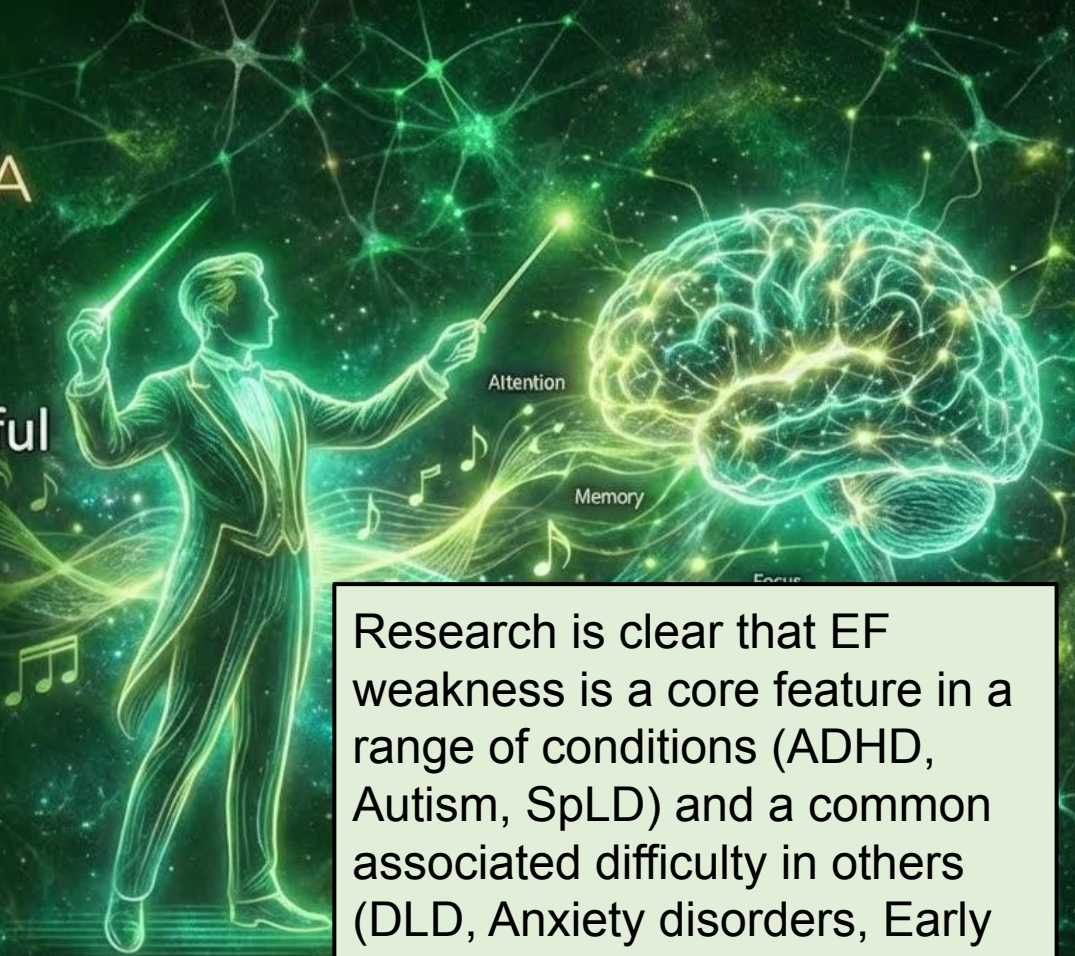


Supporting the development of Executive Functioning skills in Primary aged pupils

Helen Mastrilli - Specialist Advisory Teacher Service

EXECUTIVE FUNCTION: THE BRAIN'S ORCHESTRA CONDUCTOR

Executive function coordinates various components for successful learning and behavior. These functions must be refined and applied at the right moment to achieve a cohesive, successful performance.



Research is clear that EF weakness is a core feature in a range of conditions (ADHD, Autism, SpLD) and a common associated difficulty in others (DLD, Anxiety disorders, Early trauma and Sleep disorders)



Not trying

Distracted

Forgetful

Disruptive

Not listening

Can you think of children you work with who struggle with ...?;

- Attention and focus
- Following instructions
- Getting started or completing a task independently
- Holding information in mind
- Switching between activities
- Organisation
- Emotional control
- Impulse control

Weak executive function is **not about intelligence**. Many children with EF difficulties understand and actually want to do the work but lack the skills to self regulate, organise and carry it out independently.

Why Do Executive Function Skills Matter?



• Executive function skills facilitate young people's ability to "**learn how to learn.**" Executive function skills are related to multiple indicators of children's school readiness success.



• Executive function skills undergo rapid development in **early childhood**. Early childhood has been described as a developmental period in which executive function interventions may be most effective and have the greatest potential for long-term payoff.



• Executive function skills can be improved. For children with SEN, improving executive function skills can be especially powerful, because these skills often develop more slowly and have a big impact on learning, behaviour and independence.



Environmental challenges - No judgment intended!





Executive Function

FLEXIBILITY & MEMORY



Flexible Thinking
Adapting to change



Working Memory
Holding information



REGULATION



Emotional Control
Managing feelings



Impulse Control
Thinking before acting



Self-monitoring
Self-awareness



Brain Control Tower

ACTION & PLANNING



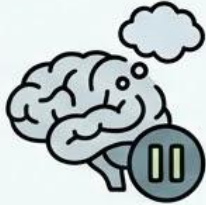
Task Initiation
Getting started



Planning & Prioritising
Setting goals



Organisation
Keeping track



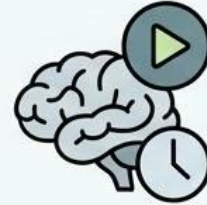
Impulse Control

Children need to develop impulse control in order to build **stamina** around waiting. They need to be able to **manage and accept frustration, concentrate** for sustained periods and **consider others** before acting.



Working Memory

This is the skill of keeping information in mind and using it. Working memory supports tasks like **problem-solving, learning, and understanding sentences** by holding and processing multiple pieces of information simultaneously. Often compared to a **temporary sticky note** in the brain.



Task Initiation

Being able to start a task independently, in a timely way, and without excessive prompting. The brain has to decide us to decide **now** is the time to start, **shift** from a current activity, **overcome anxiety or low motivation** and **organise** the first step.



Impulse Control

Age 3

- Has little to no control over impulsive behaviour.
- Has little patience.
- Gets frustrated easily.
- May not always respond to the 'stop' command.

Age 5

- Can be redirected if caught as about to engage in impulsive behaviour.
- Little control over impulsive behaviour.
- Having lots of physical activity improves impulse control.
- Patience is improving – sticks at tasks longer.
- Sometimes responds to the 'stop' command.

Age 7

- Has some control over impulsive behaviour unless driven by big emotions.
- Knows they are in control of their choices.
- Given sensory items can support impulse control.
- Can concentrate on one thing for short bursts of time.
- Responds to the 'stop' command the majority of the time.

Age 9

- Understands the importance of impulse control.
- Can consider pros and cons of different choices.
- Can choose a given sensory item over an impulse.
- Increased concentration.
- Can pause before acting to consider choice.

Age 11

- Has impulse control in the majority of situations.
- Understands the benefit of impulse control in certain situations.
- Knows which sensory items can help in different impulsive situations.
- Can concentrate even if there are small distractions.
- Can consider others before acting.



What could support for impulse control look like?

EYFS	KS1	LKS2	UKS2
Teach the concept of choice	Teach the concept of consequence	Teach the concept of responsibility	Teach the concept of impulse control
Use the 'stop' instruction consistently	Teach and model 'stop and think' as a way to promote choice and consequences	Role play different scenarios where impulse control is needed	Use school incidents to discuss good impulse control and why it would have been hard to do – use praise
Model waiting and weave it into parts of the day e.g. we are going to wait until the count of 5	Give waiting strategies such as singing a song in your head, counting to 50, doing something else and coming back	Teach the concept of delayed gratification	Show how good impulse control can lead to better outcomes e.g. saving rather than impulse buying
Link impulse behaviour to feelings e.g. I think you broke the toy because you felt angry	Teach links between emotions and impulsive behaviour	Teach impulse control strategies such as counting to 5, walking away	Teach stress management techniques



Working Memory

Age 3	Age 5	Age 7	Age 9	Age 11
<ul style="list-style-type: none">• Retains and follows simple single instructions.• Retains and follows simple sequences such as actions/dance moves when singing or in a play.	<ul style="list-style-type: none">• Retains and follows simple multi step instructions.• Solves basic problems.• Can follow a procedure mostly independently until it can become lodged in long term memory e.g. tying shoes, putting on a coat.• Can retell a simple story. Beginning, middle and end.	<ul style="list-style-type: none">• Can maintain focus on a task.• Retains and follows multi step instructions.• Solves more complex problems.• Can hold information in their head that they need to use to answer a question or solve a problem.• Can retell a more complex story.	<ul style="list-style-type: none">• Can hold multiple pieces of information in their head.• Performs more than one task at once. E.g. listening and note taking.• Can respond in full to a number of questions asked at once.• Uses given memory aids to support learning.	<ul style="list-style-type: none">• Can hold multiple pieces of information in their head in order to present them to others.• Knows how to support their memory by using organisers or calendars.• Can reflect on their own thought process.



What could support for working memory look like?

EYFS	KS1	LKS2	UKS2
Play games such as Simon Says and I Spy	Play matching games	Play Kim's game	Play sudoku and do logic puzzles
Sing nursery rhymes and songs such as Ten Green Bottles, Five speckled frogs etc	Teach and model acronyms and mnemonics as 'memory hooks'	Teach visualising and chunking memory techniques	Explicitly teach and model methods to aid memory such as mind maps and visual organisers
Only give simple instructions, starting with one and build up to multi step	Slowly introduce more complex multi step instructions (visuals as a scaffold)	Give simple instructions for more than one task at a time (visuals as a scaffold)	Give more complex instructions for more than one task at a time

Metacognition

Thinking about thinking

Talk about and model your thinking, problem solving, organisation and prioritisation to support metacognitive skills in children

- "My goal for this task is to..."
- "I will need [resource] to help me..."
- "A strategy I could try is..."
- "First I need to..."
- "I already know that..."





Task Initiation

Age 3	Age 5	Age 7	Age 9	Age 11
<ul style="list-style-type: none">• May engage in self-directed play.• May initiate simple activities and try to do them on their own.• Needs support to complete simple self-care routines.	<ul style="list-style-type: none">• Engages in and initiates play that interests them.• Initiates known routines independently.• Completes simple self-care routines with little support.• Still needs reminders to engage in tasks that need doing.• Needs large tasks breaking down into manageable chunks for them.	<ul style="list-style-type: none">• Independently initiates tasks that need doing such as homework/reading• Can organise their own activities and belongings.• Can take responsibility for certain jobs/tasks with some reminding.• Can use a visual reminder independently to complete tasks.• Prioritises tasks by enjoyment.	<ul style="list-style-type: none">• Has begun to understand how long things take them to complete.• Takes responsibilities for things without reminders.• Takes ownership of creating own to-do lists etc to help them with task initiation.• Can break large tasks down into manageable chunks independently.	<ul style="list-style-type: none">• Can set goals for themselves and plan/complete tasks to achieve those goals.• Knows when they need to start tasks in order to get them completed in the time available.• Prioritises tasks in order of importance rather than enjoyment.



What could support for task initiation look like?

EYFS	KS1	LKS2	UKS2
Use visual timelines	Use equipment lists, timetables to aid organise	Use calendars and to-do lists	Use prioritisation tools, mind mapping techniques and digital tools
Give tasks that need to be completed one after another	Give small choices about when to complete tasks e.g. complete maths or reading first	Teach breaking down tasks into manageable chunks and give opportunities to practise	Teach and model prioritisation and give opportunities to practise
Give simple clear instructions that remain the same every day	Have predictable routines	Have consistent expectations for learning and behaviour that do not change	Use these children to support the routines and instructions of younger children
Give physical rewards for completing tasks	Give visual rewards for completing tasks and effort	Give visual rewards for initiating tasks, creativity and independence	Build the understanding of intrinsic rewards for achievement and effort

There are basically 5 things that motivate the developing brain.

Just remember:

What motivates young people ?

PINCH



P Play (Humour/creativity)



I Interest



N Novelty



C Competition



H Hurry Up
(Urgency or fear)



Questions?
Reflections/Takeaways?

Resources from
The Responsible Behaviour
Curriculum - Sarah Quinn



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Specialist Advisory Teacher - SEND and EAL