



# Navigating Executive Functioning Challenges

Explore strategies and techniques for navigating the complexities of executive functioning skills, including focus, working memory and flexible thinking.

# Welcome & Introduction to EF

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## WHAT IS EXECUTIVE FUNCTIONING?

Executive functioning refers to a set of cognitive skills that help children focus, remember instructions, juggle multiple tasks, and solve novel problems.



## COMPONENTS OF EXECUTIVE FUNCTIONING

The key components include working memory, cognitive flexibility, and inhibitory control, which allow children to regulate their behavior and achieve their goals.



## IMPORTANCE OF EXECUTIVE FUNCTIONING

Strong executive functioning skills are crucial for children's academic success, social-emotional development, and overall well-being.

**DEVELOPING AND SUPPORTING EXECUTIVE FUNCTIONING SKILLS IN CHILDREN IS ESSENTIAL FOR THEIR LONG-TERM SUCCESS AND WELL-BEING.**



# Mary Miele and IEF Model

- Bachelors & Masters + Credits from NYU
- NYS Permanent Certification, Special Education Teacher K-12
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- Almost 30 Years of Teaching Experience in NYC DOE, Higher Education and Independent Schools
  - Founder Evolved Education Company
- Author of 14 books on Education and Five Publications on Executive Functioning
  - Host of “Be Evolved” Podcast
  - Creator of IEF Model, in 2020
- IEF Model Used at Evolved Education Company, Birch Wathen Lenox School, Mercy University
  - Parent of 3 Children
- Current Area of Work: Problem Solving in Education

# Why IEF?

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## **NEEDED A PROGRAM FOR VARIOUS CONTEXTS**

Executive functioning is used within various classes with various teachers. It is used with curriculum that is sometimes executive functioning friendly but at other times not so executive function friendly.

Many programs on the market require external changes and extensive training which does not practically get actualized.

## **NEED A PROGRAM FOR INDIVIDUAL BRAINS and KIDS**

Children come to this work with various strengths and lagging skills.

Children are dynamic and are always developing so we cannot stay in one lesson for too long, knowing they will grow skills and eventually generalize them.

## **NEED A PROGRAM THAT ALIGNS WITH RESEARCH FOR EF AND TEACHING/LEARNING**

Using executive functioning increases executive functioning.

There is no single method for assessing executive functioning.

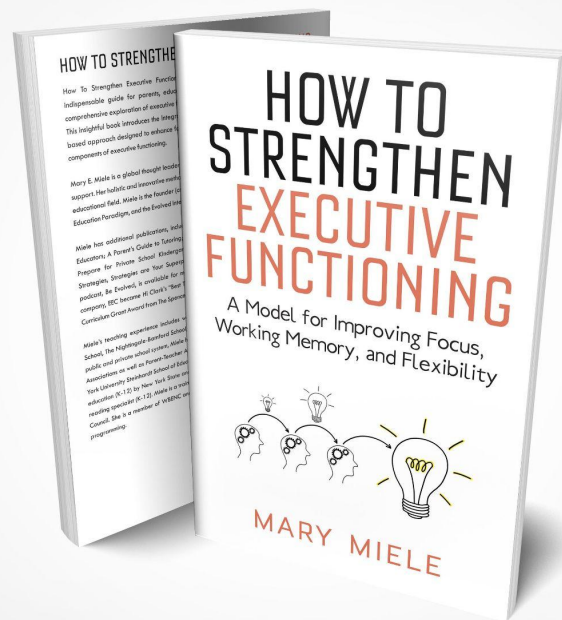
Emotions, temperament, and development affects executive functioning.

Learning strategies and contextual learning works best for learning outcomes.

Consolidation and review allow a student to remember new strategies.

Interleaving and social-emotional wellness are also best practices in teaching and learning.

**DEVELOPING AND SUPPORTING EXECUTIVE FUNCTIONING SKILLS IN CHILDREN IS ESSENTIAL FOR THEIR LONG-TERM SUCCESS AND WELL-BEING.**



## I'm a Parent, Why should I learn about the IEF Model?

Because no one is coming to build these skills for your child.

There is no related service dedicated to build EF for students currently.

The lack of EF often results in punitive measures for students, which cause all kinds of negative outcomes



## Focus: Sustained Attention

Sustained attention is a crucial skill that enables individuals to focus on a task or activity for an extended period, ignoring distractions and maintaining concentration. This ability is essential in various aspects of daily life, from academic or professional pursuits to personal tasks and hobbies.

# Focus Used at Home

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## COMPLETING CHORES

Sustaining focus to finish routine tasks such as setting the table or bringing wash to hamper. .

## DOING HOMEWORK

Staying focused on assignments, avoiding distractions such as phones or siblings.

## FOLLOWING MULTI-STEP DIRECTIONS

Focus is essential when kids need to remember a series of steps in a task such as packing their backpack or completing bedtime routine.

## PLAYING OR ENGAGING WITH SIBLINGS

When playing, kids need to focus on following shared rules, taking turns, or adapting to what the sibling wants to do.

## HANDLING MEAL PREP

Kids can follow recipe steps, cleaning up afterward, requiring attention and follow-through to avoid mistakes.

# Working Memory: Multistep Directions

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## **FOLLOWING MULTI-STEP INSTRUCTIONS**

Remembering a sequence of steps to complete a task, such as preparing a meal or assembling furniture.



## **KEEPING TRACK OF DAILY SCHEDULES**

Remembering multiple appointments, activities, and deadlines throughout the day.



## **NAVIGATING NEW ROUTES**

Recalling a series of directions to reach a destination, especially in unfamiliar areas.



## **SOLVING MULTI-STEP PROBLEMS**

Remembering the steps involved in a problem-solving process, such as math word problems or troubleshooting technical issues.

**WORKING MEMORY IS ESSENTIAL FOR MANAGING THE COMPLEXITY OF DAILY LIFE, ALLOWING US TO KEEP TRACK OF MULTIPLE STEPS, SCHEDULES, AND INSTRUCTIONS IN ORDER TO COMPLETE TASKS EFFICIENTLY AND EFFECTIVELY.**



# Examples of Working Memory

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## WRITING

Holding information in mind while adding points to it; keeping on track with an outline or on point.

## READING

Comprehending information and then adding to it as the text becomes longer and more complicated.

## TEST TAKING

Keeping in mind formulas and definitions to apply to problems and questions on exams. .

## PARENT EXPLANATIONS

When parents provide guidance, children with weak working memory have a hard time keeping the new steps in mind and using them.

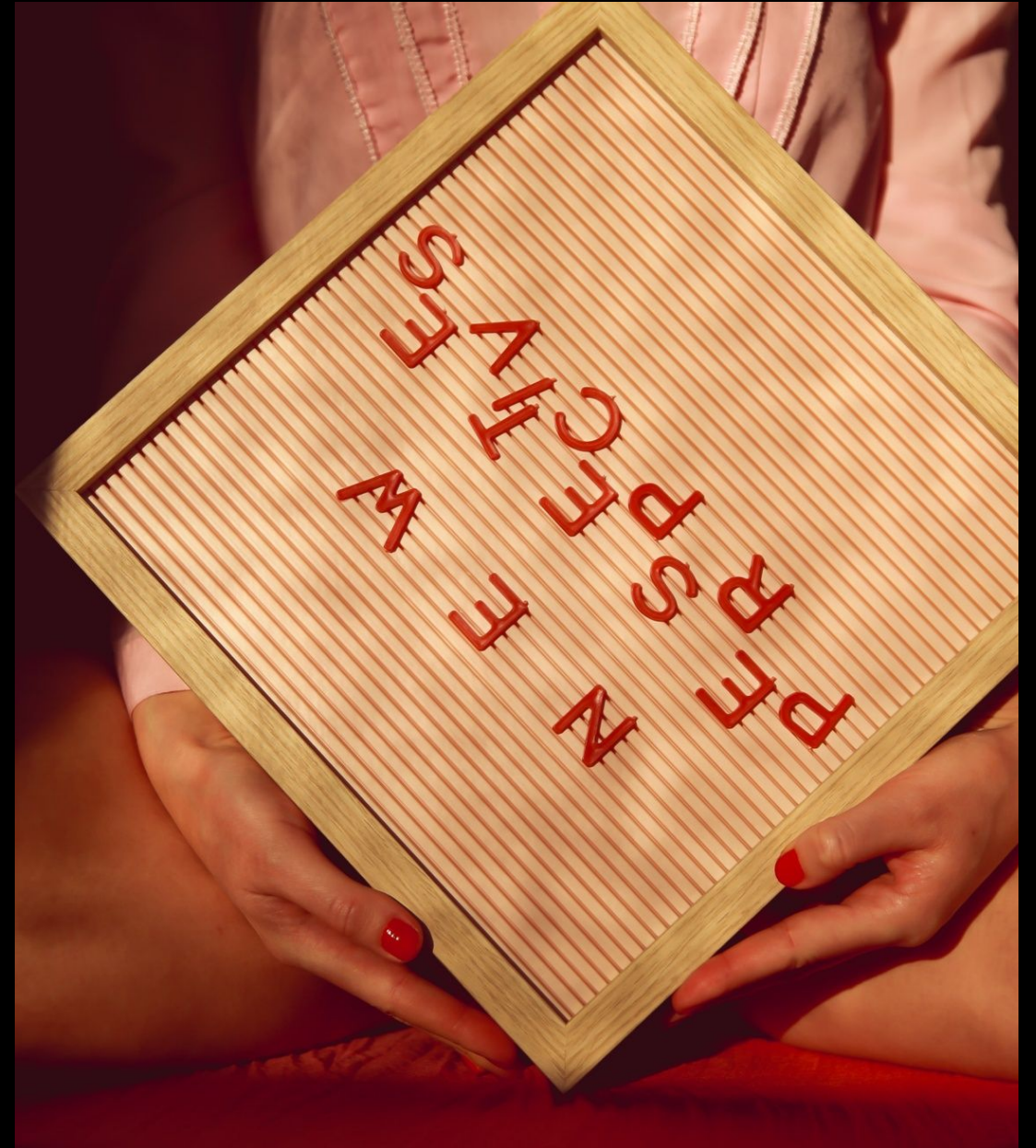
## SOCIAL RELATIONSHIPS

Kids need to hold rules for play in mind and apply them as they play with peers.

# Flexible Thinking: Adapting to Change

Flexible thinking skills are crucial in our daily lives, allowing us to adapt to unexpected situations and overcome challenges.

These skills include the ability to consider multiple perspectives, generate creative solutions, and quickly adjust our approach as circumstances change.



# Examples of Cognitive Flexibility

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## WRITING

Considering feedback and applying it  
- requiring changing approaches and actions.

## READING

Considering new perspectives presented in writing or allowing a character to change or develop

## TEST TAKING

Comprehending a novel problem or question. Being able to shift from one problem type to another.

## PARENT COACHING

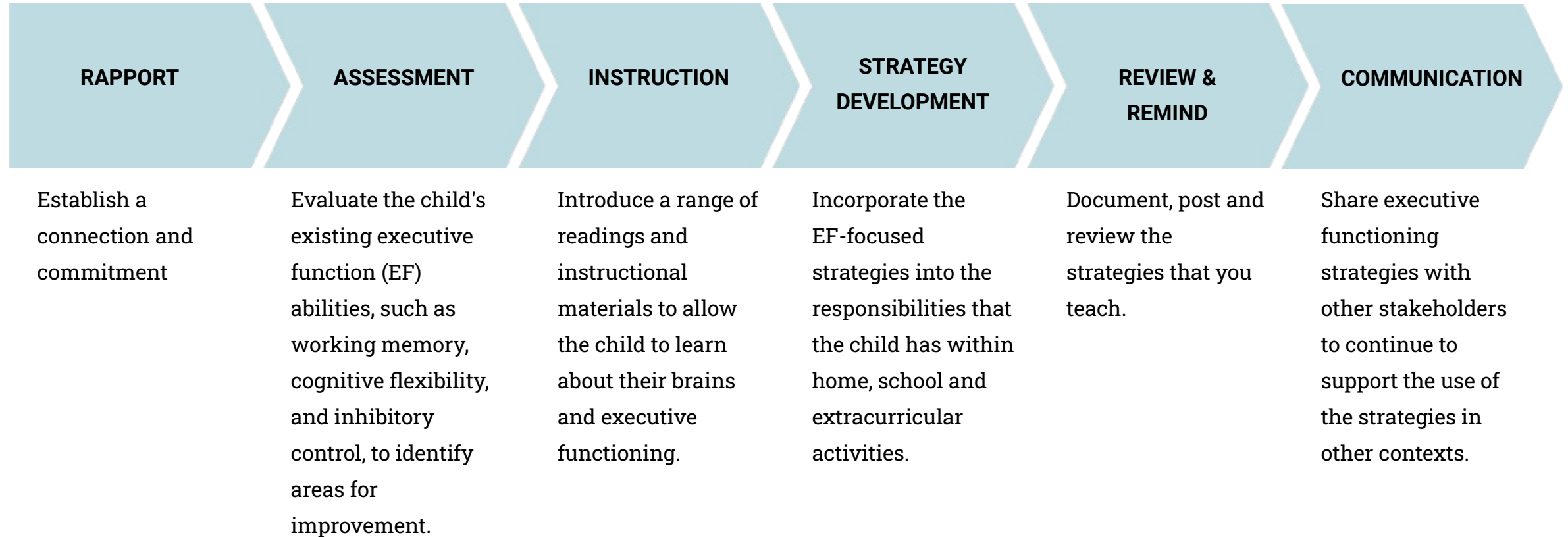
Applying a new way of doing something or taking a suggestion and trying it out.

## SOCIAL RELATIONSHIPS

Kids often need to shift or change course as they engage in play or games.

# The Integrated EF Model Framework

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# The Model In Action

## Procrastination

### RAPPORT

- **Active Listening** – Show that you're fully present when your child speaks.
- **Validate Their Feelings** – Let them know their emotions are understood and respected.
- **Share Your Experiences** – Tell stories of your own challenges with focus, memory, or flexibility.
- **Express Genuine Curiosity** – Ask about their interests and hobbies.
- **Encourage Self-Expression** – Allow them to share their opinions without judgment.
- **Apologize When Needed** – Admit mistakes to model accountability and humility.
- **Respect Their Autonomy** – Give choices within boundaries to practice decision-making.
- **Offer Constructive Feedback** – Frame it as a way to help them grow, not criticize.
- **Acknowledge Their Efforts** – Praise attempts as much as achievements.
- **Practice Patience** – Give them time to process information and respond.
- **Be Consistent** – Build trust by following through with what you say.
- **Use Positive Language** – Reinforce their strengths before discussing areas to improve.

- **Model Calm Responses** – Show how to react thoughtfully, not impulsively.
- **Encourage Problem-Solving** – Ask open-ended questions to foster critical thinking.
- **Create a Safe Space for Mistakes** – Assure them it's okay to fail and learn.
- **Spend Quality Time** – Engage in activities they enjoy without an agenda.
- **Involve Them in Decisions** – Let them weigh in on family matters when possible.
- **Practice Empathy** – Put yourself in their shoes to understand their perspective.
- **Avoid Comparisons** – Focus on their individual journey rather than comparing.
- **Use Visual Supports** – Create charts or checklists to clarify expectations.
- **Give Gentle Reminders** – Use cues instead of commands to guide them.
- **Focus on Effort Over Outcome** – Praise the process rather than just results.
- **Create Rituals Together** – Establish special routines like a weekly game night.
- **Engage in Physical Activity** – Move together to release stress and boost focus.
- **Provide Clear, Simple Instructions** – Break down tasks to make them manageable.
- **Teach Mindfulness Practices** – Introduce techniques to help them stay calm and focused.
- **Be Their Cheerleader** – Encourage them to tackle challenging tasks with positivity.

# The Model In Action Procrastination

## ASSESSMENT

### Summary Results

STRENGTHS	EXPECTED RANGE			SKILLS TO SUPPORT
	High	Medium	Low	
Abstract Reasoning ★	Working Memory Verbal Reasoning Attention Verbal Memory	Visual Memory Processing Speed Visual Motor Speed	Spatial Perception	Flexible Thinking

<span style="color: green;">■</span> Ahead of peers Top 16% of peer group	<span style="color: cyan;">■</span> Developing appropriately for peer group High: 69th - 83rd percentile Medium: 31st - 68th percentile Low: 17th - 30th percentile	<span style="color: purple;">■</span> Developing behind peer group, may require outside support Bottom 16% of peer group
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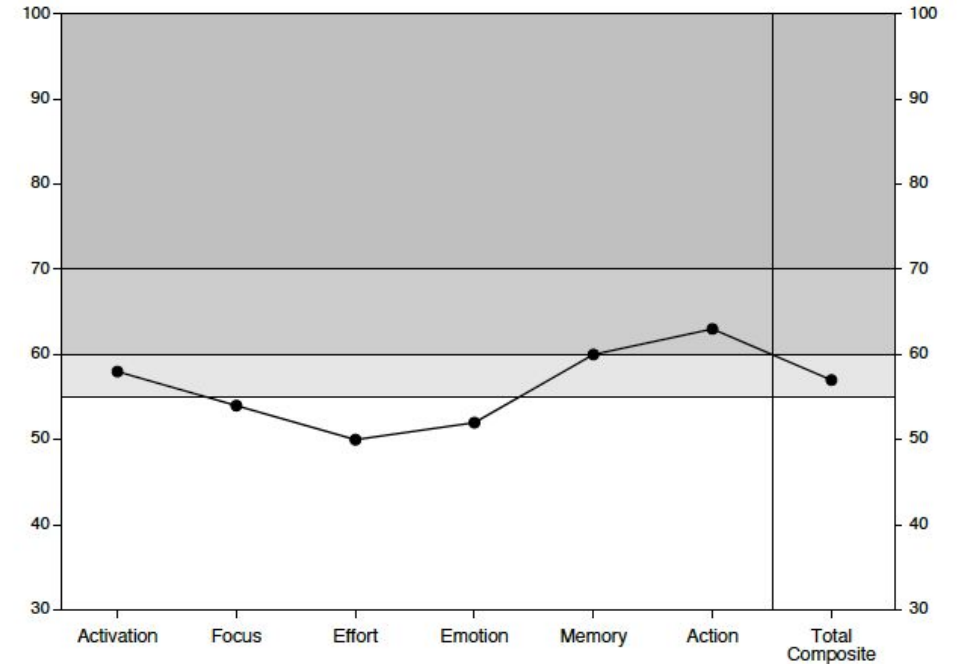
#### PLANNING/PRIORITIZING

When my child has a big project, my child knows how to plan it out.	
When my child has many things to do, my child begins by prioritizing.	
My child <u>is able to</u> do long-term projects easily.	

#### ORGANIZATION

My child keeps their drawers, closets, shelves, <u>desktops</u> and bags organized.	
My child prefers to keep my desk or workspace at home neat and organized.	
My child likes to keep my bedroom neat and organized.	

## BROWN EF/A SCALES T-SCORE PROFILE **STUDENT**



### Score Summary Table

Score	Score Description	Raw Score	T Score (Plotted)	Percentile Rank	90% Conf. Interval
Activation	Organizing, prioritizing, and activating to work	13	58	77	52-64
Focus	Focusing, sustaining, and shifting attention to tasks	12	54	67	49-59
Effort	Regulating alertness, sustaining effort, and adjusting processing speed	9	50	57	44-56
Emotion	Managing frustration and modulating emotions	10	52	64	47-57
Memory	Utilizing working memory and accessing recall	15	60	84	54-66
Action	Monitoring and self-regulating action	17	63	88	57-69
Total Composite	Overall indication of executive functioning	76	57	76	54-60

### T-Score Interpretation

Suggested ranges for the interpretation of the cluster and Total Composite T scores are as follows:	T-Score Range	Classification
	70 and above	Markedly atypical (very significant problem)
	60-69	Moderately atypical (significant problem)
	55-59	Somewhat atypical (possibly significant problem)
	54 and below	Typical (unlikely significant problem)

# The Model In Action

## Procrastination

### INSTRUCTION

**Executive Functioning (EF)** includes focus, working memory, and cognitive flexibility. It is carried out primarily in the brain's frontal lobe and is developed from birth through young adulthood.

**Focus** is the ability to sustain attention intentionally, ignore a distraction, stop an impulsive action, and/or overcome a highly learned routine or action.

**Working Memory** involves keeping information in mind while manipulating it in a few ways. We use working memory when we read as we have to hold different pieces of information together to consider it a whole picture or story. As we write, we must keep our ideas in mind and connect them as we transcribe. In math, mental calculations holding directions in mind and using them all involve working memory. A person's working memory is measured on a continuum from small to large. We can think of it as being a Post-it note of varying sizes, able to contain different amounts of information; Some people have a 3-by-3 Post-it note, others may have a 4-by-6 Post-it note, and so on.

**Cognitive Flexibility** is the process of thinking about something differently. We often use cognitive flexibility in learning as we consider various perspectives as we read. We also use it to solve problems in math and science. In writing, we may also explain an idea using various forms of evidence and change our minds as we communicate.

### Teach a student to do unpreferred activities

#### **Anterior Midcingulate Cortex:**

Doing tasks that are not preferred is quite difficult for students with weak executive functioning. This is because the brain is not supported with dopamine and serotonin and other hormones that are helpful in connecting neurons. The way to do tasks that are not preferred is not always to find the joy in those tasks, but rather to do them despite the boredom, disconnection and disinterest in them. I love to teach students about the part of their brain that grows every time they do something they don't want to do from start to finish. This part is called the Anterior Midcingulate Cortex. And a scientist named Huberman taught me this in his famous podcast which can be 2-3 hours long! There is an episode on David Goggins that you might find interesting which really brings this point home.

Often, kids find it interesting and cool that they are growing their brains by doing what they don't want to do. Discussing this with students also allows you to open a dialogue around preferred and non preferred tasks. You can encourage your student to tolerate the pain associated with doing what is unpreferred.

### Build a student's ability to be uncomfortable

#### **Tolerate:**

Because the brain which has weak executive functioning benefits from hormones such as dopamine to connect neurons, not having the happy chemicals can make executing on work painful. A concept and a practice to teach students is toleration of unpleasant emotions.

# The Model In Action

## Procrastination

### STRATEGY DEVELOPMENT

Strategy for Improved Attention

## Where do you focus?

1

Where does your brain already have the ability to focus for a long period of time? Ideas may include: Watching You Tube or Tik Tok Videos, Doing an Activity of High Interest, Playing Sports, Listening to Music.

Create a strong awareness of what this focus feels like; imagine your neurons connecting.

2

How can you implement this focus experience into tasks you have to do that are not naturally focused (connecting your neurons)?

3

Write down ideas and try them as you do tasks which tend to have weak focus.



# The Model In Action

## Procrastination

### STRATEGY DEVELOPMENT

Strategy for Improved Attention

## Visualization

- 1 Close your eyes.
- 2 What do you need to gather? Imagine the physical things.  
Imagine the online resources needed.
- 3 Watch yourself reading the prompt or directions.
- 4 Watch yourself doing the work. How will you maintain attention?
- 5 Watch yourself completing the work and turning it in.

# The Model In Action

## Procrastination

### STRATEGY DEVELOPMENT

Strategy for Improved Attention

Use this strategy after you master "Where do you focus?" and "Visualization."

## Two-Minute Drill

- 1 Describe and understand what it feels like to be focused.
- 2 Visualize yourself doing the work from start to finish.
- 3 Work with an extreme focus for 2 minutes.
- 4 Stop after 2 minutes and rest fully.
- 5 Reflect on the process and build awareness of what it feels like to fully focus.

# The Model In Action

## Procrastination



### REVIEW

Have the student state the steps before your next work period.



### REMIND

Prompt the student to remember the steps they took using the strategy.



### COMMUNICATE

Share the strategy with other stakeholders.

**USING STRATEGIES TO OVERCOME THESE COMMON FOCUS CHALLENGES CAN HELP IMPROVE PRODUCTIVITY, ACADEMIC PERFORMANCE, AND OVERALL WELL-BEING.**

# Working Memory Struggles



## **FORGETTING MULTI-STEP DIRECTIONS**

Difficulty remembering and executing a series of instructions, leading to frustration and incomplete tasks.



## **LOSING TRACK OF SCHOOL ASSIGNMENTS**

Struggling to remember homework, project deadlines, and other academic responsibilities, resulting in missed or incomplete work.



## **DIFFICULTY RECALLING WHAT THEY READ**

Challenges in comprehending and retaining information from reading materials, impacting academic performance.

**INDIVIDUALS WITH WORKING MEMORY STRUGGLES FACE SIGNIFICANT CHALLENGES IN THEIR DAILY LIVES AND ACADEMIC PURSUITS, HIGHLIGHTING THE IMPORTANCE OF UNDERSTANDING AND ADDRESSING THESE DIFFICULTIES TO SUPPORT THEIR SUCCESS.**

# Flexible Thinking Barriers



## RESISTANCE TO CHANGE

Difficulty adapting to new situations or ideas, preferring to maintain the status quo.



## STRUGGLES WITH FEEDBACK

Defensiveness or unwillingness to consider constructive criticism or alternative perspectives.



## RIGIDITY IN PROBLEM-SOLVING

Tendency to rely on a single approach or solution, even when it may not be the most effective.

**ALL STUDENTS WITH ADHD HAVE RSD (REJECTION SENSITIVE DYSPHORIA), AND ALONG WITH COGNITIVE INFLEXIBILITY THIS CAN MAKE FOR A VERY TRICKY PARENTING JOURNEY!**

# Navigating Focus Challenges

- **BREAK DOWN TASKS**

Divide larger tasks into smaller, more manageable steps to make them less overwhelming and easier to focus on.

- **MINIMIZE DISTRACTIONS**

Eliminate or reduce external distractions like noise, clutter, and digital devices to help children stay focused on the task at hand.

- **ENCOURAGE REGULAR BREAKS**

Incorporate frequent, short breaks into the schedule to allow children to recharge and refocus their attention when needed.