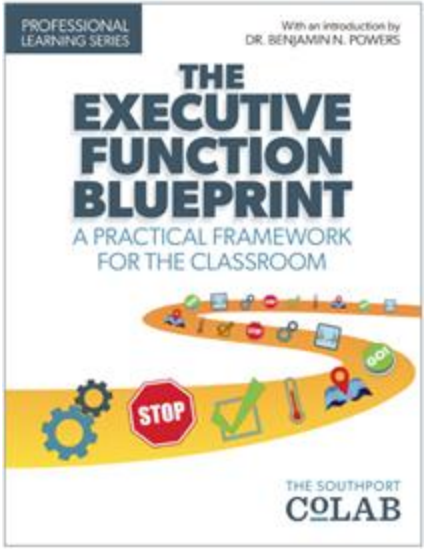
EXECUTIVE FUNCTIONING

The Hidden Infrastructure of Literacy Learning



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The Invisible Skill Set

“They need to try harder”

“They’re just not motivated.”

“They’re so disorganized.”

“Students are just so lazy!”

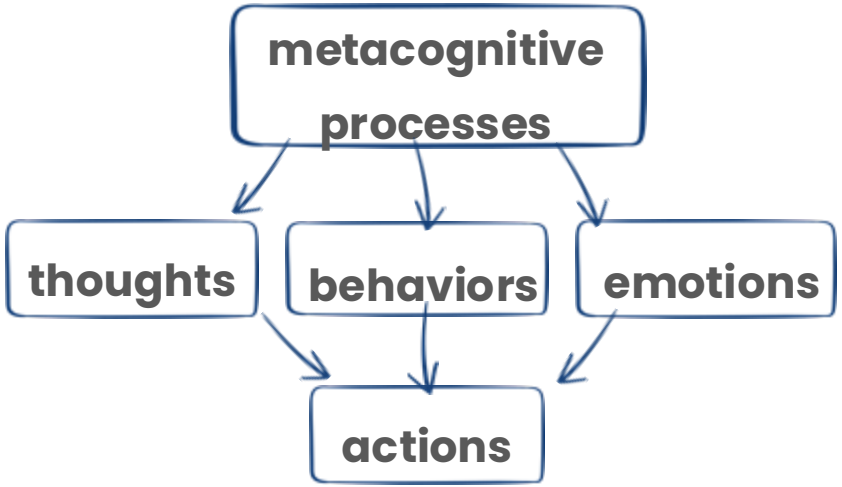
What if it’s not effort they’re missing?

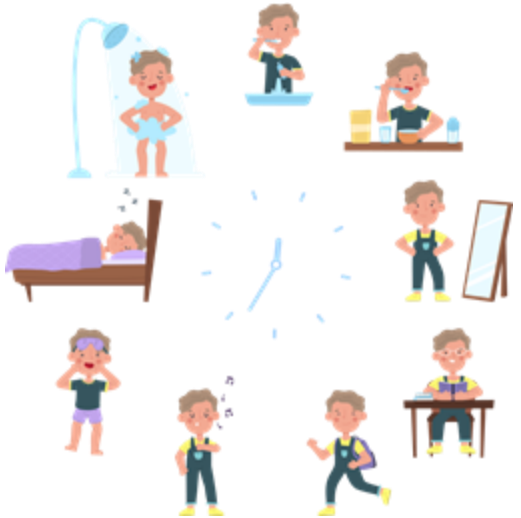
Objectives

- **Explain** the role of executive functioning in literacy achievement.
- **Identify** EF demands embedded within reading and writing tasks.
- **Apply** EF lens to the classroom context and literacy instruction.
- **Use language** and **strategies** to support EF skill-building at the classroom and building levels.

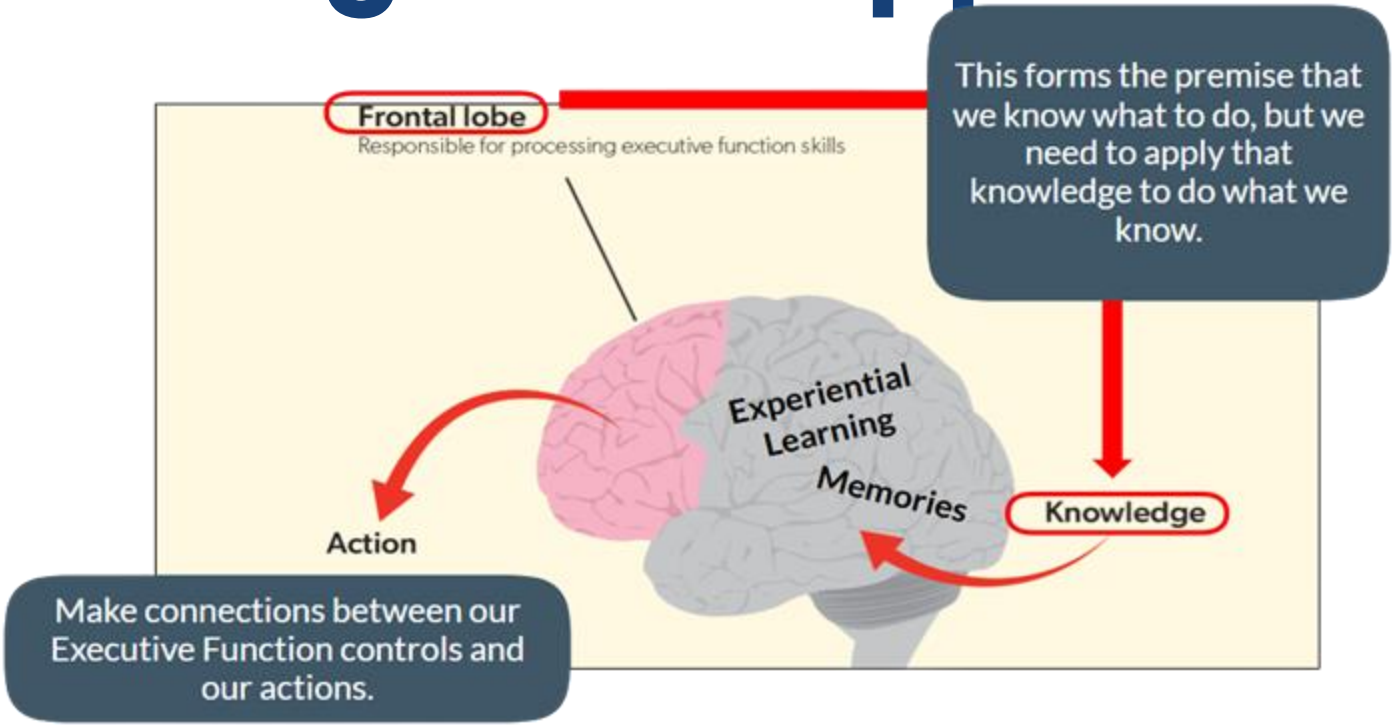
What is Executive Function?

EF is the brain's command center





Metacognitive Approach



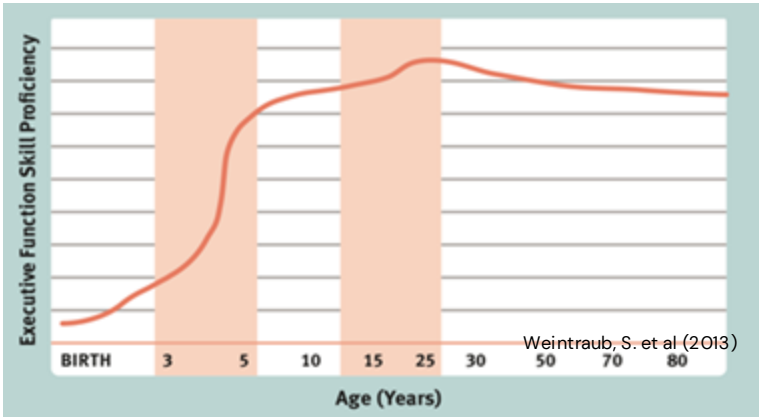
Prefrontal Cortex

- Manages big picture tasks and individual cognitive skills
- Guides behavioral, emotional, and cognitive controls
- Shifts focus to meet challenging needs

The Reality...

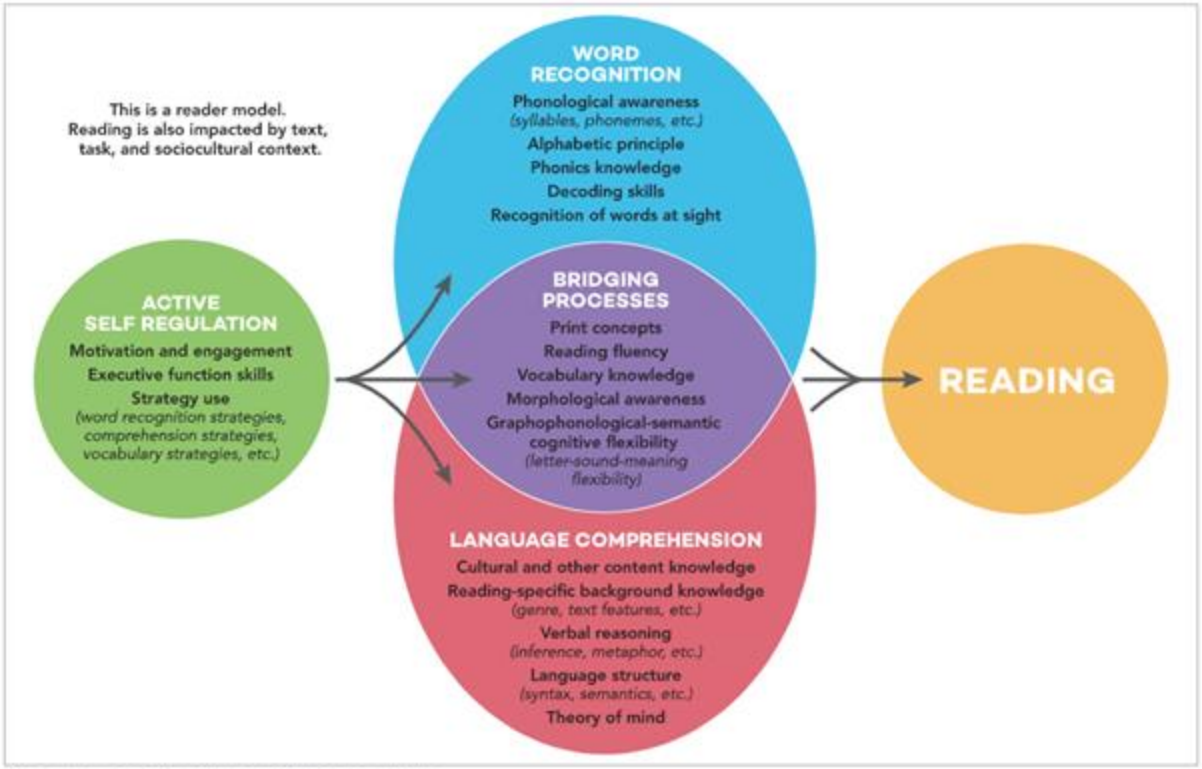
- Students are exposed to constant distraction and choice
- Adults are filled with assumptions of skill development

Executive Function develops slowly, through modeling, feedback and explicit teaching.



Weintraub, S. et al (2013)

The Active View of Reading



Note. Several wordings in this model are adapted from Scarborough (2001).

Why This Matters

EF Skills are a predictor of academic success

With Strong EF Skills **Students** are...

- Able to manage stress more effectively
- Able to manage time
- Follow multi-step directions
- More likely to graduate & persist in college

Teachers can...

- **Deepen instruction**: transition focus to content vs management
- **Increase Pace:** spend less time re-explaining and managing transitions
- **Facilitate Collaboration:** trust students to work productively and independently
- **Foster Independence:** act as facilitators while students take ownership of their learning

Our Goal

Decrease
Interference

- Temptations
- Distractions
- Ambiguity
- Content Volume

&

Increase
Automaticity

- Foundational Knowledge
- Routines
- Resources

Adapted from Figure 3.2, by M. Weathers and S. Oberle, 2026, Executive Functions for Every K–3 Classroom: Promoting Self-Regulation for a Strong Start, Corwin. Copyright 2026 by Corwin

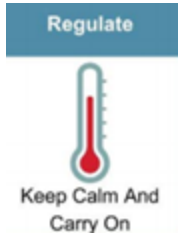
The Controls

What if our students are missing a set of cognitive tools they were never taught?

Inhibit	Shift	Regulate	Self-Monitor
Stop And Think	Shift Gears	Keep Calm And Carry On	How Am I Doing?
Initiate	**Working Memory**	**Plan & Organize**	**Task Monitor**
Hit The Go Button	Keep It In Mind	Break It Down... One Step At A Time	Am I On Track?

The Core EF Controls

Regulation: Manages our emotions guiding a calm and appropriate response. Regulation is the foundation of all executive functions.



Skill	What It Does	Classroom Example
Working Memory	Holds information in mind while using it	• Remembering multi-step directions • Holding events from a story
Shift (Cognitive Flexibility)	Switches thinking & adapts	• Adjusting when a plan changes unexpectedly • Shifting between decoding and determining meaning
Inhibitory Control	Controls impulses & attention	• Waiting your turn, staying focused on a task • Staying focused on text

The Foundation

When EF Skills breakdown…

We see common patterns:

- Students can't start or finish work, lose materials, or give up easily
- Teachers feel overwhelmed, reacting more than instructing
- The school culture experiences chaos–
  Too many initiatives, shifting goals,
  and little consistent reflection or routines.

Strength-Based Approach

- Focus on strengths to support growth
- All Executive Function skills improve with practice
- Use supports strategically- aim to build independence overtime

The EF Mindset

Principle #1
Engage in Daily Activities

- Multiple opportunities to practice
- Identify controls in the moment

Principle #2
Model Behavior & Provide Supported Activities

- Demonstrate how you use EF
- Utilize think aloud and modeling

Principle #3
Use Language to Mediate Thought and Behavior

- Use cues consistently across contexts
- Support student metacognitive processes

Principle #4
Keep an EF mindset when engaging in tasks

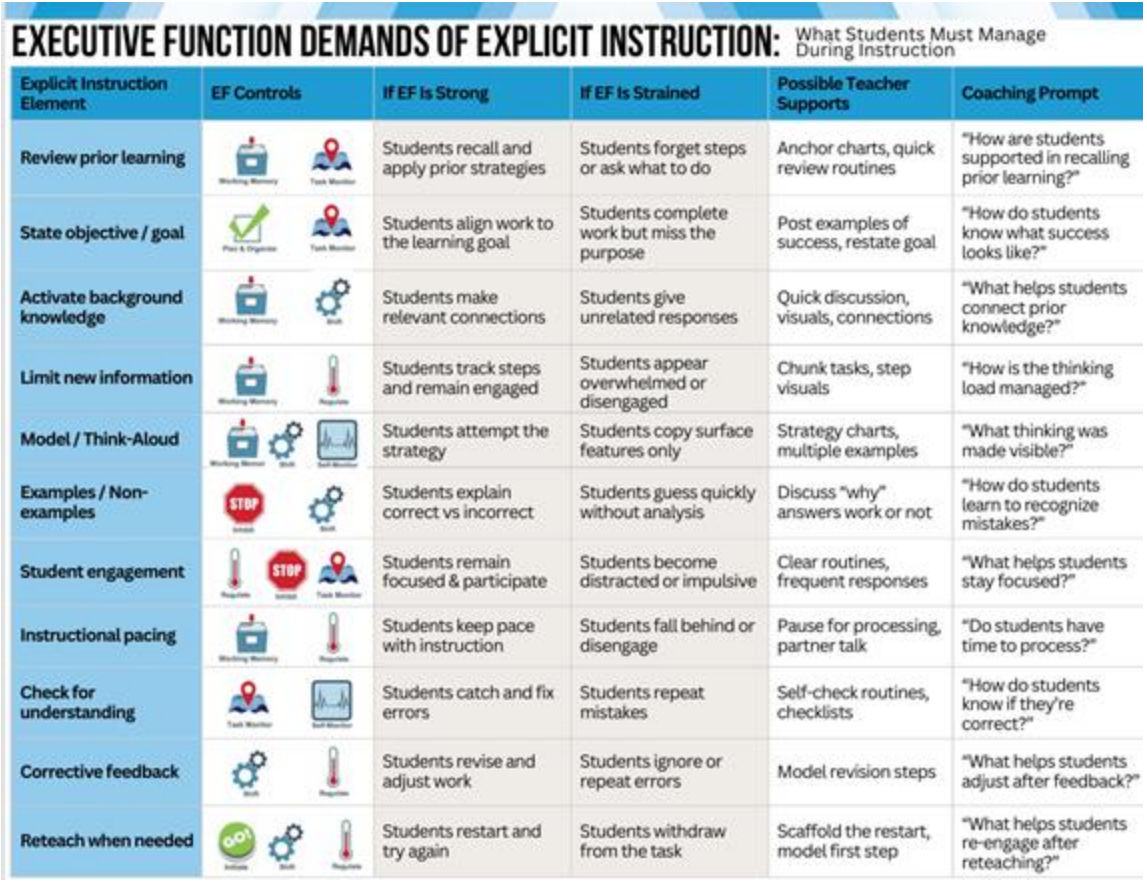
- Approach activities and tasks with EF lens
- Consider related controls when planning

Routines

- Foundation for Success
- Cognitive Bandwidth
- Aim for automaticity

Next steps: Identify grey areas in the day where increased clarity and intention can reduce friction.

Executive Function Demands of Explicit Instruction

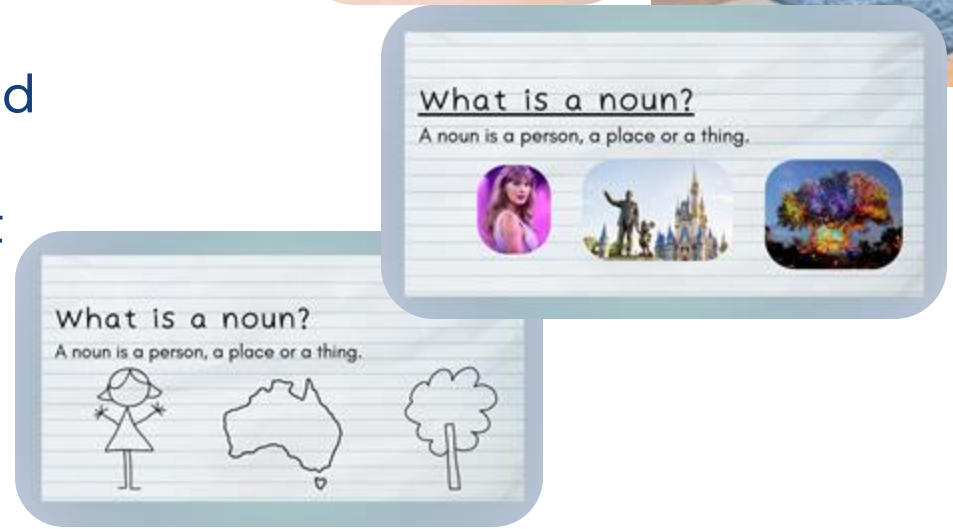


EXECUTIVE FUNCTION DEMANDS OF EXPLICIT INSTRUCTION: What Students Must Manage During Instruction

Explicit Instruction Element	EF Controls	If EF Is Strong	If EF Is Strained	Possible Teacher Supports	Coaching Prompt
Review prior learning		Students recall and apply prior strategies	Students forget steps or ask what to do	Anchor charts, quick review routines	"How are students supported in recalling prior learning?"
State objective / goal		Students align work to the learning goal	Students complete work but miss the purpose	Post examples of success, restate goal	"How do students know what success looks like?"
Activate background knowledge		Students make relevant connections	Students give unrelated responses	Quick discussion, visuals, connections	"What helps students connect prior knowledge?"
Limit new information		Students track steps and remain engaged	Students appear overwhelmed or disengaged	Chunk tasks, step visuals	"How is the thinking load managed?"
Model / Think-Aloud		Students attempt the strategy	Students copy surface features only	Strategy charts, multiple examples	"What thinking was made visible?"
Examples / Non-examples	STOP	Students explain correct vs incorrect	Students guess quickly without analysis	Discuss "why" answers work or not	"How do students learn to recognize mistakes?"
Student engagement	STOP	Students remain focused & participate	Students become distracted or impulsive	Clear routines, frequent responses	"What helps students stay focused?"
Instructional pacing		Students keep pace with instruction	Students fall behind or disengage	Pause for processing, partner talk	"Do students have time to process?"
Check for understanding		Students catch and fix errors	Students repeat mistakes	Self-check routines, checklists	"How do students know if they're correct?"
Corrective feedback		Students revise and adjust work	Students ignore or repeat errors	Model revision steps	"What helps students adjust after feedback?"
Reteach when needed		Students restart and try again	Students withdraw from the task	Scaffold the restart, model first step	"What helps students re-engage after reteaching?"

Environment

- **Prioritize Purpose Over Aesthetics**
  - Mindful Design
  - Reducing Cognitive Load
  - Intentional Engagement



Scenario 1:

Students are asked to write a paragraph using a model.

Some students:

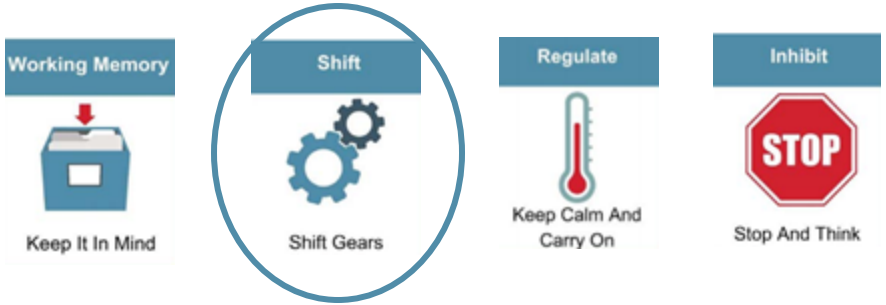
- Write very quickly
- Skip punctuation
- Ignore the structure that was modeled

Scenario 2:

During a comprehension check, a student selects an incorrect answer. The teacher provides feedback and explains why it's incorrect.

The student:

- Keeps the same answer
- Or repeats the same mistake on the next question



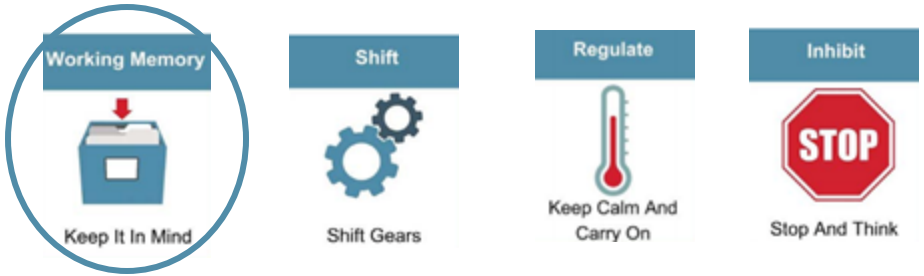
Scenario 3:

A teacher models how to identify the main idea.

Students begin reading a short passage independently.

Several students:

- Start strong
- Then stop midway
- Say, “Wait… I don’t remember what I just read.”

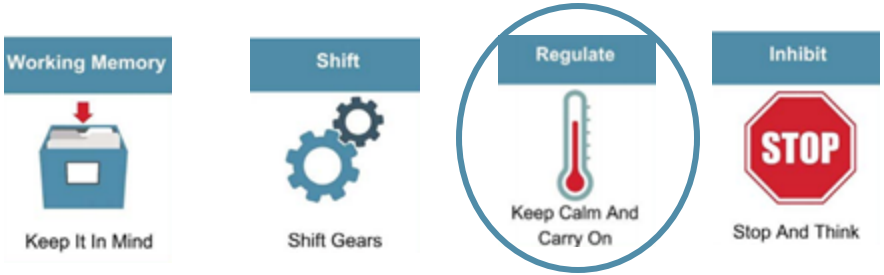


Scenario 4:

Students are asked to read a longer passage and annotate.

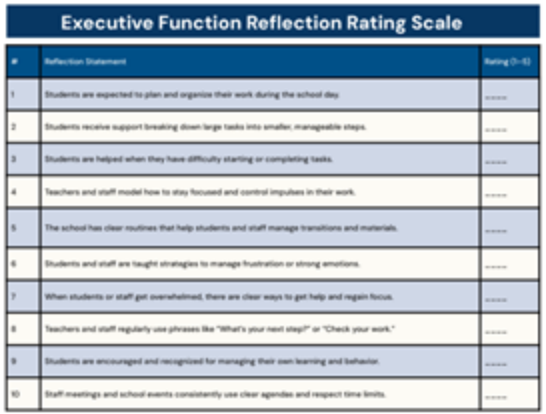
Some students:

- Stop halfway through
- Put their head down
- Say, “This is too much”



Executive Function Reflection

- What's one area where you think your school could improve in helping students or staff manage learning and behavior?
- What's one existing strength or routine your school can build on?
- What is one simple, immediate step you might take to support this work?



Executive Function Reflection Rating Scale

#	Reflection Statement	Rating (1–5)
1	Students are expected to plan and organize their work during the school day.	____
2	Students receive support breaking down large tasks into smaller, manageable steps.	____
3	Students are helped when they have difficulty starting or completing tasks.	____
4	Teachers and staff model how to stay focused and control impulses in their work.	____
5	The school has clear routines that help students and staff manage transitions and materials.	____
6	Students and staff are taught strategies to manage frustration or strong emotions.	____
7	When students or staff get overwhelmed, there are clear ways to get help and regain focus.	____
8	Teachers and staff regularly use phrases like "What's your next step?" or "Check your work."	____
9	Students are encouraged and recognized for managing their own learning and behavior.	____
10	Staff meetings and school events consistently use clear agendas and respect time limits.	____

When Executive Function is a Shared Priority…

We **eliminate the assumptions** and **begin teaching the strategy**

The new language:

- “What’s your plan for managing distractions?”
- “What’s your next step when you get stuck?”
- “Let’s chunk this task together.”

Three Teacher Moves

1. **Refer:** Use clear, specific language tied to visuals and activities.

2. **Recognize:** Name and praise EF skills when observed.

3. **Relate:** Connect EF skills to daily tasks and lessons.

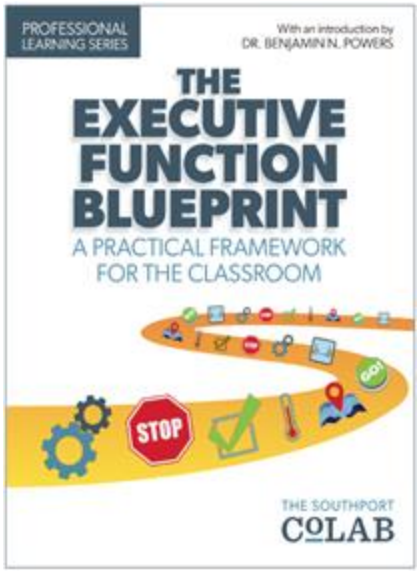
REFER
RECOGNIZE
RELATE
EXECUTIVE FUNCTION

Within Your School

What would it look like if executive functioning wasn't just a **hidden variable** in success, but a **visible, intentional part** of our school culture?

Resources

EXECUTIVE FUNCTION FOCUS: WORKING MEMORY
The ability to hold information in mind to complete a task
What is Working Memory?
Why Working Memory Matters?
Visual Cue
Verbal Cue
KEEP IT IN MIND
Development and Neurological Basis
The Goal of a "Working Memory" Plan
Why a Goal-Oriented Approach Matters
Working Memory and Other Executive Functions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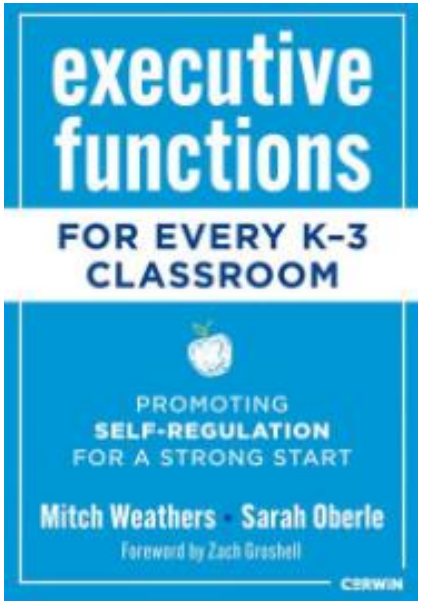
executive functions
FOR EVERY K-3 CLASSROOM
PROMOTING SELF-REGULATION FOR A STRONG START
Mitch Weathers • Sarah Oberle
Foreword by Zach Groshell
CORWIN

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