



COLLABORATING TO SUPPORT CHILDREN WITH EXECUTIVE DYSFUNCTION

REED SENTER, M.S. CCC-SLP

LEARNING OUTCOMES

1) What are executive functions?

- Define “Executive Function”
- Explain its role in development
- Define its components

2) How can interdisciplinary teams support students with executive dysfunction?

- Implement direct intervention
- Support through indirect intervention

WHAT ARE EXECUTIVE FUNCTIONS?

WHAT ARE EXECUTIVE FUNCTIONS?

- Cognitive skills used to perform goal-directed behaviors



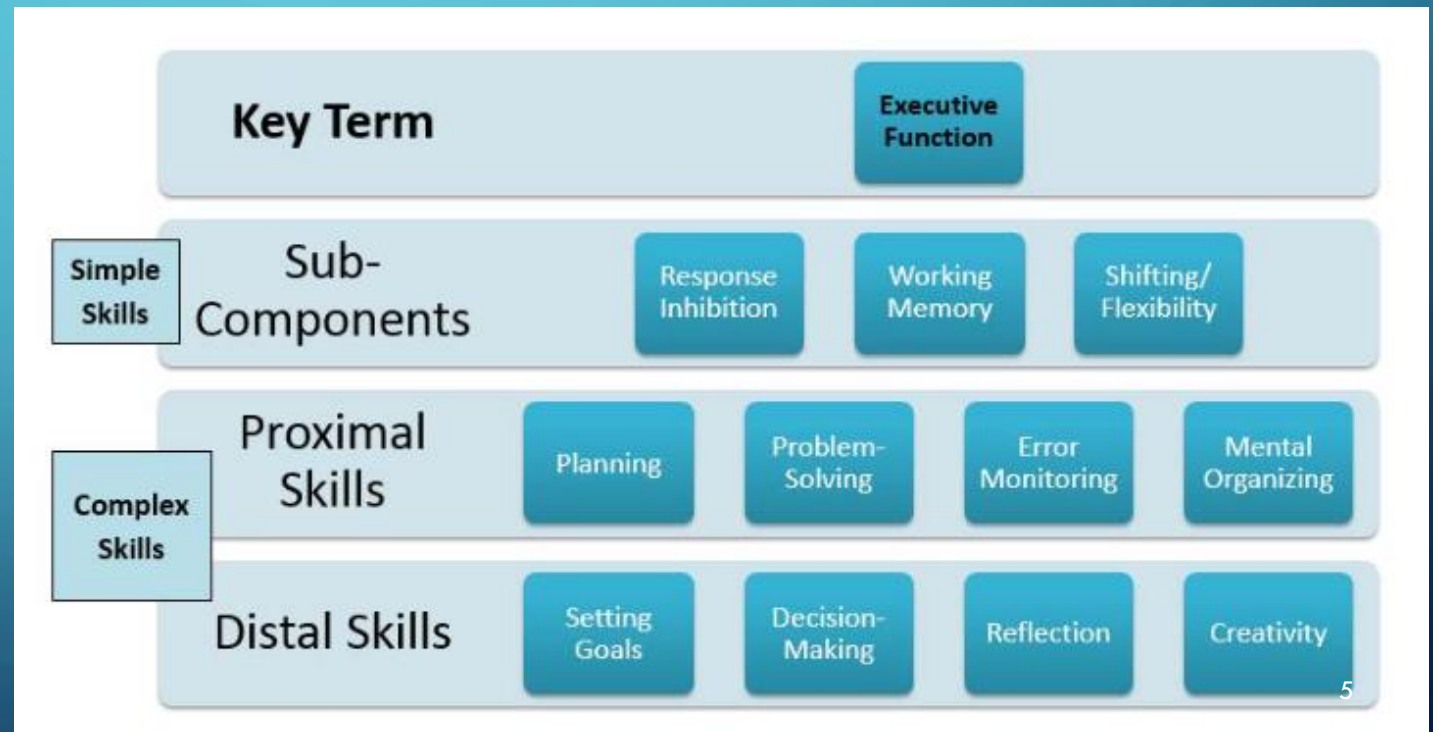
EF COMPONENTS

Traditional “3-component” model

- Response Inhibition
- Working Memory
- Shifting/Flexibility

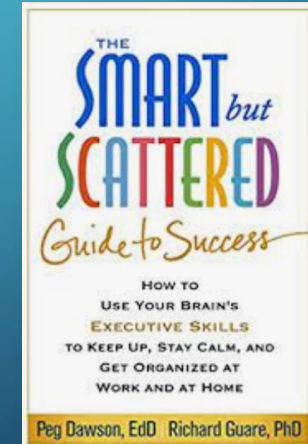
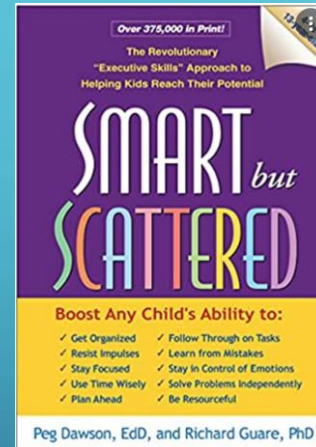
3-component model: Miyake et al., 2000

Image: Jones et al., 2016



EF COMPONENTS: THE “SMART BUT SCATTERED” MODEL

- Response Inhibition
- Working Memory
- Emotional Control
- Sustained Attention
- Task Initiation
- Planning / Prioritization
- Organization
- Time Management
- Goal-Directed Persistence
- Flexibility
- Metacognition



WHY SO MANY MODELS?





MEET JOHNNY

RESPONSE INHIBITION

- Resisting distractions, urges, temptations
- Thinking before you act



WORKING MEMORY

- Holding information in your head while you perform a complex task
- Not to be confused with short- or long-term memory



EMOTIONAL CONTROL

- Ability to manage emotions while working on tasks



SUSTAINED ATTENTION

- Maintaining attention despite boredom, fatigue, distractibility
- Only relevant for non-preferred tasks



TASK INITIATION

- Ability to begin projects without undue procrastination



PLANNING / PRIORITIZATION

- Create a plan to reach a goal
- Determine what's important or not important



ORGANIZATION

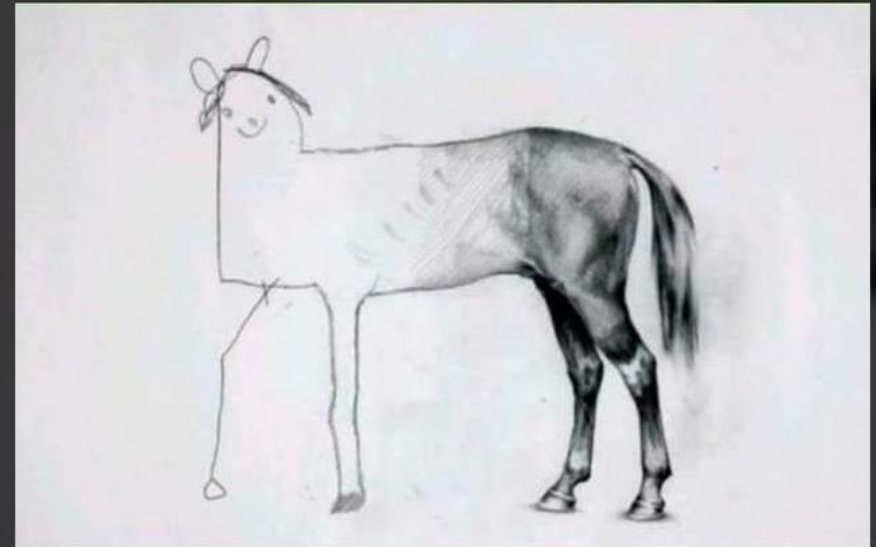
- Create and maintain systems to keep track of information or materials



TIME MANAGEMENT

- Estimating how much time you have
- Estimating how long tasks will take
- Allocating time, staying within time limits and deadlines

When there is 5 minutes remaining on your test



GOAL-DIRECTED PERSISTENCE

- Having (or making) a goal
- Following through to completion, despite distractions or competing interests



FLEXIBILITY

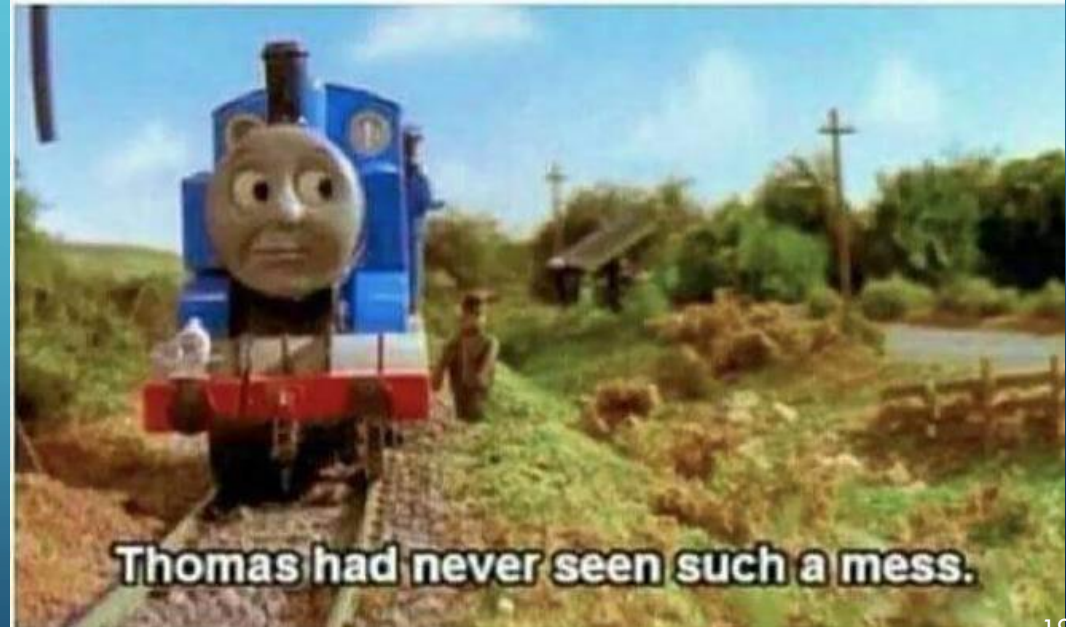
- Ability to revise plans in the face of obstacles, setbacks, new information, or mistakes



METACOGNITION

- Self-monitoring and self-evaluating skills
- Observing your own problem-solving

When I take a minute to focus on my own life



SO WHAT ABOUT JOHNNY?

- Response Inhibition
- Working Memory
- Emotional Control
- Sustained Attention
- Task Initiation
- Planning / Prioritization
- Organization
- Time Management
- Goal-Directed Persistence
- Flexibility
- Metacognition

WHICH POPULATIONS OF CHILDREN COULD BE EXPECTED TO DEMONSTRATE EXECUTIVE FUNCTION DEFICITS?

CHILDREN WITH:

- 1) ADHD
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____

WHICH POPULATIONS OF CHILDREN COULD BE EXPECTED TO DEMONSTRATE EXECUTIVE FUNCTION DEFICITS?

CHILDREN WITH:

- 1) ADHD
- 2) TBI/ABI
- 3) LANGUAGE DISORDERS
- 4) AUTISM SPECTRUM DISORDER
- 5) FETAL ALCOHOL SPECTRUM DISORDER
- 6) BORN PREMATURELY
- 7) OTHER NEURODEVELOPMENTAL DISORDERS
- 8) AND MORE...?

The background is a blue gradient. In the corners, there are white line-art designs resembling circuit boards or neural networks, with lines and small circles connecting them.

HOW CAN SLPS COLLABORATE TO SUPPORT STUDENTS WITH EXECUTIVE FUNCTION DEFICITS?

SLP INTERVENTIONS

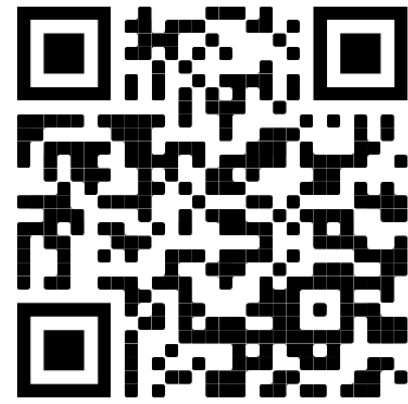
Direct intervention

- Pull-out therapy
- Push-in therapy (working with student)

Indirect intervention

- Consulting with educators, parents
- Implementing learning accommodations
- Adjusting instructional practices

COMPONENTS OF DIRECT INTERVENTION



Domains to target

Purpose of intervention (skill development or strategy use)

Delivery

Form (decontextualized, contextualized, activity-focused)

Teaching techniques (prompting, linguistic, and regulatory techniques)

SAMPLE INTERVENTION: GET READY, DO, DONE

Ward & Jacobsen,
2014

<p>3. Get Ready: What do I need?</p>	<p>2. DO What steps do I need to take to be done? How long will each step take?</p>	<p>1. What will it look like when I am DONE? Future Sketch/Picture</p>
<p>4. What materials do I need to do the steps? Prepare my Space</p>	<p>5. Sketch the time, create time markers and $\frac{1}{2}$ way checkpoint. Set timer to alert $\frac{1}{2}$ way point. Do My Work! Check in at the $\frac{1}{2}$ way point and Determine if there are any time Robbers: Identify/Remove/Replan</p>	<p>6. Know when to STOP. Close out the Task. Review: What Worked? What did not Work?</p>

INDIRECT SERVICES: KEY PRINCIPLES

Balance EF demands against curricular demands

Offload cognitive demands

Accommodations are “free,” there’s no advantage to stinginess

Consider modifications to environment or instruction

SAMPLE ENVIRONMENTAL MODIFICATIONS



Damico & Armstrong, 1996; Dunaway, 2004;
Gillam et al., 2018; Ward (n.d.)

- Use external memory aids
- Use visual organizers, concept/knowledge maps, mental imagery, and graphic organizers
- Use small groups as an opportunity for re-teaching
- Use time visualization techniques

SAMPLE INSTRUCTIONAL MODIFICATIONS



Break down
tasks into
manageable
chunks



Emphasize active
learning,
interaction, and
participation
(reading, writing,
speaking, in
various group
structures)



Implementing
cooperative
learning (small
group) and
peer tutoring



Speak clearly
and slowly; use
prosody,
repetition and
other verbal cues
for emphasis



Select topics
that are
relevant to the
learner, or
explain *how*
they are
relevant

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RESOURCES

SARAH WARD: EFPRACTICE.COM

The screenshot shows the EF Practice website homepage. The top navigation bar is dark blue with icons for Home, Favorites, Calendar, Resources (selected), Briefcase, Information, and Shopping Cart. A 'Sign Up Now' button is in the top right corner. The Resources dropdown menu is open, listing: Suggested Readings, Links, Videos, FAQs, Social Media, Games, Additional Handouts from Lectures, and CHADD. The main content area features several blue tiles: 'Professional Education' with a 'read more' link, 'Latest Resources' with a 'read more' link, 'Creators of the Innovative 360 Thinking™' with a clock icon, and a 'Services' tile. At the bottom, there is a webinar announcement for 'View Now! On Demand Webinar on Teaching Students HOW to Schedule their Time' and a 'Site Search' section with a search bar and filters for Local, Web, and Blogs.

Professional Education
read more

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In over 30 years of clinical practice, Drs. Peg Dawson and Richard Guare have worked with thousands of children who struggle at home and in school. At the center of their struggles are weak **executive skills**, and through our writing and now this website, we spotlight these skills...

[< Learn More >](#)

Now Available – ESQ-R

A self-report assessment instrument that students complete to help them (and their teachers or coaches) understand their executive skill strengths and challenges.

[▶ Take the ESQ-R and get results immediately!](#)

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[ESQ-R Self-Report Assessment Tool](#)

[Tips for Remote Schooling during the Coronavirus Pandemic](#)

Print Articles

Below is a list of PDF articles, research, and publications that Drs. Dawson and Guare have authored.

- [Tips for Caregivers on Schooling at Home – What Role Do Executive Skills Play?](#)
Written guide by Dr. Peg Dawson
- [Executive Skills Coaching Parent Handout](#)
Executive Skills Coaching – What Parents Should Know
- [Coaching Teenagers \(and Younger Children\)](#)
A coaching model to help teenagers with attention disorders and executive skill deficits be more successful in school and reach the career goals.
- [Homework: Problems and Solutions](#)
Of all the challenges parents face as they guide their children through school, homework is, for many, the most daunting. This handbook is written for parents who struggle with children who struggle with homework.
- [Daily Homework Planner](#)
Use this tool with your student to manage their workload.
- [Incentive Planning Sheet](#)
A homework contract and incentive planning tool.
- [Best Practices in Assessing and Improving Executive Skills](#)
Chapter written by Dr. Peg Dawson.
- [How to Set Up a Tier 1 Intervention for Promoting Executive Skill Development](#)
Embedding Executive Skills into Daily Classroom Routines and Instruction
Written guide by Dr. Peg Dawson
- [Some Thoughts on Task Initiation](#)
Some Thoughts for Teachers on Helping Teenagers Develop Task Initiation
Written guide by Dr. Peg Dawson

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Resources

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Interesting Articles

[Why: Why kids struggle and what to do about it \(Singer, 2017\) \(PDF\)](#)

[You are what you say to yourself \(Singer, 2017\) \(PDF\)](#)

[What are executive functions and self-regulation, and what do they have to do with Language Learning Disabilities? \(Singer & Bashir, 1999\) \(PDF\)](#)

[Assisting students with becoming self-regulated writers \(Bashir & Singer, 2006\) \(PDF\)](#)

[Wait...What??? Guiding intervention principles for students with verbal working memory limitations \(Singer & Bashir, 2018\) \(PDF\)](#)

[Measures of oral and silent reading fluency in children who stutter vs. controls: A case study. \(Scaler-Scott, K, Howland, K., Singer, B., et al., 2016\). \(PDF\)](#)

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Content in This Guide

Step 1: Executive Function 101

- Executive Function & Self-Regulation
- Executive Function: Skills for Life and Learning

Step 2: The Science of Executive Function

- Building the Brain's "Air Traffic Control" System
- Video: How to Build Core Capabilities for Life

Step 3: Building Executive Function Skills

- **You Are Here:** Activities Guides: Practicing Executive Function Skills
- Building the Core Skills Youth Need for Life
- Building the Skills Adults Need for Life



Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence

An activities guide for building executive function

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Activities for 6- to 18-month-olds

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Activities for 18- to 36-month-olds

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QUESTIONS?

REED SENTER, M.S. CCC-SLP

Doctoral Candidate at University of Maryland

rrsenter@umd.edu

<https://www.reedsenter.com/>

@rrsenterSLP