The Executive Skills Toolbox: Strategies for Success

Colin Guare
Why Executive Skills?

The goals we have for children as educators and parents: That they grow up to be independent, self-sufficient members of a community with satisfying interpersonal relationships and work – and that they are able to set goals to achieve those outcomes and self-regulate their behavior to achieve those goals.

(understanding that they choose the path to accomplish this).
Executive Skills: Definitions

- **Response Inhibition**: The capacity to think before you act – this ability to resist the urge to say or do something allows us the time to evaluate a situation and how our behavior might impact it. (BR)

- **Working Memory**: The ability to hold information in memory while performing complex tasks. It incorporates the ability to draw on past learning or experience to apply to the situation at hand or to project into the future. (MI)

- **Emotional Control**: The ability to manage emotions in order to achieve goals, complete tasks, or control and direct behavior. (PB)
Executive Skills: Definitions

**Flexibility:** The ability to revise plans in the face of obstacles, setbacks, new information or mistakes. It relates to an adaptability to changing conditions. (BR)

**Sustained Attention:** The capacity to maintain attention to a situation or task in spite of distractibility, fatigue, or boredom. (M)

**Task Initiation:** The ability to begin projects without undue procrastination, in an efficient or timely fashion. (M)

**Planning/Prioritization:** The ability to create a roadmap to reach a goal or to complete a task. It also involves being able to make decisions about what’s important to focus on and what’s not important. (M)
Executive Skills: Definitions

**Organization:** The ability to create and maintain systems to keep track of information or materials. (M)

**Time Management:** The capacity to estimate how much time one has, how to allocate it, and how to stay within time limits and deadlines. It also involves a sense that time is important.

**Goal-directed persistence:** The capacity to have a goal, follow through to the completion of the goal and not be put off or distracted by competing interests. (M)

**Metacognition:** The ability to stand back and take a bird's-eye view of oneself in a situation. It is an ability to observe how you problem solve. It also includes self-monitoring and self-evaluative skills. The capacity for self-appraisal. (M)
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Why is it important to help kids develop executive skills?
All skills, including executive skills, improve with practice...

The more you practice, the better the skill. Practice also makes the task less effortful.
Frontal lobes take time to develop…
Role of Adult in Facilitating Development of Executive Skills in Children.

The adult acts as a “surrogate frontal lobe” who engages in the lending of his or her executive skills to coach the child in order to facilitate the learning and development of the child’s executive skills.
Factors that impact the degree to which the adult will act as a surrogate frontal lobe

- Child’s age and developmental level (the younger the child, the greater the adult’s involvement).
- Child’s executive skill profile and baseline of current strengths and weaknesses.
- Child’s type and degree of educational impairment and child’s cognitive profile.
- Task/situational/environmental demands on child, goodness-of-fit with child’s profile, and current environmental modifications in place.
Your goal for this surrogate role

- Your success as a surrogate frontal lobe is directly proportional to the child’s success in regulating behavior to solve problems and achieve goals in your absence – you’ve succeeded when you’re no longer needed (or at least less needed!).
Learning conditions that facilitate skill acquisition

- Identification of specific task/situation that requires use of executive skill.
- Specification of behaviors that define that skill.
- Time and effort limits of skill practice in that task/situation.
- Self and teacher appraisal and brief discussion.
ROLE OF EFFORT AND NEED FOR MOTIVATION IN PROMOTING EXECUTIVE FUNCTIONS

- Using executive functions, especially those that are weak, requires significant effort.
- Results in rapid energy depletion and susceptibility to context-dependent behavior.
- Fatigue and stress weaken EF.
Steps to teaching executive skills

1. Identify the weak executive skill.

2. Identify specific problem behaviors and situations that reflect the weak executive skill (forgetting homework materials, not paying attention during morning meeting).

3. Get a baseline of current performance in those situations.

4. Set short- and long-term goals (materials reliably come home, child pays attention during instruction).
Steps to teaching executive skills

5. Depending on the skill set of the child, decide how the skill will be introduced (e.g., verbal explanation, video or live model, task analysis with hand-over-hand prompt, etc.), demonstrate for the child and have the child model.

6. When introducing the skill in the target situation, review the specific behaviors expected and fade this review to the child.

7. Turn the steps into a picture or word list to use for review and evaluation.
Steps to teaching executive skills

8. Practice at regular, frequent intervals but keep practice sessions brief.

- If child is being prompted to perform each step, gradually fade the prompt and let natural stimulus prompts take over (working memory).

9. Observe the child while s/he performs each step, praising effort and providing evaluation feedback to help improve performance. When possible, have child also evaluate.

- Praise the child when s/he makes an effort on each step and when the procedure is completed as a whole (I like the way you tried to keep your eyes on me while I was explaining how to...
Steps to teaching executive skills

10. Evaluate the program’s success and revise if necessary (modify task demands, increase/change reinforcer, etc.)

11. Fade all supervision.
Modify task demands to match the youngster’s capacity for effortful work

Some tasks are more effortful than others--this is as true for adults as it is for children.
Modify the relationship between the task and the incentive
Decrease task demands
Disclaimer: It's a toolbox, not a magic wand!

-Success is possible, diligence and persistence are crucial components.

-Emphasis to kids; peers with good executive skills aren't wunderkind, they're making good use of personal support structures and natural prompts!
Smart Phones / Tablets

Can be the single most effective executive skills implement that we discuss today.
  - Multifaceted in both form and function.
  - Socially inconspicuous
  - Versatile
  - Longevity: apps allow for devices to remain current with new best practices in supporting those with weak executive skills.

Specific Tools to use in these devices:

Basic alarm function: Simple to use; streamlines short term alerts; custom labeling and myriad alarm types lead to variety that diminishes likelihood of “tuning out.”

  - Remember, tones aren't the only form of alarm! Vibration, custom audio alerts, and even visual patterns can be more effective depending on the situation!