



# Strategies to Support Executive Functioning and Self-Regulation

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# Presenters

## Dr. Orson Morrison

- Clinical Psychologist
- Father of two boys (10 and 13)
- DePaul Family and Community Services is a full-service Child, Adolescent and Family behavioral health clinic located on the Lincoln Park campus of DePaul University  
<https://fcs.depaul.edu>

## David Walker

- Licensed Social Worker
- Worked with children and families for 5 years.

# Mindful Middle Schoolers Program



## ***Resiliency Skills for Anxiety, Depression and Executive Functioning***

- DePaul University, in partnership with the Oak Park Township Community Mental Health Board and D97, plan to offer the following services and supports to the Brooks/Julian community during the 2019-2020 school year:
- Community Talks on technology, anxiety, depression, executive functioning, mindfulness and the social and emotional needs of youth
- School-based group mindfulness-based services for students
- Individual and family therapy at school and home

For more information please reach out to [omorriso@depaul.edu](mailto:omorriso@depaul.edu), your school principal or social worker

# Outline

- What is Executive Functioning?
- The Brain and Executive Functioning 101
- The Development of Executive Functioning
- Strategies to Support the Development of Executive Functioning and Self-Regulation



# Executive Functioning & Self-Regulation Overview

[https://youtu.be/efCq\\_vHUMqs](https://youtu.be/efCq_vHUMqs)



# What is Executive Functioning?

Your 8th grader spontaneously got invited to hang out with his friend after-school at his home across town. Early that day his teacher announced that there will be an unplanned science quiz the next day. Mom and dad are running late from work and you need your son to run home to let the dogs out and he's upset this will cut into his free time. Your son also has a soccer practice at 7 PM....

- **Plan**...how to get to/from friends house across town?
- **Plan/Organize**...how to make the most efficient use of time tonight, develop a study plan?
- **Regulate emotions**...managing frustration/anger
- Keeping **track** of time
- **Shift** from one task to the next

# Executive Functioning Skills

- **Inhibitory/Impulse Control**: Ability to stop, think, plan then act before responding. Weighing the outcomes before responding and acting.
- **Self-Monitor**: Ability to monitor one's own performance and to measure it against some standard of what is needed or expected. Includes learning to adapt responses and apply them in stressful situations.
- **Flexibility**: The ability to revise plans in the face of obstacles, setbacks, new information or mistakes; relates to an adaptability to changing conditions.

# Executive Functioning Skills

- **Emotional Control**: The ability to manage emotions in order to achieve goals, complete tasks, or control and direct behavior.
- **Sustained Attention**: The capacity to maintain attention to a situation or task in spite of distractibility, fatigue, or boredom.
- **Task Initiation**: The ability to begin projects without undue procrastination, in an efficient or timely fashion.
- **Working Memory**: The ability to hold information in memory while performing complex tasks.



# Executive Functioning Skills

- **Plan and Prioritize**: The ability to create a roadmap to reach a goal or to complete a task.
- **Organize self and materials**: The ability to create and maintain systems to keep track of information or materials.
- **Metacognition**: The ability to stand back and take a bird's-eye view of oneself in a situation; the ability to self-monitor, self-evaluate.

# What Lack of Executive Skills May Look Like in Students

- Acts without thinking
- Interrupts others
- Overreacts to small problems
- Upset by changes in plans
- Talks too loudly
- Resists change of routine
- Easily overstimulated and has trouble calming down
- Gets stuck on one topic or activity
- Gets over upset about “little things”
- Low frustration tolerance
- Overwhelmed by large assignments
- Can’t come up with more than one way to solve a problem.

# What Lack of Executive Skills May Look Like in Students

- Doesn't notice impact of behavior on others
- Slow to initiate task
- Runs out of steam before finishing work
- Loses books, papers, notebooks
- Forgets directions
- Lack of time sense/urgency
- Chooses “fun stuff” over homework
- Forgets homework/rogets to turn it in
- Leaves long term assignments until last minute
- Sloppy work
- Messy notebooks, backpacks, etc.



# Executive Functioning Messages

## Child

“I’m stupid”

“I’m lazy”

“I’m not good at school”

“I just can’t do this, so I  
won’t even try”

“I’m not as smart as others”

## Parent/Teacher

“You’re not trying your  
best”

“Just focus”

“Make better decisions and  
choices”

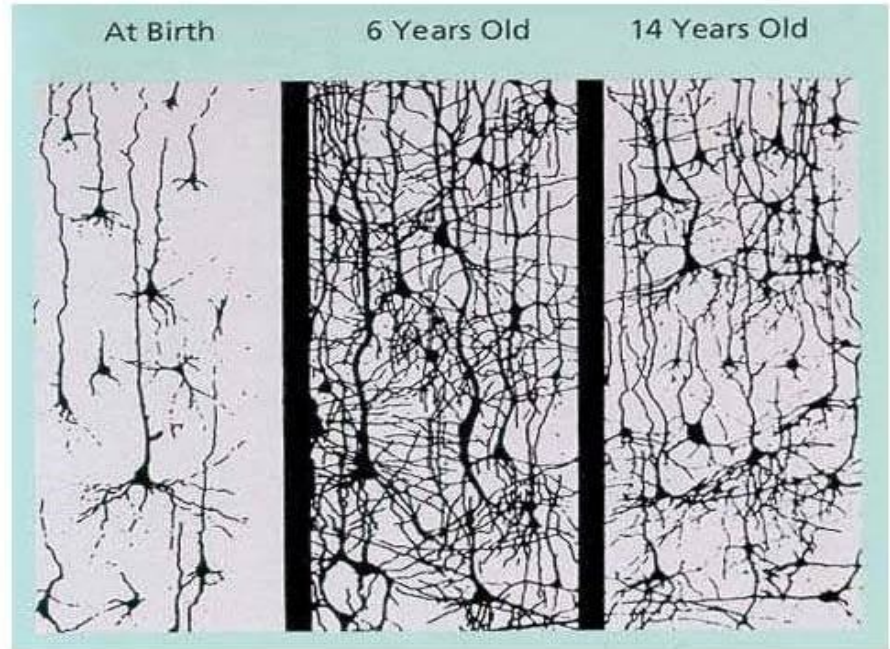
“You shouldn’t need to be  
reminded”

# Brain changes across childhood

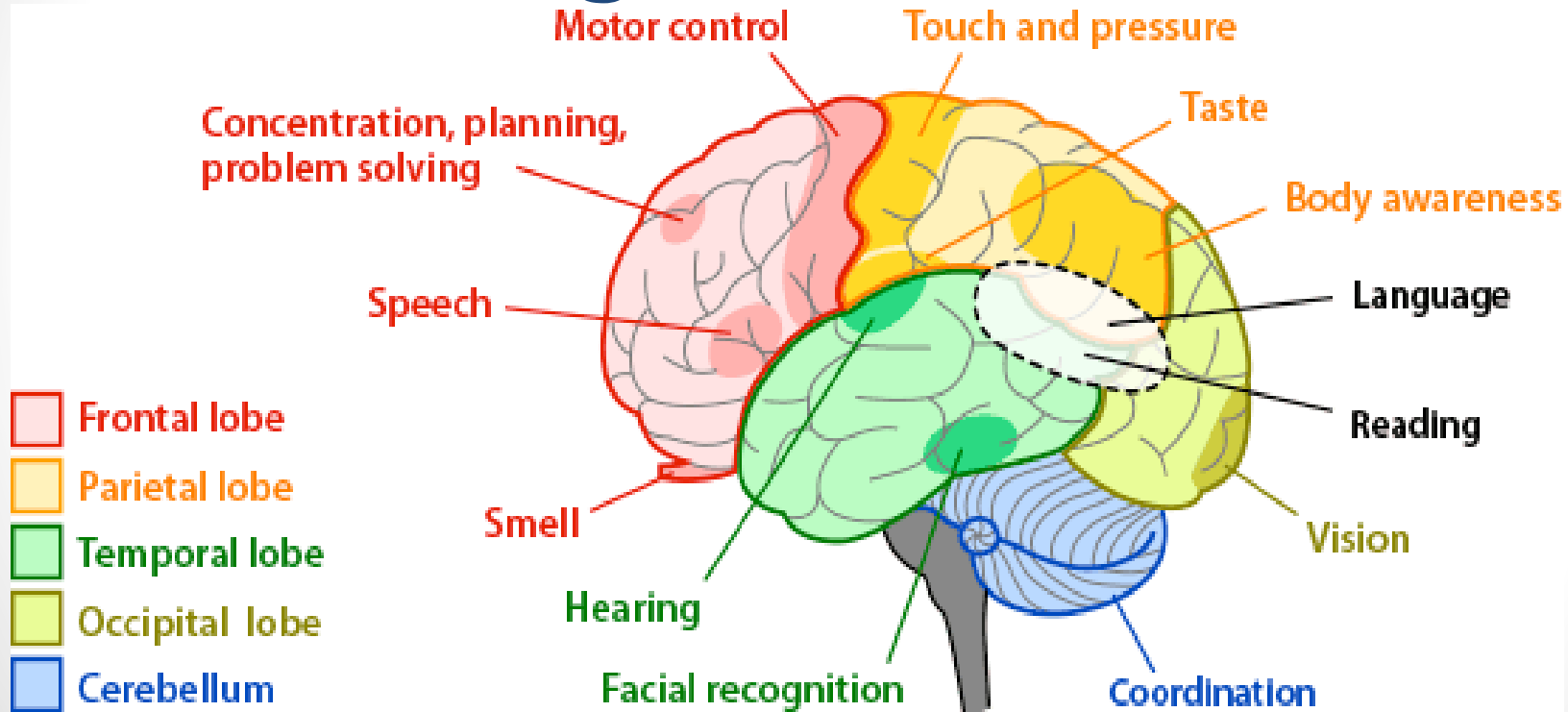
## Integration of Structures/Systems

**Neuronal “Pruning”**:  
becoming specialized and  
efficient

**“Myelination”**: becoming  
faster, more synchronized



# The Brain and Executive Functioning



# The Development of

# Executive Functioning Skills

The areas of the brain that are responsible for executive functioning (front lobe) aren't fully developed until early to mid 20s

<https://youtu.be/P629TojpvDU>



parents and teachers act as  
“surrogate” frontal lobes for children  
until they are fully developed

LUCKY  
YOU

# Strategies

Like any other “academic” subject area,  
Executive Functioning Skills **must be**  
and **can be** taught!

*Set a Goal, Incentivize, Describe, Model, Supervised  
Practice, Promote/Encourage, Adjust,  
Gradually Fade Supervision*

# Strategies: Inhibition

- The use of visual cues can be highly effective for this deficit area.
  - Some examples may include: stop sign, hand signals, pictures of 'quiet mouth,' traffic light
- Use of a fidget toy or object.
  - Some examples include: Tangle, velcro, squishy ball, fun-tac/therapy putty
- When a child begins to interrupt, ask them to write down their comments/questions. In order for this strategy to be effective, make sure you give the child time to talk about what they have written.

# Strategies: Inhibition

## Sample Questions/Statements to Promote Skills Development

- “What can you do to keep from losing your cool at lunch?”
- “What can you tell yourself while you’re in line to keep from touching the person in front of you?”
- “Is there something we can give you to hold to help you remember to raise your hand before speaking?”
- “Good job keeping your hands to yourself during \_\_\_\_\_ today!”

# Strategies:



## Sustained Attention

- Shorten length of tasks and gradually extend
- Take periodic, short breaks
- Visual timers
- Model, teach, coach and REINFORCE think aloud procedural steps
  - Use mnemonic devices
  - Use motor movement or motions
  - Positive self-talk
- Teach social scripts
  - “I need more time”
  - “Can you come back to me”
  - “Please show me an example”

# Strategies:



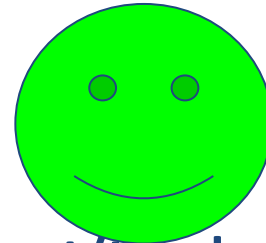
## Sustained Attention

Sample Questions/Statements to Promote Skills Development

- “Sometimes it’s hard to keep working on your homework until it’s done. What are some ways you could motivate yourself to keep working?”
- “You talk about how hard it is to stay focused on your classwork because of distractions. Let’s make a list of distractions and then brainstorm ways to manage them better.”

# Strategies: Task Initiation

- Target motivation!
- Incentives
- Teach self advocacy skill; “Can you help me get started?”
- **Scaffolding** along with positive reinforcement for small steps
- Work checklist:
  - Gather materials
  - Sit at the desk
  - Set timer
  - Review the directions
  - Start working



Parent/teacher:

“Great job starting your homework!”

# Strategies: Task Initiation

## Sample Questions/Statements to Promote Skills Development

- “It’s hard to get started on homework because there are so many other fun things to do at home. Let’s think about ways to get ourselves to get the homework out the way first.”
- “I like the way you jumped right into your writing assignment. That’s been hard for you to do.”
- “Take out your assignment book. Next to each homework assignment, I want you to write down what time you plan on starting each one.”



# Strategies: Planning

## **Daily Visual Schedules**

Post a Daily Schedule: start & finish time, name of activity/task. Review the daily schedule (conversation) each morning and upon returning from school.

## **Monthly Calendars**

Post a monthly calendar: Assignment due dates, Break long assignments into chunks and assign time frames and due dates for completing each small step. Global picture snapshot.

## **School Planners**

Avoid planners with visual clutter, quotes, distractions...Keep it simple

## **Modeling**

Model appropriate planning by verbalizing your own step by step process as you complete a task.

# Strategies: Planning

## Sample Questions/Statements to Promote Skills Development

- “One reason projects are assigned is because you have to learn how to play. Let’s talk about the steps you need to do in order to complete this project. What do you have to do first?”
- “Let’s make a homework plan. Make a list of the work you have to do and the order in which you plan to do it.”

# Strategies: Flexibility

- Use social stories to help teach solutions or coping strategies to different situations.
- Structured social skills groups to help identify, practice and learn more flexible coping and problem solving strategies.
- Teach thought stopping, relaxation or coping strategies (e.g., deep breaths, calming self-talk, leaving the situation until calm, etc.).
- Help understand why strategies used in one setting or for one task may not work for another. Role-play situations ahead of time to help generate more than one outcome and more than one potential solution.

# Strategies: Flexibility

## Sample Questions/Statements to Promote Skills Development

- “Tell me three things you can do if you start your math homework and realize you can’t remember exactly how to do the assignment.”
- “Let’s talk about what you can do if you get stuck on part of this assignment and start feeling frustrated or angry.”

# Strategies: Organization

- Organize with your child and post a picture or visual cue (of organized locker/room etc.)
- Schedule a weekly time to organize (backpack, room etc.)
- Organizational strategies:
  - Binders
  - Color-coding
  - Labels
  - Checklists/Steps
  - Feedback/Reflection/Positive Reinforcement



# Strategies: Organization

## Sample Questions/Statements to Promote Skills Development






- “We’re going to spend the last 20 minutes of the day cleaning out our desks. Let’s make a list of the steps we have to go through to do this.”
- “We need a system for organizing our science notebooks. What are some sections we need to include?”

# Strategies: Self-Monitoring

- Highlight, summarize, read aloud directions
- After a task has been completed re-read instructions. Have I completed everything?
- Use self-monitoring charts/rating scales/checklists for tasks, emotions, behaviors, academic dashboard (Powerschool).

<b>Physical Education 8</b> Absences: 3 Room: A123	<b>A+</b> 100% >
<b>Physical Education 8</b> Room: A123	<b>--</b> 0% >
<b>Science 8</b> Absences: 4 <i>Previous: B+ (89%)</i> ↑ Room: B102	<b>A</b> 93% >
<b>Individuals and Societies 8</b> Absences: 6 <i>Previous: D (66%)</i> ↑ Room: B107	<b>C-</b> 70% >
<b>Algebra 8</b> Absences: 5 Room: B108	<b>B</b> 82% >

Dashboard Classes Calendar Schedule More

<b>5</b>	Rage, Furious	
<b>4</b>	Angry, Mad	
<b>3</b>	Frustrated, Confused, Annoyed, Sad	
<b>2</b>	Nervous, Worried, Anxious	
<b>1</b>	Happy, Calm, Satisfied, Pleased, Okay	

# Strategies: Working Memory



- Reading/studying: highlighting, sticky notes, underline, flashcards
- Multi-sensory input
- Repetition of orally presented information
- Simplify the language in directions.
- Chunk/break down multi-step directions.
- Use mnemonic devices (associate the information we want to remember with an image, a sentence, word, or location: acronyms, visualization, rhymes, chunking/organization)



# Strategies: Working Memory



## Sample Questions/Statements to Promote Skills Development

- “What are some ways you could remember everything you have to bring home at the end of the day?”
- “You seem to have trouble remembering to put your homework in your backpack after you’ve finished it. What’s something you could do to help you remember that?”

# Strategies: Emotional Control



- Teach students to identify emotions
- Play clips from movies/videos and talk about how the character feels
  - Pause and highlight facial expressions, body language, and other reactions.
- Find opportunities to talk about different emotions as they come up throughout a day and model appropriate expression.
- Work with students to identify how their body feels with different emotions and feelings. Identify triggers.
- Identify and teach coping skills.

# Strategies: Emotional Control



## Sample Questions/Statements to Promote Skills Development

- “We’ve had some problems with fights and arguments on the playground. What are some ways you can handle this that solve the problem and keep kids out of trouble?”
- “Sometimes kids get nervous when they take tests and it makes it hard for them to focus and remember what they studied. What are some things kids could do when that happens?”
- “You did a nice job of controlling your temper at lunch today. What helped you do that?”

# Strategies: Metacognitive

## Sample Questions/Statements to Promote Skills Development

- “Tell me how you made that decision or came to that conclusion?”
- “What’s the most important thing you need to work on tonight?”
- “What materials do you think you will need to complete this assignment?”
- “What things are the biggest distractions for you while doing homework? What do you think might work to reduce/eliminate those distractions?”

# Other Strategies

- Dedicated study space
- Optimize their browser to pull up the sites that are needed (tabs)
- Routines
- Timers: teach to calibrate and understand time, short bursts (concrete, auditory, visual, kinesthetic)
- Rewards: focus on the process not necessarily the outcome (effort, motivation, initiating, organization etc...)
- **Relationships, attachment, interpersonal safety first - executive functioning second**

# Other Strategies

## **Before** a task/problem, adults can...

- Rehearse with student what will happen and how the student will handle it
- Use verbal prompts or reminders to elicit a skill (“Remember what we practiced.”)
- Arrange for other cues, such as list, schedules, alarms, or text messaging systems.

## **During** a task/problem, adults can...

- Coach the student
- Remind the student to check list or schedule
- Monitor the situation to better understand triggers and other factors

## **After** a task/problem, adults can...

- Provide positive reinforcement
- Debrief with student. What worked? What didn’t work?

# Play & Development

Benefits of Play (well-established in research)

- Personal control and child-directed
- Intrinsically interesting and motivating
- Learning occurs through close (yet informal) interactions with materials, peers, adults
- Executive Functioning Skills
  - e.g. NATURE



# Other Considerations

- Low socioeconomic status and perceived discrimination in adults is linked to poor mental health and more health risk behaviors (Pascoe & Smart Richman, 2009).
- Such consequences in parents may alter children's EF development through prenatal environments, chaotic households, or parenting support (Buss, Davis, Hobel, & Sandman, 2011; Hughes & Ensor, 2009).
- Consider what practices within classrooms that make the understanding and internalization of task rules or questionnaires more demanding for bilingual students (Brooks-Gunn & Markman, 2005).



# Mindfulness and Regulation

A study by UCLA showed 78% of participants noticed a reduction of overall ADHD symptoms when they regularly used mindfulness practices, even practice sessions as short as five minutes. So far, research for EF/ADHD consistently finds mindfulness effective in increasing attention, working memory, self-monitoring, emotion/mood, conflict attention and impulse control (add.org).

- Square Breathing
- Apps (Headspace, Calm, etc.)
- Yoga and other physical activity
- [Video](#)

# Strategies: Mindfulness and Executive Functioning

“Paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally”

Kabat-Zinn (1994)

# Activity: The Mindful HALT

H is for Hungry

A is for Angry or Anxious

L is for Lonely

T is for Tired

Bringing awareness to our basic bodily needs give us information about what we need to stay healthy, regulate our brain, regulate our impulses, and to think clearly.

# Thank you

Please complete a brief evaluation:

**<http://bit.ly/EFTalk>**

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