

# An Overview of Executive Function

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# What is Executive Function?

- ▶ As stated in *Executive Function 101*, it is a set of mental processes that helps us connect past experience with present action.
- ▶ *School Specialty, Inc.* states that Executive Functions are the cognitive processes that occur in the frontal lobe area of the brain that allow us to plan, organize, make decisions, pay attention, and regulate behavior. They allow us to solve problems and evaluate the decisions we make.

# Executive Function 101 eBook

- ▶ Executive Function 101
- ▶ <https://www.understood.org/~media/images/categorized/ebooks/executivefunction101ebook.pdf>

# Troubleshooting

- ▶ Your child may have problems with EF if they have trouble:
  - ▶ Planning projects
  - ▶ Comprehending how much time a project will take to complete
  - ▶ Telling stories (verbally or in writing), struggling to communicate details in an organized, sequential manner

# Troubleshooting

- ▶ Your child may have problems with EF if they have trouble:
  - ▶ Memorizing and retrieving information from memory
  - ▶ Initiating activities or tasks, or generating ideas independently
  - ▶ Retaining information while doing something with it, for example, remembering a phone number while dialing

# Executive Function Behavioral Categories

## ▶ Impulse Control

- ▶ The ability to stop and think before acting

## ▶ Emotional Control

- ▶ The ability to manage feelings by thinking about goals

## ▶ Planning/Prioritizing

- ▶ The ability to create steps to reach a goal and to make decisions about what to focus on

# Executive Function Behavioral Categories

## ▶ Flexibility

- ▶ The ability to change strategies or revise plans when conditions change

## ▶ Working Memory

- ▶ The ability to hold information in mind and use it to complete a task

## ▶ Self-Monitoring

- ▶ The ability to monitor and evaluate your own performance

# Executive Function Behavioral Categories

## ▶ Task Initiation

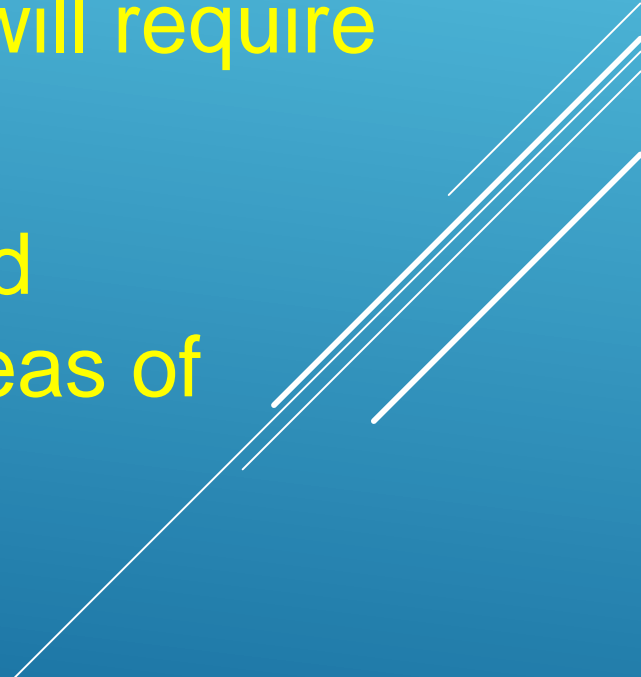
- ▶ The ability to recognize when it is time to get started on something and begin without procrastinating

## ▶ Organization

- ▶ The ability to create and maintain systems to keep track of information or materials



# Don't despair ...

- ▶ While some kids will independently figure out ways to develop their executive skills, other children will require extra support to develop these skills.
  - ▶ The good news is that you can help your child recognize, improve and work around their areas of executive dysfunction.
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# Executive Function & Learning

Five areas of Executive Functioning that affect learning.

- Organizing
  - Prioritizing
  - Shifting/Thinking Flexibility
  - Accessing Working Memory
  - Self-Monitoring/Self-Checking
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# Organizing

- ▶ Organization involves arranging possessions, information or tasks into a structured whole so that the parts are coordinated efficiently.
- ▶ Key areas where students face organizational challenges are:
  - ▶ Homework
  - ▶ Long-term projects
  - ▶ Studying
  - ▶ Writing

# Organizing

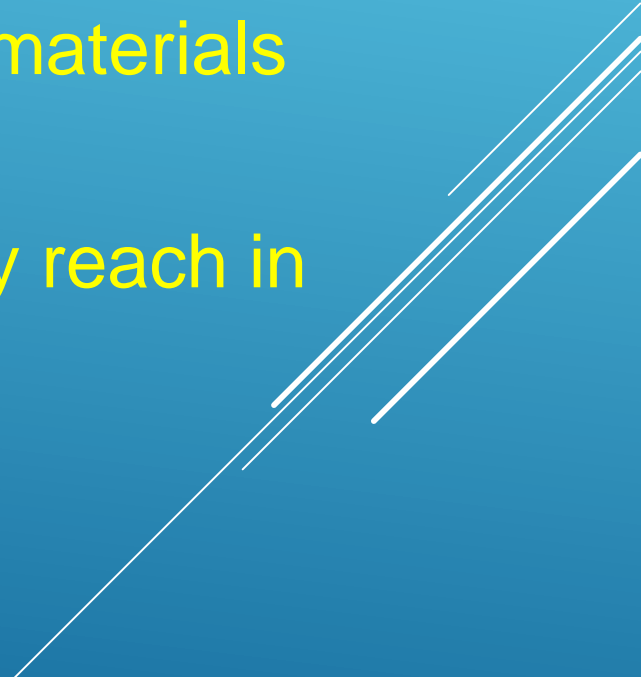
## ▶ Tips to help with Organizing:

- ▶ Organizing Time: Use a family calendar, use an student calendar, schedule fun activities as well as obligations
- ▶ Organizing Tasks: break complex tasks into manageable chunks, write down important tasks in a calendar to allocate time accordingly
- ▶ Organizing Materials: keep your workspace organized; store like materials in different sections, keep reference materials near the workspace, set a regular time for clearing out and organizing backpack, use a brightly colored folder to take important papers to and from school

# Prioritizing


- ▶ Prioritizing is closely linked to organizing. Students need to prioritize when they do the tasks.
- ▶ Prioritizing Tasks:
  - ▶ Encourage kids to prioritize homework based on due dates, difficulty level, or the level of stress
  - ▶ Encourage them to list the steps needed to complete a long-term project
  - ▶ Help them sequence tasks logically

# Prioritizing


- ▶ **Prioritizing Materials:**
    - ▶ Show kids how to review homework and gather materials before starting their work
    - ▶ Store the most commonly used items within easy reach in accessible locations
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# Prioritizing

## ▶ Prioritizing Tips:

- ▶ You know your child best so use that knowledge of how your child thinks and works
  - ▶ Focus first on short-term strategies
  - ▶ Start small
  - ▶ Keep it simple
  - ▶ Collaborate with your child and their teachers
  - ▶ Lead by example
  - ▶ Create comfortable routines
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# Shifting/Thinking Flexibility

- ▶ As a student advances through grade levels and the curriculum becomes more complex, they must be able to interpret information in more than one way and to change their approaches and strategies.
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# Shifting/Thinking Flexibility

- ▶ Tips for helping your child become a more flexible thinker:
  - ▶ Do activities that involve multiple-meaning words, word categories and number approaches.
  - ▶ Help your child recognize differences in language by visualizing and discussing jokes, riddles, puns, and multiple meaning words.
  - ▶ If your child should come across a word they don't understand, encourage them to stop reading and ask questions to learn the meaning of the word.


# Shifting/Thinking Flexibility

- ▶ Tips for helping your child become a more flexible thinker:
  - ▶ When doing a writing task, if your child gets stuck, encourage them to use strategies to organize and prioritize the information such as graphic organizers or a three column note-taking system.
  - ▶ Show your child how to look for alternative approaches to solve a math problem.

# Shifting/Thinking Flexibility

- ▶ Tips for helping your child become a more flexible thinker:
  - ▶ Studying for test and quizzes:
    - ▶ They need to study differently for different kinds of tests.
    - ▶ Different study strategies may be needed in different subject areas.

# Accessing Working Memory

- ▶ While working memory isn't one of the Executive Functions, it is a foundation that supports the Executive Functions.
  - ▶ There are two types of Working Memory:
    - ▶ Verbal working memory
    - ▶ Visual-spatial working memory
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# Accessing Working Memory

- ▶ Tips for helping a child with poor Working Memory:
  - ▶ Know your child's weaknesses, but play to their strengths.
  - ▶ Help compensate for a weakness.
  - ▶ Reinforce what works.
  - ▶ Use working memory as a floodlight to plan action.

# Self-Monitoring/Self-Checking

- ▶ This is an executive skill that requires students to recognize when and how to use specific strategies, check the effectiveness of these strategies and adjust strategies in relation to the task at hand.
- ▶ You can model this behavior by talking through your own checklists, reviewing and revising plans, and discussing how to avoid errors.

# Self-Monitoring/Self-Checking

## ▶ Strategies to try:

- ▶ Reading Comprehension: read single sentences or small chunks of text and then check for understanding; teach your child to think critically by discussing the characters, language use and connections between themes and details.
- ▶ Writing: help your child review their most common errors and create a list to watch out for; suggest they use different colored pens when editing; try reading out loud to check for errors

# Self-Monitoring/Self-Checking

## ▶ Strategies to try:

- ▶ Math: Show your child how to check work for accuracy; create a personalized checklist of identifying past errors.
- ▶ Homework: Use silly phrases or songs as reminders to pack needed materials in their backpacks; encourage them to get into the habit of checking over their homework; keep a clock nearby so they can monitor the time spent on each assignment.



# Self-Monitoring/Self-Checking

- ▶ **Strategies to try:**

- ▶ **Studying and Test Taking:** review study guides to help them set up a study schedule, encourage them to create a list of things to review before tests.
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# Executive Function, Behavior & Emotions

- ▶ Executive Function skills allow us to control our impulses and emotions, be flexible, plan and organize.
- ▶ Tips:
  - ▶ Praise your child's effort.
  - ▶ Communicate with teachers and other school staff. Use a common language between home and school.
  - ▶ Set clear and consistent rules that have consequences.

# Executive Function in Social Situations & Relationships


- ▶ Social skills, just like academic skills, often must be taught especially to children who struggle with them.
- ▶ Tips:
  - ▶ Observe your child in a social situation and then discuss it with them.
  - ▶ Develop a simple signal you can use to discourage behaviors.

# Executive Function in Social Situations & Relationships

## ▶ More tips:

- ▶ Generalize a skill that has been learned so your child can learn how behaviors can be applied in different situations.
- ▶ Stay non-judgemental: avoid your inner Mama Bear!
- ▶ Provide consistent, ongoing encouragement and support, but try to avoid over-praise. Simply let them know you appreciate their efforts.


# Executive Function Curriculum

- ▶ **School Specialty, Inc.**
    - ▶ Introduction to Parents
    - ▶ Homework Support for Your Child
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# Executive FX Accommodations

- ▶ Jennifer Rahschulte MEd OTR/L ATP  
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Occupational Therapist  
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- ▶ Executive FX Accommodations

# Parents with Voices Schoology Group

- ▶ Check out our Schoology Group for this presentation and other resources and activities.
  - ▶ To join our group, send an email to Fran or LeRae with your name and names of the buildings your children attend.
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