## Executive Functioning Challenges for ASD Students

Is your child overwhelmed by where to start, struggling to meet deadlines and avoiding tasks?

Marci Skigen, Founder of Enhance EFS Rachel Sushner, M.Ed.

## By the end of the hour, you will learn about...

- Multiple executive functions (EF)
- Strategies to support EF needs
- EF accommodations and modifications

Have an opportunity to ask questions!

#### What are Executive Functioning Skills?

Brain-based skills that enable us to focus our attention, remember instruction, plan and execute tasks.

## Brain Structure

The back of the brain is where information already learned is stored. The front part of the brain is where you use this information to be socially effective and succeed in life. This prefrontal cortex mediates executive functioning and it contains four major circuits.

- The "what" circuit controls working memory, helping you execute plans, goals, and specific steps needed to complete a project.
- The "when" circuit helps you organize the order in which you complete activities, and address timelines.
- The "why" circuit controls emotions what you think about, and how you feel.
- The fourth "how" circuit controls self-awareness of your feelings and experiences.

Students with executive functioning challenges and/or ADHD may experience impairments in one or more of these circuits and, therefore, their symptoms may touch memory, planning, emotional regulation, and/or social skills.

## What do Executive Functioning challenges look like at home and school?

### Metacognition

The ability to think about your thought process, pausing to look at what you are doing; self-monitoring; self awareness.

Are you able to reflect and evaluate choices/actions to inform future ones?

What You Might See	What You Can Try
<ul> <li>Makes repeated errors that have similar or the same consequences</li> <li>Overconfident</li> <li>Unable to, or does not, evaluate conflicts/resolutions</li> <li>Surprised by a poor grade or negative feedback</li> </ul>	<ul> <li>Increased "wait time" for a response</li> <li>Provide structured choices</li> <li>Facilitate reflective/introspective thinking</li> </ul>

## Working Memory

The ability to keep track of information we need (the brain's notepad)

Are you able to remember all of the directions without missing a step or writing them down?

What You Might See	What You Can Try
<ul> <li>Having to be reminded to complete a task</li> <li>Requests for clarification of task</li> </ul>	<ul> <li>Develop routines</li> <li>Use checklists for tasks with multiple steps</li> <li>Break big chunks of information into smaller pieces</li> <li>Play memory games</li> </ul>

## Response Inhibition

The ability to control your impulses

Can your brain say "no" to itself and listen?

What You Might See	What You Can Try
<ul> <li>Blurting out or interrupting (unrelated to medical cause)</li> <li>Engaging in risky behavior</li> </ul>	<ul> <li>Provide prompting to "stop and think"</li> <li>Play games that require turn taking</li> <li>Model response inhibition</li> <li>Review directions</li> <li>Avoid surprises</li> </ul>

#### **Task Initiation**

The ability to get started on a task

Are you able to get started on things you don't want to without being asked?

What You Might See	What You Can Try
<ul> <li>Freeze up and/or are unsure where/how to begin a task</li> <li>Procrastination</li> <li>Inaccurate estimate of task duration</li> </ul>	<ul> <li>Use a timer to count down time to get to work</li> <li>Create schedule for chores/homework - establish routines</li> <li>Do a physical activity before beginning a work task</li> <li>Share a model of expected outcome before getting started</li> </ul>

## Planning & Prioritizing

Knowledge of the planning process and the ability to make a plan, breaking down tasks into smaller pieces

Are you able to break a big project into steps and get it done on time?

What You Might See	What You Can Try
<ul> <li>Difficulty determining which parts of the project are most important</li> <li>Difficulty utilizing a planner</li> </ul>	<ul> <li>Number tasks in order of deadlines</li> <li>Complete one task/step at a time</li> <li>Schedule time to complete work during your most productive hours</li> <li>Create a master list and schedule time to review it</li> </ul>

## Organization

The ability to organize thoughts and materials

Does your brain organize language, both spoken and written? Do you keep your "stuff" where you can find it?

What You Might See	What You Can Try
<ul> <li>Losing a train of thought</li> <li>Speaking in non-sequential order</li> <li>Misplacing items</li> <li>Messy room/personal space/backpack/binder</li> </ul>	<ul> <li>Color-coded folder system (materials)</li> <li>"Launch pad" near the front door (materials)</li> <li>Graphic organizer (thoughts/ideas)</li> <li>Planner (thoughts/ideas)</li> <li>Guided cooking (thoughts/ideas)</li> </ul>



## Time Management

The ability to have an internal awareness of the passage of time

Are you on time for commitments/classes/deadlines? Do you use your time efficiently?

What You Might See	What You Can Try
<ul> <li>Turning assignments in late</li> <li>Late to or misses activities</li> <li>Oversleeps</li> <li>Overestimates/ underestimates how long a task will take</li> </ul>	<ul> <li>Visual timers</li> <li>Analog clocks</li> <li>Using break wisely</li> <li>Start with smaller/easier tasks</li> </ul>

## Goal-Directed Persistence

The ability to stick with and finish a task to completion.

Do you finish things or do you tend to have partially completed assignments or projects?

#### What You Might See

- Incomplete assignments
- Completes assignments but does not submit
- Burst of inspiration, but struggles to follow through

#### What You Can Try

- Create incentives and rewards for completion of goal
- Clearly define goal and relevance
- Establish and break down appropriate goals
- Identify barriers
- Reflect and revise plans, as needed

## **Flexibility**

The ability to adapt and shift our thought patterns in response to a given situation.

Do you have difficulty transitioning from one task/activity to another or adapting to change in a routine?

# What You Can Try Rigid thinking Unable to "roll with the punches" Difficulty with perspective taking Struggling to reset when something goes wrong or is unexpected What You Can Try Social stories Dialectic thinking Notice and praise the times your child is flexible Practice hypothesizing when you are watching TV/Movie, reading a book

#### **Sustained Attention**

The ability to direct and focus thought on a specific task for a duration of time.

Are you able to stay focused on a task despite distractions (internal/external)?

What You Might See	What You Can Try
<ul> <li>Incomplete assignments</li> <li>Daydreams</li> <li>Fidgets</li> <li>Easily bored</li> </ul>	<ul> <li>Hands on activities</li> <li>Ask your child to repeat directions back</li> <li>Use assistive technology to promote interest</li> <li>Take frequent breaks</li> <li>Fidgets</li> </ul>

### **Emotional Control**

The ability to control emotions and maintain focus on a task

Are you able to keep working when you don't feel like it?

What You Might See	What You Can Try
<ul> <li>Overreacts to situations</li> <li>Feels judged when given constructive feedback</li> <li>Depression, fear, anxiety, anger, overwhelm</li> <li>Stomach aches, headache, rapid heartbeat, change in sleep patterns</li> <li>Challenged family and/or peer relationships</li> </ul>	<ul> <li>Positive self-talk</li> <li>Identify and reduce triggers</li> <li>Mindfulness</li> <li>Attention-shifting strategies</li> <li>Being kind to future self</li> <li>Aim for regulation, not repression</li> </ul>



#### **Accommodations & Modifications**

#### **Accommodations Modifications** Accommodations enable equitable Modifications change what the access to instruction (levels the student is taught or expected to learn playing field) Modifications are provided to Accommodations are changes in how students who require additional the student learns or accesses the support to accommodations Modifications can be used in material Accommodations are changes in conjunction with accommodations Modifications are changes to content timing, formatting, setting, scheduling, response and/or rigor, test and assignment expectations and academic presentation standards

#### Accommodations for EF Challenges at School

- Visual: schedules, directions, class rules, expectations, timer, etc.
- Break down assignments into smaller steps with sub-deadlines
- Preferential/flexible seating
- Fidgets
- Teacher/peer notes
- Extra response time
- Reduced distraction work environment (clutter free/headphones if needed for noise reduction)
- Organizational tools to keep the student's desk organized
- Fewer items per page/line
- Organizational aids graphic organizer, outline, planner, checklist, etc.

#### Modifications for EF Challenges at School

- Reduce number of questions on an assignment/test
- Provide alternative assessments to demonstrate knowledge (oral, written, project-based)
- Reduce the variety of tasks
- Provide alternate curriculum
- Pace learning differently
- Graded using a different standard

## Not Every Accommodation/Modification Fits Every Child!

- Accommodations/modifications should be meaningful and relevant to executive functioning barriers
- The laundry list hazard
- Self-awareness, reflection and self-advocacy

#### Final Thoughts on Executive Functioning

- EF challenges can exist with ASD, learning differences and other diagnoses
- EF deficits can be chronic, change with age, and/or emerge when someone is experiencing temporary stress.
- If your child has ADHD, you may find starting with the treatment of ADHD leads to diminishing problems with EF.
- Even with ADHD treatment, EF challenges may be best addressed through the intervention of an executive functioning coach or specialist
- When EF challenges exist alongside social/emotional concerns, such as depression, anxiety or other mental health concerns, mental health is addressed as the first priority.

