



Autism Spectrum Disorders Information for Families

Autism Spectrum Disorders Executive Functioning Skills

What are executive functioning skills and their impact on students with Autism Spectrum Disorders?

Executive functioning has become a growing area of research. If you were to Google 'Executive Functioning' you are likely to find this general definition. "The executive functions are a set of processes that all have to do with managing oneself and one's resources in order to achieve a goal" (LD – online). However, researchers do not always agree on the separate categories that make up executive functioning skills. Some researchers break executive functioning into as few

as 4 separate skills while others utilize 12 or more skill areas to describe executive functioning. Over the next three newsletters we will be addressing 12 skill areas; providing a definition, examples, and strategies for each area. Along with this information we will provide additional resources for you to investigate.

The 12 areas we will discuss include: Response Inhibition, Working Memory, Emotional Control, Sustained Attention, Task Initiation, Planning/Prioritization, Organization, Time Management, Goal-Directed Persistence, Flexibility, Metacognition, and Stress Tolerance.

Although anyone can have strengths and weaknesses within the areas of executive functioning research shows that students identified with Autism Spectrum Disorders tend to have higher levels of difficulty in these areas.

Before we take a closer look at 4 of the areas of executive functioning in this newsletter, let's look at how often your child uses executive functioning throughout their day.

The following information was taken from "FLIPP the Switch: Strengthen Executive Functioning Skills"; By Sheri Wilkins and Carol Burmeister

Executive Functioning Across the Day...

• To start the day

- Wake up on time.
- Plan grooming activities that don't take too long but still get the job done.
- Choose clothing that is appropriate for the temperature outside and the school setting.
- Leave the house early enough to make it to school on time.
- Get to school, arriving with enough time to get to the class on time.

• During the school day

- Listen to the teacher.
- Keep track of time and finish work on time.
- Ask for help when needed.



- Meaningfully include prior knowledge in discussions.
- Engage appropriately in groups, and wait to speak until called upon.
 - Be flexible enough to go with a new plan when something changes in the schedule.
 - Control emotions and use strategies to avoid an emotional outburst if the new plan is frustrating, or something doesn't go their way during the day.

• End of the day

- Use all these skills to complete: chores, homework, and interact with family/friends

Metacognition (Problem Solving) – The ability to know when there is a problem that needs to be solved, generate solutions, select one, and evaluate the outcome.

Metacognition Tendencies:

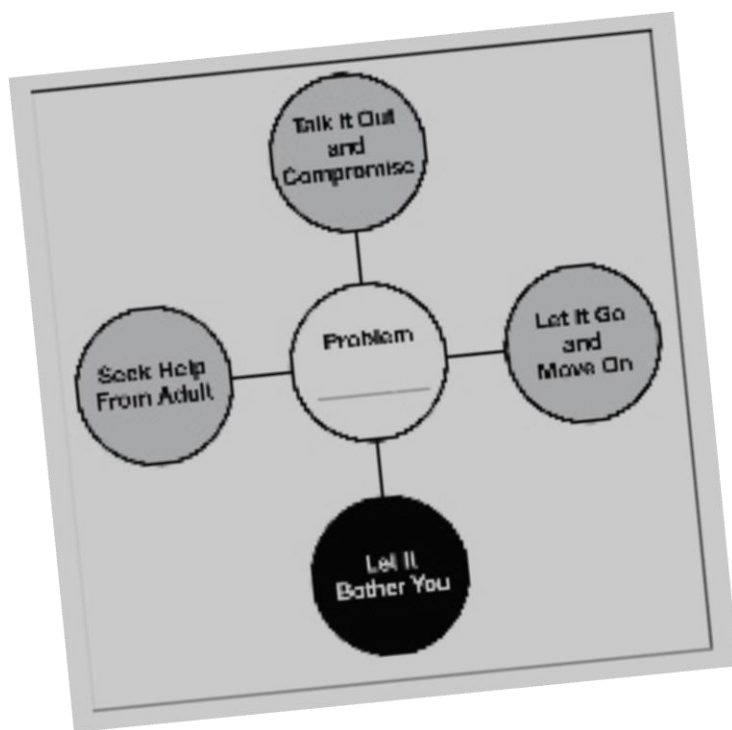
- Marked difficulties with alternate thinking (weighing problem-solving options) when stressed
- Limited adaptability (becoming easily "stuck" and overwhelmed by changes in plans and routines)
- Black and white thinking (tendency to see things or people as all good or all bad)

Metacognition Scenario:

Dominique had a rough weekend and refuses to go to school on Monday morning. On Friday evening her classmate, Kalen, posted a picture of herself in a new outfit on a social media site. Dominique responded to the post saying she thought the outfit was ugly and that it made Kalen look fat. Kalen responded by posting several unkind things about Dominique, including calling her stupid and ugly. Dominique was puzzled by Kalen's response because she felt she had been honest. After all, Kalen's post included the question, "What do you think of my new outfit?" Dominique was simply answering the question honestly. Throughout the weekend Kalen, along with several other girls, attacked Dominique on social media. This resulted in Dominique becoming more and more frustrated and increasingly fixated on the problem. Dominique's mother realized she needs a strategy to help her daughter to identify solutions to the problem, allowing her to solve the problem or let it go and move on.

Metacognition Strategies:

- Create a choice board to work through a problem
- Use the SODA strategy
 - **Stop:** teach the student to stop, before s/he enters the situation
 - **Observe:** the student is asked to observe how others are behaving (e.g. physical proximity, topics of conversation, and who is talking to whom)
 - **Deliberate:** the student is taught to deliberate, or plan in their mind, and think of what s/he is going to do or say in that situation, and how s/he is going to do it
 - **Act:** teach the student to act confidently, based on what they planned
 - Social Stories (Carol Gray)
 - Comic Strip Conversations



Emotional Control (Regulation) – The ability to manage emotions in order to achieve goals, complete tasks, or control and direct behavior.

Emotional Tendencies:

- Low frustration threshold (tendency to experience significant frustration and anger in situations that are unlikely to trigger as much negative emotion in most peers)
- Low frustration tolerance (tendency to become overwhelmed by frustration and anger)
- Reflexive negativity (tendency to respond with quick and often intense negative emotion to requests and stressors)
- Easily explosive behavior
- Marked difficulties managing emotions

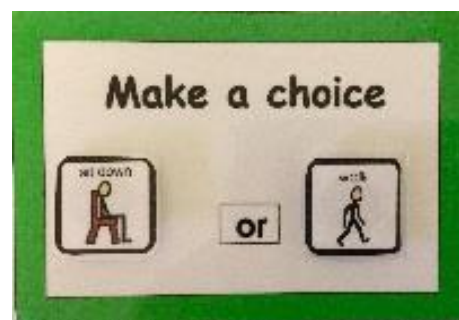
Emotional Control Scenario:

Caleb, a first grader, wants to be first in line today when his class goes to the gymnasium. Noticing his classmates beginning to gather by the door, he jumps from his seat and rushes headlong for the choice place in line. En route, he inadvertently knocks over a table holding the class's recently finished clay art projects. The assorted paperweights, bowls, and figurines crash to the floor,

with most of them shattering to bits. Before anyone can say anything, Caleb runs from the room, screaming "You all hate me!" (Example from *Executive Function in the Classroom*, C. Kaufman)

Emotional Control Strategies:

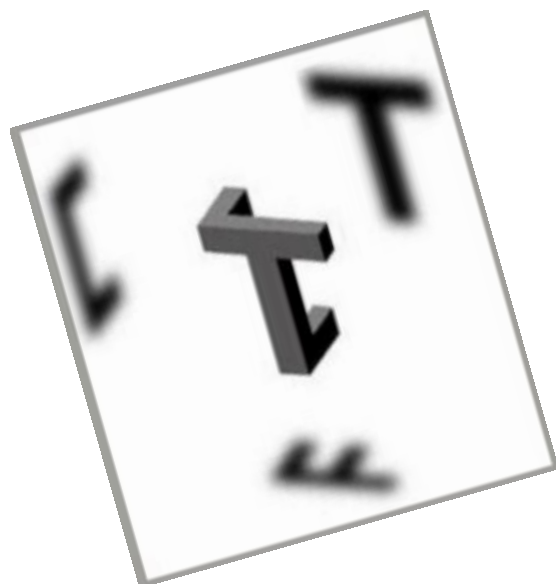
- Choice Card
- Establish Calming Routines
- Create Help and Break Cards
- Zones of Regulation® Leah Kuypers



Flexibility - The ability to revise plans in the face of obstacles, setbacks, new information or mistakes. It relates to adaptability to changing conditions.

Flexibility Tendencies:

- Children who behave in ways that are inflexible have trouble when a familiar routine is disrupted or a task becomes complicated
- They get frustrated when a first attempt to solve a problem isn't successful
- They are unable to see new ways to do familiar tasks or make another choice when the first choice proves unworkable



Flexibility Scenario:

Shaniqua had difficulty coping with unforeseen events. Though the educators who support her did their best to forewarn her when there was a change in plans at school, she was not always prepared ahead of time for modifications or adjustments, such as the appearance of a substitute teacher, a change in the assembly schedule, or a change in menu items in the cafeteria from what was posted on the lunch menu calendar. A visual scale was created with the numbers from 1 to 5, each number representing the behaviors described below. Shaniqua was taught how to use the scale in school environments to express her anxiety level and monitor her behavior.

Flexibility Strategies:

- Keep to schedules and routines whenever possible
- Give children choices. For some children, inflexibility arises when they feel someone is trying to control them. Offering choices for how to handle situations returns some of the control to them. Consider carefully the options presented
- Use social stories to address situations where the child is predictably inflexible

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.

Response Inhibition Tendencies:

- In the young child, waiting for a short period without being disruptive is an example of response inhibition while in the adolescent it would be demonstrated by accepting a referee's call without an argument
- Children with this weakness often speed through schoolwork, sacrificing accuracy and completeness along the way

Response Inhibition Scenario:

Mikael enjoys going to recess and playing with his friends. One day he discovers that he can tease the girls in his class by throwing pebbles at them. His teacher, Mr. Hernandez, catches Mikael in the act and tells him, "No throwing rocks!" The next day Mr. Hernandez catches Mikael throwing pieces of bark from the playground area at the girls. Exasperated, he bursts out, "What did I tell you yesterday? Don't throw things at people!" The next day Mikael entertains himself by chasing the girls and stepping on their heels. When Mr. Hernandez sends Mikael to the principal's office, Mikael can't understand why he is in so much trouble. After all, he stopped throwing rocks and pieces of bark. No one ever said anything about stepping on the backs of people's shoes!

Response Inhibition Strategies:

- Help your child learn to delay gratification by using formal waiting periods for things he/she wants to do or have. If your child has trouble waiting, set a kitchen timer and let he/she know when the bell rings he/she can have what was asked for
- Prepare your child for situations that require impulse control by reviewing them in advance
- Practice response inhibition in role-playing situations



Resources:

Books:

"Executive Function "Dysfunction" Strategies for educators and Parents" By: Rebecca Moyes

"Executive Functioning in the Classroom"
By: Christopher Kaufman

"Executive Skills in Children and Adolescents"
By: Peg Dawson

"Flipp the Switch - Strengthen Executive Function Skills" By: Sheri Wilkins

"Smart But Scattered" By: Peg Dawson

"Solving Executive Function Challenges"
By: Lauren Kenworthy

"The Eclipse Model" By: Sherry Moyer

"The Executive Functioning Workbook for Teens" By: Sharon Hansen

"Unstuck and on Target" By: Lynn Cannon

Websites:

<https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/executive-functioning-issues/executive-functioning-issues-strategies-you-can-try-at-home>

<https://jillkuzma.wordpress.com/teaching-ideas-for-executive-function-skills/>

<https://www.understood.org/~media/040bfb1894284d019bf78ac01a5f1513.pdf>

Reminders:

1. We would like to send out the newsletters via email, please email Jill Yost at jyost@bric.k12.mn.us to be added or taken off the email list.

Email addresses will be confidential when newsletters are sent.

2. All the newsletters will be available on the BRIC web-site, <http://www.bric-k12.com/> look under the "Resources and Services" dropdown then click on "parent resources".