

What is Executive Function?

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"Executive function is a set of mental processes that helps connect past experience with present action. People use it to perform activities such as planning, organizing, strategizing, paying attention to and remembering details, and managing time and space.

If you have trouble with executive function, these things are more difficult to do. You may also show a weakness with working memory, which is like "seeing in your mind's eye." This is an important tool in guiding your actions.

As with other learning disabilities, problems with executive function can run in families. It can be seen at any age, but it tends to become more apparent as children move through the early elementary grades. This is when the demands of completing schoolwork independently can trigger signs of a problem with executive function.

The brain continues to mature and develop connections well into adulthood. A person's executive function abilities are shaped by both physical changes in the brain and by life experiences, in the classroom and in the world at large. Early attention to developing efficient skills in this area can be very helpful. As a rule, it helps to give direct instruction, frequent reassurance, and explicit feedback.

How Does Executive Function Affect Learning?

In school, at home, or in the workplace, we're called on all day, every day, to self-regulate behavior. Executive function allows us to:

- Make plans
- Keep track of time and finish work on time
- Keep track of more than one thing at once
- Meaningfully include past knowledge in discussions
- Evaluate ideas and reflect on our work
- Change our minds and make mid-course corrections while thinking, reading, and writing
- Ask for help or seek more information when we need it
- Engage in group dynamics
- Wait to speak until we're called on

What Are the Warning Signs of Executive Function Problems?

A student may have problems with executive function when he or she has 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

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

How Are Problems with Executive Function Identified?

There is no single test or even battery of tests that identifies all of the different features of executive function.

Educators, psychologists, speech-language pathologists, and others use a variety of tests to identify problems.

Careful observation and trial teaching are invaluable in identifying and better understanding weaknesses in this area.

What Are Some Strategies to Help?

There are many effective strategies to help with the problem of executive function challenges. Here are some methods to try:

General Strategies

Take step-by-step approaches to work; rely on visual organizational aids.

Use tools like time organizers, computers or watches with alarms.

Prepare visual schedules and review them several times a day.

Ask for written directions with oral instructions whenever possible.

Plan and structure transition times and shifts in activities.

Managing Time

Create checklists and "to do" lists, estimating how long tasks will take.

Break long assignments into chunks and assign time frames for completing each chunk.

Use visual calendars at to keep track of long term assignments, due dates, chores, and activities.

Use management software such as the Franklin Day Planner, Palm Pilot, or Lotus Organizer.

Be sure to write the due date on top of each assignment.

Managing Space and Materials

Organize work space.

Minimize clutter.

Consider having separate work areas with complete sets of supplies for different activities.

Schedule a weekly time to clean and organize the work space.

Managing Work

Make a checklist for getting through assignments. For example, a student's checklist could include such items as: get out pencil and paper; put name on paper; put due date on paper; read directions; etc.

Meet with a teacher or supervisor on a regular basis to review work; troubleshoot problems.

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