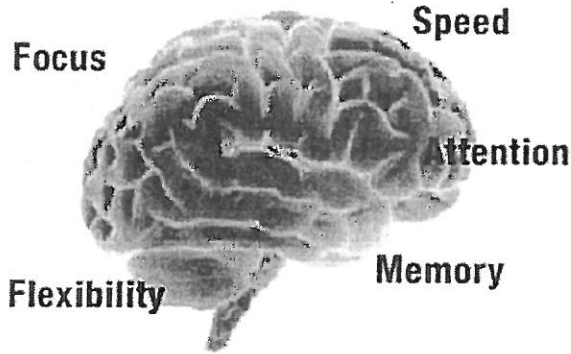


# What Is Executive Functioning?

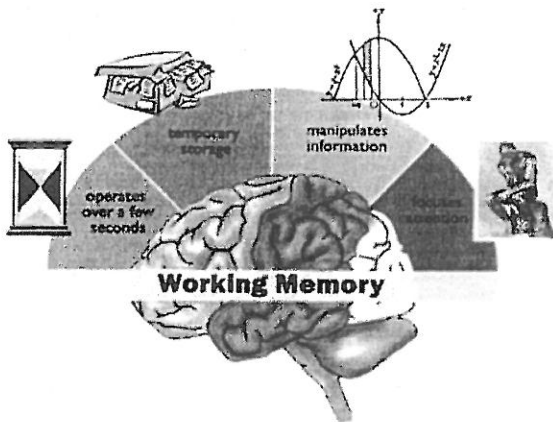


## The Basics

- The executive functions all serve a "command and control" function; they can be viewed as the "conductor" of all cognitive skills.
- Executive functions help you manage life tasks of all types. For example, executive functions let you organize a trip, a research project, or a paper for school.
- Often, when we think of problems

with executive functioning, we think of disorganization. However, organization is only one of these important skills.

The term "executive functioning" has become a common buzzword in schools and psychology offices. This is more than just a passing fad. In fact, neuropsychologists have been studying these skills for many years. We believe that the focus on executive functioning represents a significant advancement in our understanding of children (and adults!) and their unique profile of strengths and weaknesses.



## A Formal Definition of Executive Functioning

Now (drum roll please), here is a formal definition of executive functioning:

*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. It is an umbrella term for the neurologically-based skills involving mental control and self-regulation.*

## Understanding Executive Functions by Looking at Life without Them

Thinking about what life is like for someone with weak executive functioning gives us a better understanding of the way these core skills affect our ability to manage life tasks. Walk in their shoes!!!!

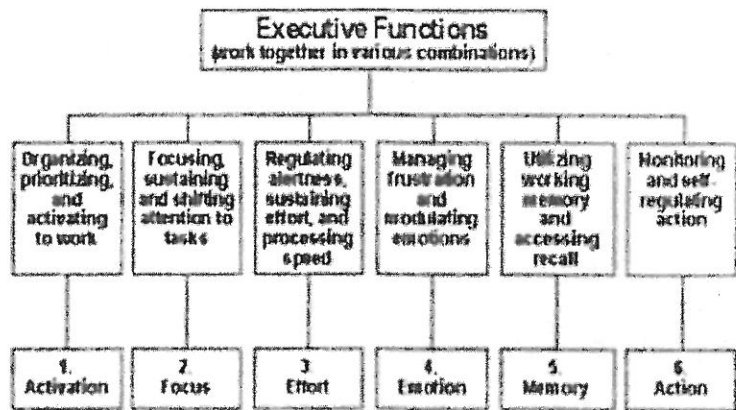


## A List of Executive Functions

1. **Inhibition** - The ability to stop one's own behavior at the appropriate time, including stopping actions and thoughts.
  - The flip side of inhibition is impulsivity; if you have weak ability to stop yourself from acting on your impulses, then you are "impulsive."
2. **Shift** - The ability to move freely from one situation to another and to think flexibly in order to respond appropriately to the situation.
3. **Emotional Control** - The ability to modulate emotional responses by bringing rational thought to bear on feelings.
4. **Initiation** - The ability to begin a task or activity and to independently generate ideas, responses, or problem-solving strategies
5. **Working memory** - The capacity to hold information in mind for the purpose of completing a task
6. **Planning/Organization** - The ability to manage current and future- oriented task demands.
7. **Organization of Materials** - The ability to impose order on work, play, and storage spaces.
8. **Self-Monitoring** - The ability to monitor one's own performance and to measure it against some standard of what is needed or expected.

## Executive Functions Impaired in ADD Syndrome

X



The executive functions are a diverse, but related and overlapping, set of skills. In order to understand a person, it is important to look at which executive skills are problematic for them and to what degree.



### 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. Normally, features of executive function are seen in our ability to:

- make plans
- keep track of time
- keep track of more than one thing at once
- meaningfully include past knowledge in discussions
- engage in group dynamics
- evaluate ideas
- reflect on our work
- change our minds and make mid-course and corrections while thinking, reading and writing
- finish work on time
- ask for help
- wait to speak until we're called on

- seek more information when we need it.

These skills allow us to finish our work on time, ask for help when needed, wait to speak until we're called on and seek more information.

Problems with executive function may be manifested when a person:

- has difficulty planning a project
- has trouble comprehending how much time a project will take to complete
- struggles to tell a story (verbally or in writing); has trouble communicating details in an organized, sequential manner
- has difficulty with the mental strategies involved in memorization and retrieving information from memory
- has trouble initiating activities or tasks, or generating ideas independently
- has difficulty retaining information while doing something with it; e.g., remembering a phone number while dialing.

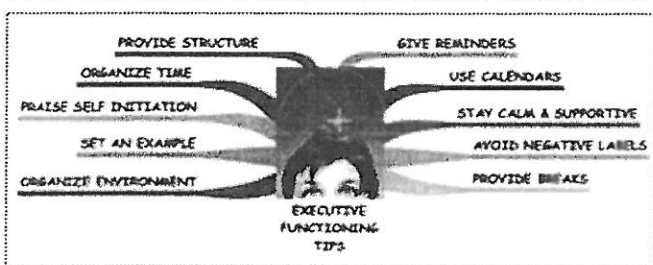
That said, it does not mean executive functioning difficulties should be used as an excuse for poor behavior. The general consensus is that these children need help developing strategies to help them stay focused, including organizational tools, memory aids, and things like sitting at the front of the class.



It is important that we help them learn how to manage their impulsive behaviors. They need to develop accountability for their actions, and may need some extra help in learning how to think before they act or react.

Rather than viewing educational disability with executive functioning difficulties as a disorder, try to see it as an inconvenience. Someone describes it as being a hunter in a farmer's world. (Hunters benefit from being distractible and impulsive, while farmers are good at being consistent with the ordinary, repetitive tasks of life.)

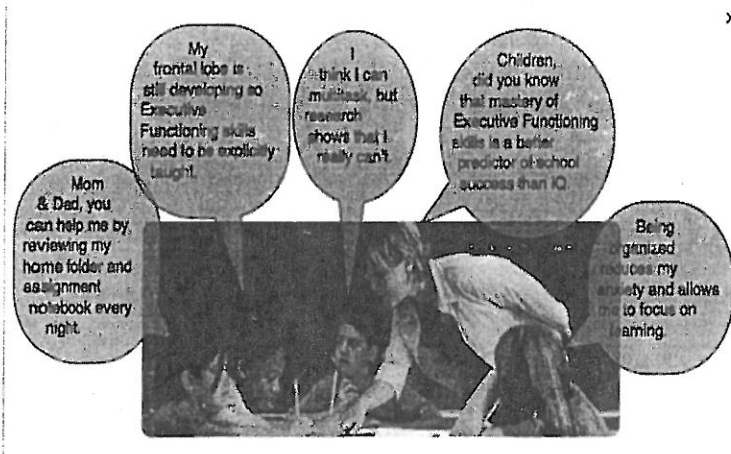
## Learning Disabilities and Executive Functioning



As it relates to a learning disability, executive functioning is a bit of a chicken vs egg situation. While students with specific areas of information

processing difficulty often also display broader executive functioning problems, this may simply reflect a breakdown in the overall 'organization' caused by a single ineffective 'department'. It can also relate to broad motivational issues brought about by years of failure and frustration.

Weakness in the executive functioning area is also often associated with an attention deficit disorder (ADHD with or without hyperactivity). In fact, evaluation of executive functioning skills is becoming a fairly standard aspect of ADHD diagnosis. Unfortunately, as with a learning disability, it is generally unclear if the apparent breakdown of executive functioning is actually the cause or the effect of the attentional difficulties.



x Intervention for executive dysfunction:

Students with executive functioning issues tend to respond well to increased structure, routine, and predictability in their lives. The use of lists and schedules can help a great deal. The important thing to remember is that you are trying to help the student develop better executive functioning skills. A common pitfall occurs when parents or teachers simply perform the

Visual supports play a double role in prevention: they help with executive functioning skills such as organization and attention, and they clarify verbal information, which can be confusing for students with language disorders.

executive functioning tasks for the student rather than helping him learn to perform the tasks for himself. While it may be necessary and appropriate to initially help to develop lists, schedules, routines, and other structures to 'get the job done', when parents or teachers do too much for too long, the student's dysfunction actually becomes more significant and unmanageable.

## Executive Functioning Intervention Strategies

What Are Some Strategies to Help? There are many effective strategies that may help such as these:

- Give clear step-by-step instructions with visual organizational aids. Children with executive functioning disorders may not make logical leaps to know what to do. Be as explicit as possible with instructions. Use visual models and hands-on activities when possible. Adjust your level of detail based on the student's success.
- Use planners, organizers, computers, or timers.
- Provide visual schedules and review them at least every morning, after lunch, and in the afternoon. Review more frequently for people who need those reminders.
- Pair written directions with spoken instructions and visual models whenever possible.
- If possible, use a daily routine.
- Create checklists and "to do" lists.
- Use positive reinforcement to help kids stay on task.
- Break long assignments into smaller tasks and assign mini-timelines for completion of each. If children become overwhelmed with lists of tasks, share only a few at a time.
- Use visual calendars or wall planners to keep track of long term assignments, deadlines, and activities.
- Adults may find time management planners or software such as the Franklin Day Planner, Microsoft Outlook calendar and task lists, or Palm Pilot helpful. If possible, try before you buy to ensure effectiveness.
- Organize the work space, and minimize clutter on a weekly basis.
- Consider having separate work areas with complete sets of supplies for different activities. This reduces time lost while searching around for the right materials for a task.
- Try to keep your strategies consistent across classrooms, at home, or in the workplace. People with executive functioning disorders are more likely to do well when their routines are similar in different settings.

As with all interventions, it is important to be aware of how they affect the person with executive functioning disorder. If the person is not helped with the strategy or is making no progress after a reasonable amount of time, look for a better way. Older children and adults may be able to help identify more effective strategies or ways to adjust strategies for more effectiveness. Considering their preferences is an important part of developing an appropriate intervention program. One of the most important things to remember about executive functioning disorders is that this is as much of a disorder as any other. Although it is an invisible disability, it can have a profound effect on all aspects of a person's life. Be prepared to share this information with teachers, co-workers, or supervisors as needed to ensure the disorder is not mistaken for laziness or carelessness.

[More on Executive Functioning from NCLD.org](http://www.nclld.org)

