



## What are Executive Functions?

Executive functions (EFs) are cognitive processes involved in problem-solving and goal-directed behavior. They help us regulate our thoughts, feelings and behaviors and manage our time and resources as we undertake and complete tasks. A student's ability to activate and apply EFs such as attention, judgment, planning, and behavioral regulation can have long-term implications for academic and personal success.

## What do EF deficits look like?

EFs vary considerably from person to person, and each person has relative strengths and weaknesses. Individuals considered to have EF deficits are those who demonstrate a **chronic pattern** of difficulty with more than one of the following processes:

- Inhibition/impulse control – The ability to stop one's own behavior and think before acting. For example, the student might agree to join friends for a social activity without first checking to see if he or she has homework or studying that must be completed.
- Flexibility/shifting tasks – The ability to change strategies or revise plans when conditions change. The student might have difficulty adjusting if the instructor changes from a lecture to group work and back to a lecture during a class session.
- Emotional control – The ability to manage feelings or emotional responses by considering goals or thinking rationally about the feelings. In class, the student might voice anger over a low grade or become argumentative in defending a strongly held opinion, which could cause conflicts with classmates and professors.
- Working memory – The ability to store information briefly in mind and use it to complete a task. Students might have difficulty listening to lectures and taking notes at the same time.
- Task initiation/getting started – The ability to recognize when it is time to get started on something and to begin without procrastinating. The student might have difficulty focusing on and starting a long-term assignment.
- Planning/organization/setting priorities – The ability to create steps to reach a current or future goal and to make decisions about what to focus on. The student might not know when to start a project that assigned well in advance of the due date and might have trouble understanding how to break assignments down into manageable steps.
- Organization of materials/tracking systems – The ability to create and maintain systems to keep track of information or materials. The student might have difficulty keeping up with syllabi, assignments, and important course-related materials.
- Self-monitoring – The ability to monitor and evaluate one's performance and recognize the need for change. A student might not monitor the effectiveness of his or her study strategies and so might not abandon or revise strategies that have failed in the past.