

LD/ADHD: Why Some Students Struggle

Est. Time: 30 Minutes

Objective

Better understand why some students, especially those with learning disabilities (LD) or attention-deficit/hyperactivity disorder (ADHD), struggle with academic tasks.

Overview

A significant number of students with LD and ADHD struggle academically. This is especially the case when they encounter the academic demands of high school, including the large amounts of information presented in textbooks and during lectures, homework assignments, projects, and papers for multiple classes. One reason students struggle, despite their hard work and effort, is because they have deficits in executive functions, the mental process that control and coordinate activities related to learning.

The table below highlights some of the differences between high and low achievers (e.g., struggling students) in four executive function processes related to learning.

Executive Function Process	High Achievers	Low Achievers
Processing Information	<ul style="list-style-type: none"> • Connect information to prior knowledge • Identify the important concepts to study • Extract key information from lectures • Take notes on important information • Monitor their understanding of content 	<ul style="list-style-type: none"> • Do not activate prior knowledge • Do not know what information to study • Have difficulty identifying important information during lectures • Focus on irrelevant information • Do not take notes, take inadequate notes, or try to record everything the teacher says • Do not monitor their understanding of content
Retaining and Recalling Information	<ul style="list-style-type: none"> • Employ strategies to remember information • Develop their own strategies to remember information 	<ul style="list-style-type: none"> • Have difficulty remembering information • Use ineffective or inefficient strategies to recall information (e.g., trying to remember information through repetition)

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Executive Function Process	High Achievers	Low Achievers
Organizing Materials and Managing Time	<ul style="list-style-type: none"> • Stay focused and on task • Use a system to keep information for different subject areas organized (e.g., separate notebooks) • Bring all supplies to class • Have a system for keeping track of assignments • Complete and turn in assignments on time • Plan and schedule time to complete a task 	<ul style="list-style-type: none"> • Are easily distracted and engage in off-task behavior • Do not have a system for organizing information for different subject areas • Forget to bring items to class • Have difficulty keeping track of assignments and turning them in on time • Have trouble estimating how long a task will take • Run out of time when working on a project • Require more time than peers to complete tasks
Selecting, Monitoring, and Using Strategies	<ul style="list-style-type: none"> • Are strategic about studying • Can use a variety of strategies flexibly and generalize to other situations 	<ul style="list-style-type: none"> • Do not know how to study • Forget to use a strategy • Have difficulty using a strategy in a different content area or situation • Lack knowledge of an appropriate strategy • Use inappropriate or ineffective strategies • Use the same, often ineffective, strategy for all academic tasks

Too often the response of teachers is to conclude that low-achieving students are not trying hard enough, don't care about school work, or are simply lazy. Consider the following examples.

Example A

London's high school biology teacher assigned a chapter to read for homework. London spent three hours reading the text, but the next day he failed the chapter quiz and could not answer any of the questions posed during class discussion. His teacher assumes that he didn't read the assignment.

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Example B

Mirabelle has always excelled in school, that is, until she entered high school. Although she seems to pay attention during class and does well on tests, Mirabelle often fails to turn in homework assignments. In addition, this year Mirabelle turned in one large project late and another that was incomplete. Several of Mirabelle's teachers are starting to wonder if she cares about passing their classes.

Example C

Tate has the same middle school teacher for reading and science. His teacher has spent a lot of time during reading class teaching the students comprehension strategies (e.g., identifying the main idea, summarizing, monitoring comprehension). Tate's performance has improved on tests and assignments in his reading class. However, Tate is still struggling in science. Tate's teacher is perplexed. Although both subjects require good reading comprehension skills, Tate doesn't seem to glean information from or grasp the main ideas of the science text.

Questions/Discussion Topics

1. Although he spent three hours reading the chapter, London was not able to recall the information.
 - a. Which executive function process might explain London's performance?
 - b. Use information from the table to justify your response.
2. Although Mirabelle is attentive in class and does well on tests, she struggles with turning in assignment or completing projects on time.
 - a. Which executive function process might be the cause of Mirabelle not turning in assignments or completing projects on time?
 - b. Discuss several items from the table that might explain her behavior.
3. Tate is not performing well in science class even though he has made gains in reading class.
 - a. Which executive function process might explain Tate's performance?
 - b. Use information from the table to justify your response.