Developing Efficient Study Habits in High School Students

The key to a less stressful exam season

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"But I DID study...." How many parents have heard that one before? Let's explore this statement a little bit further. Firstly, are your teens putting in the time, but not getting the results? Does the mention of studying result in exasperated sighing, slammed doors, and raised voices? Without a doubt, studying and homework completion are some of the most common causes of household conflict. Relatedly, students with learning challenges report feeling overwhelmed, frustrated, anxious, and bored by studying. Before tension rises this exam season, it's important to make sure your teens are studying effectively and efficiently.

What's going wrong?

What if I told you that students with AD/HD and Learning Disabilities (LD) are often studying the wrong information, in the wrong order, at the wrong time, in the wrong way? Let's look at some examples. First of all, research suggests that students with LD and AD/HD are more likely to spend time studying the information that they already know, rather than prioritizing the information they don't understand. Although this may seem counter-intuitive, these students are spending far too much time engaging in inefficient strategies. While they may be putting in the hours, they tend to engage in "shallow learning," as opposed to "active learning."

For example, take Johnny, who highlights his entire page of notes until it has become a sea of yellow ink. Or Catherine, who reads her textbook over and over again, but is unable to retain any of the information. Sound familiar? This next one may be less surprising... These students also tend to procrastinate, leading to... You guessed it- Cramming! When students cram, they are less likely to achieve deep, long-term learning. While these are just some examples, research suggests that this population, in particular, needs to be taught exactly *how* to study.

Why is studying so difficult?

Firstly, study skills are not often directly taught in school, and they are skills that many students do not pick up easily on their own. In addition, studying requires a significant amount of executive functioning and self-motivation. Executive functioning is like the brain's task manager and is a key player in ensuring that students are working efficiently. Many students with AD/HD and LD have deficits in their executive functioning. As well, students with AD/HD have less dopamine in the brain (the reward hormone), resulting in difficulties staying motivated. Therefore, when the brain's task manager isn't doing its job and motivation is low, studying can become even tougher.

So, how do we make studying more efficient?

Plan ahead

- First and foremost, successful studying requires goal setting and planning. It is important to work backwards from the due dates, setting both long-term and short-term goals. Ensure the goals are specific, targetable, and achievable. For example, a goal may be, "I will put all of the chapter 1 keywords onto flashcards by Tuesday." Use month-at-a-glance calendars so that the student can look ahead at what's coming up.
- When planning the week, be sure to estimate how long each task will take (and add in 50% more time, just in case!). If the student is struggling with estimation, encourage them to make use of digital estimation tools designed for students with executive functioning difficulties (e.g., <u>Goblin Tools</u>).
- Successful studying also requires students to prioritize. Students should prioritize their time so that they are spending longer on the things that are more heavily weighted (e.g., exams that are worth a higher percentage of their overall grade). As well, they should spend more time studying the core concepts that have been regularly repeated throughout the course.
- Ensure that study sessions are short and frequent. Remember that studying longer does NOT equate to studying better. Research suggests that short and regular review sessions are actually most impactful. This lessens the forgetting curve and allows for knowledge to be stored in the long-term memory. Additionally, it is important to prioritize a good night's sleep during exam season. Without enough sleep, attention can wane. Sleep also consolidates the storage of learned information.
- Plan study sessions based on your body clock. Students should plan their daily study sessions for the times when they learn the best. This may be in the morning, after a workout, or when they first get home from school. Also, encourage your teen to avoid studying in their bedroom. This one is a common mistake. Exam season tends to bring sleep difficulties; therefore, the bedroom should be kept as a place to relax, decompress, and unwind.
- Schedule rejuvenating breaks. One research-based method for students with LD/ADHD is the Pomodoro method. The Pomodoro method requires the student to work for a window of time (e.g., 20 minutes) and then take a five-minute break. This cycle is done three to four times, followed by a longer more rejuvenating break with a small reward (e.g., 20 minutes). Set timers for breaks and encourage the student to avoid breaks that can lead to "time warps" (e.g., going on social media, playing video games etc.). Instead, choose breaks that are stimulating (e.g., going for a short walk, hanging out with a pet, drinking some tea, or doing a short meditation video.)

• Schedule in rewards. Students with AD/HD need more intense and more frequent rewards to feel as motivated as neurotypical students. One useful acronym for reward usage is the F.I.S.T acronym. This suggests that rewards should be "Frequent, Immediate, Small, and Tangible." For example, the student may decide that after their study session they are going to reward themselves with a snack or refreshing drink. Importantly, make sure to Schedule in fun! Students can get bogged down by studying resulting in burnout. Encourage your teen to schedule fun things to look forward to.

Use Active Study Strategies

One of the best ways to make studying more efficient is to make it active, as opposed to passive. Active studying requires the student to interact and engage with the material in a way that promotes deeper understanding. This is unlike passive studying, which involves simply reading or highlighting notes.

- Work with the material in a multi-sensory way. Rather than just passively reading it, listening to it, or writing it out, multi-sensory learning involves using as many sensory channels as possible to engage with the material (seeing, hearing, smelling, touching etc.). Examples of active studying may look like making flashcards that include a drawn picture, the use of colour, humour, riddles, narratives, or acronyms. If learning a complicated concept, it may involve building it with clay, acting it out with a friend, or watching videos while drawing out what's happening in each step.
- When reading textbooks, actively engage with the text by **annotating the main ideas of each paragraph.** This will keep the student engaged and thinking about what they are reading. Annotating involves writing 2 to 3 key words on a post-it note in the left margin about the main idea of each paragraph. At the end of a chapter, the student can remove the Post-its, put them in order, and try to summarize the chapter by looking at their annotated notes.
- Use elaboration to achieve deeper learning. Elaboration consists of doing something further with the new information beyond just reading it or highlighting it. This may include verbally teaching someone else about the concept, making diagrams, or making mind-maps.
- Assign meaning to the new concept. When the student is trying to learn something new, relate it to something that they already know. This allows for new information to be scaffolded on the old information, leading to deeper learning. For example, connect it to a real-life example that they have experienced.
- Use self-quizzing and avoid reviewing information in the same order each time. Practice self-quizzing using multiple different formats (e.g., multiple choice, short answer, true or false etc.). This ensures that the information is being reviewed in

several different ways, leading to deeper learning and easier retrieval. Websites such as <u>Quizlet</u> allow students to make digital flashcards and practice self-quizzing in multiple different formats.

- Use self-monitoring check-ins. For example, the student may make a monitoring flashcard that they can slide into their cue cards. Self-monitoring checklists may ask questions such as:
 - o Am I actively engaged with the material, or is my mind wandering?
 - o Am I sticking to the study plan?
 - o Am I maintaining a good pace, neither rushing through nor spending too much time on one topic?
 - o Have I taken breaks? Did I plan a reward?

Key takeaways

In summary, students with LD and AD/HD need to be taught exactly *how* to study, and not just encouraged to engage in studying. Students who are the most stressed by exams are often the ones who are studying inefficiently and therefore not achieving the desired results. While we know that developing study habits does not occur overnight, it is important to stick with it and trust the process. Implementing new routines takes time, but with practice, successful studying can certainly be achieved. Most importantly, remember that the key to successful studying involves setting goals, planning, using short and frequent review sessions, taking breaks, and using rewards to increase motivation. Lastly, active studying is one of the best ways to study smarter, and NOT harder. Happy studying!

Helpful resources for parents:

https://www.understood.org/en/articles/how-to-help-your-teen-develop-good-study-habits

https://www.additudemag.com/high-school-success-adhd-students-homework-studying/

Helpful resources for students:

https://www.iimb.ac.in/sites/default/files/inline-files/learning-Strategies-LD-Students.pdf

https://goblin.tools/Estimator

https://quizlet.com/