

High-Impact Learning Strategies

Many of the most common things students do when they sit down to study are actually not the most effective strategies. Try these learning strategies, which are proven through research to enhance recall of information and increase learning! Many of these strategies may be different from advice you've heard before about effective study, and take significant discipline and hard work. Putting in the hard work over time will lead to greater information retention and deeper learning.

Distributed Practice (Spacing): spread your study out rather than sitting down for a marathon study session right before the exam. Students who work with their course materials for a short time each day have better retention of information and higher grades than students who cram before the test. Spacing results in more exposure to the material, and the time spent is more focused.

Practice Testing: Each time you test yourself (or try to recall information/generate a response from memory rather than looking at it in front of you) you are strengthening the pathway in your brain to where that information is stored. The more times you access that information, the more fluid that memory is; in other words, the faster you can access the information. Testing yourself is one of the MOST EFFICIENT ways to learn—even though it's hard work up front, the payoff is easier recall for the exam and learning that is longer lasting.

Practice testing can take many forms:

- Flashcards
- Practice tests or end of chapter reviews
- Teaching others in a study group,
- Creating a visual aid from memory
- Re-typing your notes using minimal cues from your book

Vary your Learning Conditions: You may have heard that it's a good idea to get into a study routine that you follow every time you sit down to work—Tuesdays at 2 pm in the library, you always study History, for example. The research shows, however, that changing it up is actually the way to go. Vary the day, time, and location of your study. Changing study conditions requires greater cognitive resources, but the more effort you are expending, the deeper your learning.

Switch Subjects, Topics, and Types of activities (Interleaving): Many students sit down to study for subjects separately, moving through their course materials in order. Studies on learning suggest that even though it may be difficult for your brain to move from one subject to the next or switch from one activity to the other, doing so results in better retention. When you sit down to study, you might try doing flashcards for one chapter, and then switching to a different topic or subject and try some practice testing. Study your course material in a different order than it was presented in class. Try 20 minutes of one topic and then switch to another, and continue rotating through the material you need to cover for your various courses.

