



## Teaching Students How to Study

Stephen L. Chew ▪ January 16, 2024

College students prefer to use suboptimal learning strategies when they study (e.g., Rinella & Putnam, 2022), which can undermine their academic performance. That is especially true for first-year students, who have no experience studying for college-level classes. For these students, a poor academic performance may be deeply discouraging, possibly giving them a sense that they aren't capable of succeeding in college. First-generation college students in particular may question whether they belong in college and whether it is worth the sacrifice of time and money. A low first-year GPA may disqualify students from highly competitive graduate and professional programs, such as medical school. These students must prioritize raising their GPAs, which may affect their choice of courses and majors.

Research shows, however, that explicitly instructing students in effective study strategies can improve their study skills and their academic performance (Biwer et al., 2023; Biwer et al., 2020; Brown-Kramer, 2023; Lineweaver et al., 2022). At my institution, I've given an annual presentation for first-year students on how to study effectively since 2006. We don't schedule the presentation until about four weeks into the semester, on the assumption that students will be more receptive to the presentation after they have gone through a midterm exam period. I've also recorded the presentation, broken down into [modules](#), so students can revisit them and faculty can incorporate them into their courses. During the pandemic, I created an overview [video](#) that explains the choke points and pitfalls of student learning. If colleges offer a course to help orient students to college life, a unit on how to study effectively can be part of that course. Some faculty teach study skills as part of their courses, especially in courses primarily taken by first-year students.

In addition to my videos described above, there are now many resources to help faculty teach students how to study. Two books published just last year aimed to help people improve their learning and study skills: *Study Like a Champ* by [Gurung](#) and Dunlosky (2023) and *Outsmart Your Brain* by Willingham (2023). Both are written by cognitive scientists and meant to be accessible to a student audience. For teachers, McDaniel and Einstein (2023) described the KBCP framework (for knowledge, belief, commitment, and planning) to help instructors teach students how to regulate their learning. I also created an advance organizer that teachers can use to help students study more effectively. The organizer is a graphic display of the choke points and pitfalls of studying. A choke point is a constraint in the cognitive system that limits how quickly students can learn information, such as selective attention. A pitfall is a common trap that students fall into that undermines their studying, such as the belief that they can multitask. The organizer not only highlights the pitfalls and choke points, it lists ways of addressing each of them. Finally, the American Psychological Association initiated the Introductory Psychology Initiative, a three-year effort to improve the teaching of introductory psychology. As part of that initiative, I coauthored (with Guy Boysen) a lesson plan that faculty can use for teaching students effective study skills. The [lesson plan](#) has lecture outlines, slides, activities, and both formative and summative assessments. I've included a modified form of one of the activities at the end of this article. It is meant to initiate discussion with students on when and how to study for an exam. Students often overestimate how quickly they can learn and start studying too late to do a thorough job. In this activity, students are given five different possible study schedules they can use. They must decide the pros and cons of each one and which one they think is best. A teacher discussion guide addresses the pros and cons of each schedule from a cognitive science point of view.

Students can improve their learning by using effective study strategies, but unfortunately, they do not always use them even when they know about them. While Rowell et al. (2020) found that students were open to learning about more effective study strategies and planned to use them, their study behaviors for the next exam fell short of their intentions. Students showed an increase in use of some of the more effective learning strategies but also continued using less effective study strategies. Two other studies found that students who knew about more effective learning strategies failed to implement them for reasons such as lack of time, the amount of effort required, and lack of self-efficacy to implement the study strategies (Foerst et al., 2017; Maurer & Shipp, 2021). Teachers must not only present information about better study strategies but also demonstrate and scaffold their use. Even then, there are barriers

that students must overcome to learn to use them. As one of my students, a top student with a strong understanding of effective learning strategies, remarked to me, “I know how I’m supposed to study, but sooner or later in a semester, it comes down to cramming.”

**Download the “Planning Your Study Time” activity handout.**

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