

6.2 Studying to Learn (Not Just for Tests)

LEARNING OBJECTIVES

1. Face tests with confidence, not anxiety.
2. Learn how to use your class and reading notes to learn the material, not just to pass the test.
3. Gain key strategies for effective studying.
4. Form and participate in study groups.

You have truly learned material when you can readily recall it and actually use it—on tests or in real-life situations. Effective studying is your most important tool to combat test anxiety, but more important, effective studying helps you truly master the material and be able to apply it as you need to, in school and beyond.

In [Chapter 4 "Listening, Taking Notes, and Remembering"](#) and [Chapter 5 "Reading to Learn"](#), we set the foundation for effective learning. You learned how to listen and how to take notes. You learned some tricks for improving your memory. You learned how to read actively and how to capture information from written sources. Now we'll follow up on some of those key ideas and take the learning cycle to its conclusion and a new beginning.

The reviewing and applying stage of the learning cycle involves studying and using the material you have been exposed to in your course. Recall that in [Chapter 4 "Listening, Taking Notes, and Remembering"](#) and [Chapter 5 "Reading to Learn"](#) we emphasized the importance of reviewing your notes soon after the class or assignment. This review is largely what studying is all about.

Effective studying is an ongoing process of reviewing course material. The first and most important thing you should know is that studying is not something you do a few days before an exam. To be effective, studying is something you do as part of an ongoing learning process, throughout the duration of the term.

Studying Every Day

Studying begins after each class or assignment when you review your notes. Each study session should involve three steps:

1. **Gather your learning materials.** Take time to merge your class notes with your reading notes. How do they complement each other? Stop and think. What do the notes tell you about your material? What aspects of the material are you unsure about? Do you need to reread a part of your text? Write down any questions you have for your instructor and pay a visit during office hours. It is better to clear up any misconceptions and get your questions answered soon after you are exposed to the material, rather than to wait, for two reasons: (1) the question or doubt is fresh in your mind and you won't forget about it and (2) instructors usually build their lessons on material already presented. If you don't take these steps now, you are setting yourself up for problems later in the course.

2. **Apply or visualize.** What does this material mean to *you*? How will *you* use this new knowledge? Try to find a way to apply it in your own life or thoughts. If you can't use the knowledge right away, visualize yourself using the knowledge to solve a problem or visualize yourself teaching the material to other students.
3. **Cement your knowledge.** If you use the two-column note-taking method, cover up the right side of your notes with a piece of paper, leaving the questions in the left column exposed. Test yourself by trying to answer your questions without referring to your notes. How did you do? If you are unsure about anything, look up the answer and write it down right away. Don't let a wrong answer be the last thing you wrote on a subject, because you will most likely continue to remember the wrong answer.

Studying in Course Units

At the end of each unit, or at least every two weeks or so, use your notes and textbook to write an outline or summary of the material in your own words. (Remember the paragraphs you wrote to summarize each class or reading? They'll be very helpful to you here.) After you have written the summary or outline, go back and reread your outline from the prior unit followed by the one you just wrote. Does the new one build on the earlier one? Do you feel confident you understand the material?

Studying before the Exam

At least a week before a major exam, ask yourself these questions: What has the instructor said about what is included on the exam? Has the instructor said anything about what types of questions will be included? If you were the instructor, what questions would you ask on an exam? Challenge yourself to come up with some really tough open-ended questions. Think about how you might answer them. Be sure to go to any review sessions the instructor or your section leader holds.

Now go back and review your outlines. Do they cover what the instructor has suggested might be on the exam? After reviewing your outlines, reread the sections of your notes that are most closely associated with expected exam questions. Pay special attention to those items the instructor emphasized during class. Read key points aloud and write them down on index cards. Make flash cards to review in downtimes, such as when you're waiting for a bus or for a class to start.

More Tips for Success

- **Schedule a consistent study-review time for each course at least once a week**, in addition to your class and assignment time. Keep to that schedule as rigorously as you do your class schedule. Use your study time to go through the steps outlined earlier; this is not meant to be a substitute for your assignment time.
- **Get yourself in the right space.** Choose to study in a quiet, well-lit space. Your chair should be comfortable but provide good support. Remember that libraries were designed for reading and should be your first option.
- **Minimize distractions.** Turn off your cell phone and get away from Facebook, television, other nearby activities, and chatty friends or roommates. All of these can cut into the effectiveness of your study efforts. Multitasking and studying don't mix.
- **If you will be studying for a long time, take short breaks at least once an hour.** Get up, stretch, breathe deeply, and then get back to work. (If you keep up with your daily assignments and schedule weekly review sessions for yourself—and keep them—there should be almost no need for long study sessions.)

Studying in Groups

Study groups are a great idea—as long as they are thoughtfully managed. A study group can give you new perspectives on course material and help you fill in gaps in your notes. Discussing course content will sharpen your critical thinking related to the subject, and being part of a group to which you are accountable will help you study consistently. In a study group, you will end up “teaching” each other the material, which is the strongest way to retain new material. But remember, being in a group working together doesn’t mean there will be less work for you as an individual; your work will just be much more effective.

Here are some tips for creating and managing effective study groups:

- **Think small.** Limit your study group to no more than three or four people. A larger group would limit each student’s participation and make scheduling of regular study sessions a real problem.
- **Go for quality.** Look for students who are doing well in the course, who ask questions, and who participate in class discussions. Don’t make friendship the primary consideration for who should be in your group. Meet up with your friends instead during “social time”—study time is all about learning.
- **Look for complementary skills and learning styles.** Complementary skills make for a good study group because your weaknesses will be countered by another student’s strengths. When a subject requires a combination of various skills, strengths in each of those skills is helpful (e.g., a group with one student who is really good at physics and another at math would be perfect for an engineering course). Finally, a variety of learning styles is helpful because each of you pick up differing signals and emphases from the instructor that you can share with each other, so you will not likely miss important points.
- **Meet regularly.** When you first set up a study group, agree to a regular meeting schedule and stick to it. Moving study session times around can result in nonparticipation, lack of preparation, and eventually the collapse of the study group. Equally important is keeping your sessions to the allotted times. If you waste time and regularly meet much longer than you agreed to, participants will not feel they are getting study value for their time invested.
- **Define an agenda and objectives.** Give your study sessions focus so that you don’t get sidetracked. Based on requests and comments from the group, the moderator should develop the agenda and start each session by summarizing what the group expects to cover and then keep the group to task.
- **Include some of the following items on your agenda:**
 - Review and discuss class and assignment notes since your last meeting.
 - Discuss assigned readings.
 - Quiz each other on class material.
 - “Reteach” aspects of the material team participants are unsure of.
 - Brainstorm possible test questions and responses.
 - Review quiz and test results and correct misunderstandings.
 - Critique each other’s ideas for paper themes and approaches.
 - Define questions to ask the instructor.
- **Assign follow-up work.** If there is any work that needs to be done between meetings, make sure that all team members know specifically what is expected of them and agree to do the work.
- **Rotate the role of moderator or discussion leader.** This helps ensure “ownership”

of the group is spread equally across all members and ensures active participation and careful preparation.

KEY TAKEAWAYS

- Effective studying happens over time, not just a few days before an exam. Consistent and regular review time helps you learn the material better and saves you time and anguish as exam time approaches.
- The following are three steps to follow in each study session:
 - Gather your knowledge.
 - Apply or visualize your knowledge.
 - Cement your knowledge.
- Study groups are a great idea—provided they are thoughtfully managed.

CHECKPOINT EXERCISES

1. What do we mean by “gathering your knowledge”?

2. What study habits recommended in this section do you want to develop or improve? What specific steps will you take to start working on them?

3. Think of your toughest course. Which students in that class would you want to include in a study group? Why?
