A study conducted by Dr. Jeff Ratliff-Crain and Kathryn Gonier Klopfleisch at the University of Minnesota found that students who were successful (achieved an A or a B) in a “difficult” (30% W/D/F) upper-level psychology class utilized the following habits:

- **Read ahead**: Every successful student in the study completed the assigned readings prior to attending the lecture that would cover that particular topic.
- **Made connections**: All of the A/B students in the study made a conscious effort to connect new material they were learning with something else in their lives. They learned vocabulary by thinking up examples and discussing it with a study group.
- **Studied “smart”**: The research showed that many of the students, whether they earned A’s or F’s, studied approximately the same number of hours each week. This means that studying “more” may not improve your grade. Studying “smarter” is the most important tool that students can implement. Successful students had a number of study habits that they knew how and when to use.

★ **Steps to “Studying Smarter”**

1) **Decide what you want to do.** Think carefully about how each class fits into your college plans and what grade you would like to earn in each class. People who take time to develop goals are much more likely to achieve them. Develop a weekly study schedule. Determine when you will have time to study each week. Plan to allot two to three hours outside of class for each hour in class.

2) **Know how to use your tools.**
   - **A. Review lecture notes daily.** Your brain is wired in such a way that you will likely forget much of what you have read, seen, or heard if you do not make an effort to review it within 24 hours of first being exposed to it.
   - **B. Take notes on the readings.** If you stop after each paragraph or short section and write down what you have just learned, you are more likely to remember it later. You will also be able to assess what terms/concepts/ideas you are having difficulty understanding. If you are struggling with being able to accurately and effectively summarize the information, you may need to read and study the material again.
   - **C. Read the book before attending the lectures.** The researchers found that, without exception, each of the A/B students read the assigned reading before attending the class. In many classes, the lectures are designed to enhance material you have already read.
   - **D. Read each day.** Your brain is not wired to learn 30 pages of material at once. The A/B students in the study typically read for 45 minutes or an hour at a time.
   - **E. Get independent of books and notes.** Developing an understanding of concepts and ideas is vital in college-level work. Often, it is not effective to simply memorize definitions and concepts. If you are unable to describe in your words the main ideas and concepts that you are learning, without the help of books and notes, it is likely that you do not know the material well enough to do well on an exam.

3) **Develop a plan.**
   - **A. Set goals for each study session.** The researchers found that most of the successful students had specific goals for each study session. They decided ahead of time how many pages of the chapter they would read, how many new vocabulary words they would learn, or how long they would spend reviewing notes. Most of the successful students also determined how many days in advance they would begin to review for an exam.
   - **B. Know when you need help.** Ask for assistance from the professor, study group, study table tutors, Learning Resource Center, etc., when needed.

4) **Evaluate.**
   - **A. Look at the big picture.** Ask yourself honestly whether or not you are spending enough time on your studies. Were you happy with the grade that you received on your last exam? If you would like to change your approach to studying, then do not hesitate to seek assistance from your professor with the content of the course. If you are struggling with study skill-related issues, then seek assistance from the Learning Resource Center (Jordan Hall 136).
The researchers also noted some study habits that D/F students in the study consistently demonstrated. Just as it is important to know what to do, it is also important to know what NOT to do.

**Habit #1: Read the entire chapter two or three days before the exam, all in one sitting.**
- Some students read right before the exam because they believed that they would remember more on exam day. The problem is that your brain is not wired to effectively remember large quantities of information at once.
- People have two different types of memory – short and long-term. Students who perform well on exams have committed information to their long-term memory, which requires short review sessions over a period of time. Students who tend to do all of their studying at one sitting have likely only processed the information into short-term memory, where it will likely be forgotten or remembered incorrectly on the exam.

**Habit #2: Did not plan study times.**
- Many students make no attempt to schedule study time into their week. They often do not know what chapters they should be reading or when exams are scheduled. These students fill up “free time” with social activities and often do not sit down to study until 10 or 11 pm, at which time they are often too tired to learn effectively.

**Habit #3: Did not plan goals for study sessions.**
- Often, students waste time because they do not know what or how to study. It is most helpful to set up specific goals of what is to be accomplished during each study session. For example, a goal might be to be able to answer the questions in the study guide or chapter summary without having to look them up or to take notes on 10 pages of a particular textbook.

**Habit #4: Studied by memorizing key concepts and vocabulary words.**
- Relying purely on memorization often results in low test grades. Most college courses require you to have an understanding of how to use the concepts/vocabulary, not just repeat the definitions word for word. Often, you will need to be able to “apply” the concepts and definitions.
- Students often confuse “memorizing” and “knowing.” It is possible to memorize something and have no idea of what it really means. For example, someone who does not know anything about football could memorize a list of plays, be able to repeat them flawlessly, but have no idea how those plays are run or what players are involved in executing them.

**Habit #5: Did not take notes on readings.**
- Students often believe that taking written notes on chapters is unnecessary work, because the information is already written down for them. Students who take notes prevent themselves from “dream reading,” which occurs when students “read” but their mind is busy thinking about something else entirely. A student who can write, in his/her own words, a summary of what he/she read is engaging in effective academic reading.

**Habit #6: Chose to skip class or to not take notes during the lecture.**
- Some students believe that missing class and borrowing notes from a classmate is an effective manner in which to get information, although it is not! Written notes are the note taker’s interpretation of the lecture, and the interpretation of two different students will not be the same. As a result, the notes from a classmate are often missing important concepts/ideas.

**Habit #7: Studied in ineffective groups.**
- The researchers found that students who were earning some of the lowest grades liked to study in groups. In general, these study sessions involved a student reading off vocabulary words and others reciting definitions word for word, straight out of the book. Focusing on “memorizing” concepts, rather than “applying” concepts, will likely result in not being effectively prepared for the exam.
- Instead, it would be more effective for study groups to remain focused on, for example, summarizing a chapter section without looking at it, identifying the main ideas of a chapter, applying new concepts or ideas into new scenarios/examples, and developing and answering a list of potential test questions.

**Habit #8: Read the textbook in an ineffective manner.**
- Students who read a 30-page textbook chapter in less than four hours are likely not reading as thoroughly as they could be. When students read effectively, they stop frequently to assess how well they understand the material, take careful notes, and review what they have read.
- Effective academic reading must involve review and opportunities for explanation of the concepts/ideas that have been learned.