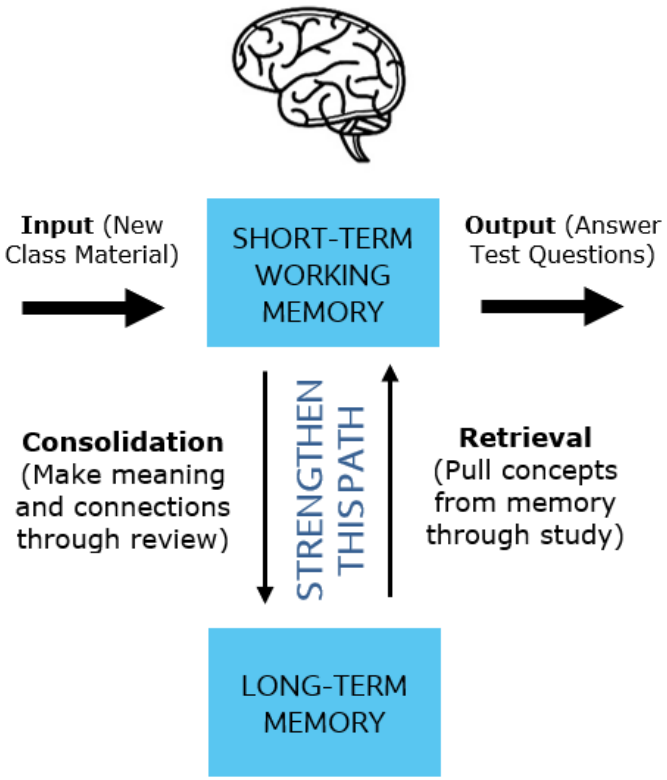
The Study Cycle and How Learning Works

The key to knowing how to study effectively in college is understanding how we learn



How the Brain Learns

Each time we learn something new, we create a new connection in our brains. Each time we engage with the material again, we strengthen that connection, making it easier to recall the material later.

Consider this analogy: You are traveling through the woods and decide to forge your own path. The first time on the path is unfamiliar, and you must push your way through all the branches. If you don't go down the path again shortly after, you will quickly forget where you traveled. Each time you travel the path again, you put in some effort to clear the path of all the branches, but you also feel more familiar and confident about finding the path again.

The Study Cycle

The Study Cycle is based on the science of how we learn and is an effective way to help you spread out your studying over several weeks, instead of cramming right before the exam. The five steps (on the next page) each require active engagement and build on each other to strengthen your learning.

Learning from Experience

Consider a time you learned something new – either a skill (like playing the guitar) or a concept (like when to use a comma). How did you use consolidation and retrieval to strengthen the pathway between your short-term and long-term memory?

Making Meaning

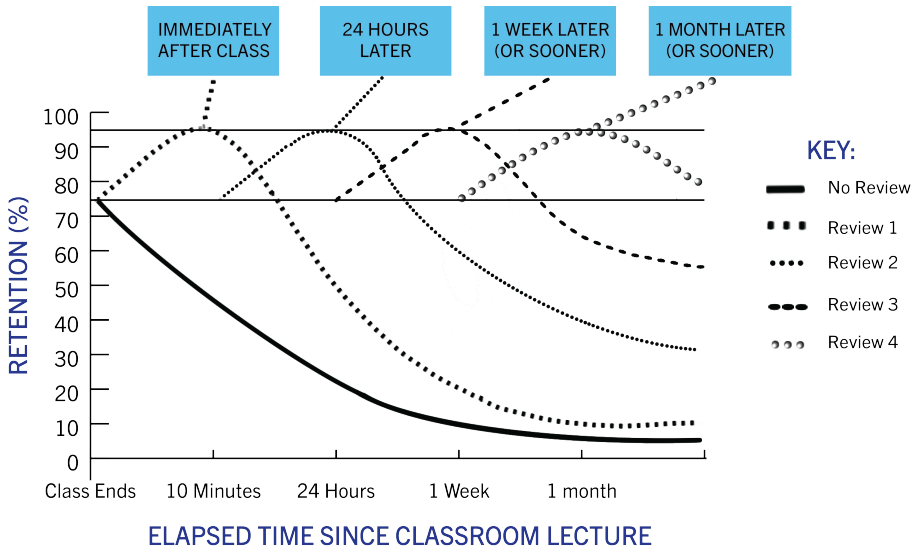
Create your own analogy to describe how learning works! Putting ideas in your own words is also an effective study strategy to understand complex topics because it creates personal meaning and connections.

PREVIEW: Before you attend class, look over the material to be covered **(10-15 min)**

- Skim the chapter or slides with a focus on objectives, headings, boldface words, and summaries.
- Note any questions you would like answered in class.
- Provides an overview so you have some context to build on during lecture.

ATTEND: Go to class! **(50-75 min)**

- Key to attending is paying attention. Actively engage and remove all distractions.
- Take meaningful notes (handwritten or electronic) based on what your instructor emphasizes.
- Ask questions you identified during preview.



REVIEW: Within 24 hours of attending class, review the material covered **(15-20 min)**

- Summarize your notes in your own words or make and use flashcards to ask questions.
- Fill in any gaps that still exist by using your text and any available materials.
- Identify any remaining questions you can ask during office hours or at tutoring/PAL.

STUDY: Studying is more than just reading notes **(30-50 min)**

- Spaced out repetition is key. Plan out 3 to 5 short, intense study sessions per class each week.
- Set a specific goal for each study session and practice retrieval instead of re-reading.
- Over the weekend, review your material from the week to make connections among concepts.

ASSESS: Periodically check in to determine if your study methods are working **(30-45 min)**

- Reflect on your study plan and ask yourself questions about what could be changed.
- Discuss concepts with classmates and try to explain big ideas in your own words.
- Regularly use self-testing to figure out what you know and what you don't know yet.

Implementing the Study Cycle

Use the space below to identify how you can implement the study cycle across your courses.

PREVIEW _____

ATTEND _____

REVIEW _____

STUDY _____

ASSESS _____

Adapted from: Stewart, A.J. (2018). An epic consequence of classroom revision of course content for first year African engineering students. *World Transactions on Engineering and Technology Education,* 16(4). 368-373. Brown, P.C., Roediger, H.L. McDaniel, M.A. (2014) *Make it stick: the science of successful learning*. Belknap Press.