“Students remember only 10 percent of what they read and 20 percent of what they hear but almost 90 percent if they do the job themselves, even if only as a simulation, according to research cited by the Federation of American Scientists.”

-Sarah Glazer

"Tell me, and I will forget. Show me, and I may remember. Involve me, and I will understand."

-Confucius

The above quotes are over 2,000 years apart, but they both relay the same information about learning and memory, and that is if you want to have strong recall you must be an active learner. What, you ask, is an active learner? It is the opposite of being passive, and it means being proactive in your education and your study.

To be an active learner a student creates a relationship with note-taking, reading, and understanding the material. This means creating context for the material you are working with. Instead of rote learning, which is simple memorization such as historical dates or vocabulary words (i.e. using flashcards), try understanding the material. Instead of memorizing historical dates, try to place those dates in context, and making connections before and after the material. If you need to memorize 1865, the end of the American Civil War, understand what came before it, what led to the war’s end, and what followed it. These connections leave a lasting impression on your long-term memory. Rote learning works in short-term memory, and the material will be lost soon after. This can happen right after an exam, or worse, before you even take it. Long-term memory lasts, well, longer.

What is the difference between short-term and long-term memory?

Short-term memory is just that: short. It lasts less than one minute. It works well when you get a phone number, but once you dial the number it is lost. New information you receive will push out what is already stored in short-term memory. Therefore, short-term memory is not the best way to study or prepare for assignments and exams.

Long-term memory, unlike short-term, is nearly unlimited in time span and capacity. When you understand the information, instead of trying to simply memorize data, it goes into your long-term memory because the associations made, and the context created, deepens the memory pattern. It goes beyond simple recall and enters a process, and that exists in long-term memory.

Let’s take, for example, remembering somebody’s name. How many times have you met someone, shook their hand, and turned away not knowing that person’s name even though they introduced themselves to you only seconds before? We’ve all been there. But why can’t we remember? Many of us say, “I’m just horrible with names.” But this is not true. It’s not a faulty memory issue. It’s because you weren’t paying full attention, and you didn’t actively incorporate the person’s name into context.

As Samuel Johnson said, “The true art of memorization is the art of attention.”