



Quizzing Yourself Helps Learning

Practicing Retrieval Facilitates Learning



Principle

Quizzing yourself helps you retain information longer.

Quotes

“Practicing retrieval shortly after learning can slow the forgetting process.”

“If you read a piece of text through twenty times, you will not learn it by heart so easily as if you read it ten times while attempting to recite from time to time and consulting the text when your memory fails” Sir Francis Bacon.

So What - Application

If quizzing yourself (i.e. practicing retrieving information) helps you retain information longer, then there are things we can do to study better.

Take a practice test. Create questions for yourself and try to recall the answers. Quiz yourself after you read to see if you can recall the information.

The Research Story

Kathleen McDermott summarizes research on learning new information by practicing recalling it. If you want to recall something, practice doing so.

For example, in one study people either took a short test on an article or re-read the whole article. On a future test, the test-takers remembered more material longer, even when they weren't given answers to the practice test.

The simplest way to practice recalling is to take a test or quiz yourself. Even if you don't get a score back on how you did, the practice itself helps you retain information longer. It might seem counter-intuitive to believe that quizzing yourself even without getting a grade can be more helpful than re-reading, but it does. This testing effect works regardless of the kind of material being studied or the age of the participant.

The research can get complex because there are several things at work here. Benefits of the type of practice and final tests (multiple choice or short answer) gets complicated, but basically short answer takes more energy, but works better for practice. When you practice recalling, did you get it right? Practice tests help you remember more information, but you'll get some of the answers wrong. That's why getting feedback on your practice tests helps even more so you can see what you actually know and don't know.

If you quiz yourself, aren't you selecting only some of the information? Yes, but studies show that quizzing helps you remember related information also. Could the results be due to individual differences? It's complicated and not tested yet. Does it work in real-world schools? Yes. Students benefit from low-pressure quizzes, which provide repeated retrieval practice. Kids did better with quizzes than re-studying information like an answer key. And the learning lasts. Given a surprise end of semester test - kids who did quizzes retained the information longer.

People don't predict well what's going to work for studying, so using research can give us better tools for learning and remembering new material. If you're cramming for a test in 20 minutes, it may be helpful to re-expose yourself to the material, but if you want to remember over the course of a semester, quizzing yourself rather than re-reading will be better.

McDermott, K. B. (2021). Practicing Retrieval Facilitates Learning. *Annual Review of Psychology*, 72(1), 609–633. <https://doi.org/10.1146/annurev-psych-010419-051019>

