

Remembering What You Learn

Psychologists and educators have known for years that cramming the night before may help you pass a test but won't help you recall the material weeks or even days later. Learning new material stays in memory longer when study periods are spaced over time rather than massed into a short interval. Now a team of psychologists from Canada, California, Massachusetts, and Florida have more precisely measured just how often you should restudy material if you want to remember it one week later, one month later, two months later, or one year later.

The researchers taught 1,350 online subjects 32 obscure facts (e.g., "What European nation consumes the most spicy Mexican food?" Answer: Norway) and then had various groups of them study the material at various intervals ranging from 1 to 105 days later. Following the second study session, the groups were tested on the items after approximately one week, one month, two months, or one year later. Scheduling a second study session the day after first learning the material produced the highest scores on a test one week later. Scheduling the second study session a week later was best for remembering it one or two months later. Scheduling the second study session 23 days later was best for remembering the material one year later. These rates of retention produced curves by which the authors could extrapolate to longer periods of time. They conclude, "If a person wishes to retain information for several years, a delayed review of at least several months seems likely to produce a highly favorable return on the time investment..."

These results add to a growing body of evidence that the brain needs a booster session from time to time to remember what it has learned. Surprisingly, these reminder sessions don't have to be long and involved, just enough to refresh the memory traces previously laid down. Vocabulary words, math formulas, facts from history, even people's names, or any other information you may need to know in the future may come just a little bit easier with occasional review. Try it and see.

Now what was the name of the European country that eats the most spicy Mexican food?

Cepeda N.J., Vul E., Rohrer D., Wixted J.T., & Pashler H. 2008. Spacing effects in learning: A temporal ridge of optimal retention. *Psychological Science*. Vol. 19, Pp. 1095 - 1102