

Center for Excellence in Teaching and Learning

A Discussion about Scholarly Teaching

Effortful Retrieval

April 22, 2016

As a brief note of introduction, this blog will focus on sharing and reacting to how scholarly teaching might be applied at Georgia State University (i.e., using what we've learned from research-based evidence to improve students' learning). We welcome your comments and suggestions.

I recently reviewed a manuscript on “effortful retrieval”, which lead me to a number of articles on how including retrieval activities can promote students' learning. The rationale for the approach goes like this—the active of listening to a lecture or even reading a textbook provides students with access to course content. However, many learners, especially more novice learners, don't have or use effective strategies for enhancing their ability to retrieve the content when needed, e.g., on examinations.

Cognitive psychologists have been examining how requiring students to retrieve the content using low-stakes, formative assessment activities can improve performance on tests and quizzes as well as long-term retention. They have found that each of the following retrieval activities improved student performance:

- Taking practice quizzes (both open and closed book conditions worked).
- Writing as much as one can remember after a lecture or reading a chapter.
- Creating a cognitive map of what one has read.

They also found that effortful retrieval activities (recalling content in order to write it) were more effective than just recognizing content (selecting the correct multiple-choice answer).

I've heard of an increasing number of instructors at GSU who are embedding retrieval activities into their courses—usually in the form of practice quizzes and even practice quizzes in groups. Retrieval activities seem to make sense for many of our students whose study strategies are limited to reviewing or even rereading (likely more passive approaches than effortful retrieval).

Are you already using retrieval learning activities? If so, in what way?

If not, are there ways you might adapt one or more retrieval activities to fit what students must master in you course(s)? How?