UNC CENTER FOR FACULTY EXCELLENCE

# 2020 CFE Faculty Showcase on Teaching

## Retrieval-Based Learning: Active Retrieval Promotes Meaningful Learning

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Recent advances in the cognitive science of learning have important implications for instructional practices at all levels of education. For example, cognitive research has identified one strategy that promotes complex learning called *retrieval practice*: Practicing actively reconstructing one's knowledge while studying has potent effects on long-term learning. Yet when students monitor and regulate their own learning, they often choose to engage in inferior strategies like repetitive reading, and the ultimate consequence is poor learning. This talk provides an overview of our research program on retrieval-based learning. In recent work, we have extended retrieval practice to meaningful learning of complex educational materials, converted existing classroom activities into retrieval-based activities, and developed new computer-based learning methods for implementing retrieval-based learning. Incorporating retrieval practice into educational activities is a powerful way to enhance learning.

Objectives:

At the conclusion of this talk, attendees will:

1. Know the most common study strategy used by college students, know why it does not work, and know how to guide students not to use it
2. Be able to describe how retrieval practice can be used as an effective learning strategy
3. Have a toolkit of possible ways to implement retrieval-based learning techniques

Learn more about Jeff Karpicke.