Retrieval Practice

**Is testing yourself an effective way to learn material**? Researchers have studied the difference between “practice testing” or retrieval (taking a quiz on material) compared to studying (reading through the material.

In this activity, you will use data simulated to match the results of the following research study:

Karpicke, J. D. & Roediger, H. L (2008). The critical importance of retrieval for learning. *Science*, *319*(5865), 966-968.

In this study, the researchers taught new Swahili-English word pairs to college students. All students had a study period to review the list and were then tested over the entire list. Participants were randomly assigned to 4 different conditions to study. The groups had six additional study (review) and testing periods that differed in the following ways:

* **ST.** This group studied and were tested over the entire list of words each time.
* **SnT.**  Once a word pair was recalled correctly, it was dropped from further study but tested in each subsequent test period.
* **STN.** Recalled pairs were dropped from further testing but were studied in each subsequent study period.
* **SNTN.** Recalled pairs were dropped entirely from both study and test periods.

One week later, the researchers tested all participants on the word pairs.

Questions:

* Is there a significant difference in the number of word pairs remembered between the four groups?
* What do the results tell us about the importance of retrieval practice? How might you use this information to adjust your study strategies for exams in this class and other classes?