(Cover photo by fruper on Pixabay) by Cindy Nebel In my position at a med school, my students use a lot of practice tests. They use them to prepare for exams in class, for Shelf exams during clinical rotations, and sometimes exclusively to prepare for board exams. One thing I’ve realized in giving advice to these students is that time matters. As someone who knows a lot about spaced practice and retrieval practice, I want to tell them how to review material in the most effective way, but frankly, they just don’t have time for it. Often when they use question banks for self-testing, they skip over feedback for correct answers and only keep the questions they got incorrect in rotation. This sure feels efficient, but I know from retrieval practice research that we often need to answer a questions multiple times for it to stick (1). The research study I’m reviewing today (2) tackles this issue of effectiveness vs. efficiency. In this series of studies, participants either received retrieval practice that was experimenter-controlled, in the most effective way, or they were given the option to do retrieval practice in the way that they wanted, which was typically to drop questions in a more efficient way. Which one is better? Image by MoteOo on Pixabay In these studies, participants studied English-German word pairs in a couple of different ways: Participant-controlled: In these groups, the participants got to decide after seeing each word pair whether they wanted to study it again, take a practice test, or drop the word pair from the “deck”. If they chose to take a practice test, they they either received a multiple choice question or a cued recall (short answer) question, depending on which condition they were in. After they gave their answer, they were told the correct answer and again asked if they wanted to study, test, or drop the item. Experimenter-controlled: In these groups, participants first studied the words and then the items were divided into ones they got right 1, 3, or 5 times before they were dropped from the deck. Some of the participants got multiple choice tests and others got short answer tests, depending on which condition they were in. The first question that the researchers were asking was what students would do when given the choice in how to self-test. Perhaps unsurprisingly, once students got a question right, they dropped it from the deck. This was true across both multiple choice and short answer questions. There were some small differences though. For example, participants restudied items more often when they knew they were going to get a short answer question vs. a multiple choice question, which again makes sense.