by Cindy Nebel (Cover photo by Bruno on Pixabay) About eight months ago, I took a career change and started a new role as Director of Learning Services for a medical school. In the first few weeks on the job, I happily told the students about spacing, retrieval practice, concrete examples, and dual coding as often as they would listen. Their eyes glazed over, they smiled and nodded, thanked me for my time, but it was very clear to me that I wasn’t having much of an impact. Eight months later, I’ve learned so much about the tools, language, and strategies that medical students use and how those ideas can be adapted using effective strategies. In what follows, I hope to provide some ideas for any medical students reading this but to also discuss the lessons I’ve learned about the limitations of research and efficient (not just effective) learning. First, some prior knowledge for the non-medical folks reading. [Med students, you can skip this next paragraph.] Image by yanalovephoto on Pixabay Medical education is divided into Undergraduate Medical Education (UME), which includes coursework, supervised clinical rotations, and specialty electives, and Graduate Medical Education (GME) which is residency and like their entry level job. So, UME is graduate-level education (post-bachelors), but called Undergraduate, for reasons I’ve yet to discover. For the purposes of this blog, I’m focused on Phase 1 of UME – coursework. For most medical schools, preclinical coursework involves a series of short (4-8 weeks-ish) courses on foundational topics of anatomy and physiology and organ modules (e.g. cardiology, brain and behavior, hematology, etc.). UME students have an enormous amount of information to learn in each of these courses in an extremely short amount of time. Many medical schools have switched to a pass/fail curriculum such that the goal is not to master 100% of the content, but maybe 80% to stay safely above the passing threshold. At the end of their coursework, most students (this varies some by medical school) take their first Medical Licensing Examination (called Step 1). The exam is 8 hours long and tests their basic science knowledge through high working memory demand questions that ask them to apply their knowledge to a series of vignettes, usually requiring them to understand how information across systems are connected and problem-solving their way to an answer. Again, the goal is not 100% on this exam, but maybe 70% to be in very safe passing range. During a typical week of medical school, students have many required activities. These vary by school, but might include lectures, active learning sessions, simulations, etc. In addition, they have a long list of material that requires self-directed learning. There are simply not enough hours in the day for them to master the material. They need learning strategies that are not only effective, but efficient.