SoTL Snapshot

A synopsis of a scholarship of teaching and learning journal article

Self-Study Program Based on the Physical Training of Athletes Can Improve Student Learning

What is this Research About?

Research shows that students can increase their ability to retain information by studying the same information on more than one occasion. However, a student's ability to repeat, review, and rest can be limited with a compressed, high-volume curriculum. As a result, students will often shift to an undesirable surface memorization approach to learning. This approach hinders students' ability to accumulate and retain foundational knowledge. In this study, researchers tested a voluntary study program for students that integrated concepts from athletes' physical preparation to improve student learning because of the shared fast-paced learning environment.

What did the Researchers Do?

The study program based on the physical training of athletes included a warm-up, study sets, repetitions, and a cool down. The **warm-up** involved activities to enhance focus and prepare the brain for learning (i.e., eating a snack, taking a walk, prepping the study space). The **physical preparation** consisted of strategically combined sets and repetitions of specific studying exercises (e.g., studying a few related concepts for a short period, take a short break, and repeat). Afterwards, the program instructed students to complete stress management activities as part of the **cooldown**. The researchers offered the self-study program to first-year veterinary medical students. At the end of the semester, the students who requested and participated in the program completed a survey measuring their perceptions of the study program.

What did the Researchers Find?

Students reported that their reasons for requesting the study program included: improving time management, reducing overwhelming stress, avoiding procrastination, gaining accountability, and enhancing organizational skills. The findings suggest that the students valued the self-study program. Specifically, students involved in the program reported an improvement in their well-being and time management skills, with no negative impacts on academic performance. Students continued to engage in a trial-and-error process to identify and select strategies that were effective, practical, and met their individual needs.

How to Implement this Research in Your Classroom

Encouraging students to study on more than one occasion as opposed to massed studying (or 'cramming') has been shown to improve learning. A study program based on the physical training of athletes, which includes a warm-up, study sets and repetitions, and a cooldown, is an effective strategy for improved retention, well-being, and time management skills. Instructors seeking to provide this study program to students could encourage students to follow the program steps when studying (I.e., include a warm-up, batch studying and include repetition, and include a cooldown). Instructors should emphasize the ability to customize the program based on individual student needs.

Citation

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