60-Second SoTL

Episode 44 – Shaping Student Study Strategies

(Piano Music)

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Jessie L. Moore:
Can an in-class intervention prompt undergraduate students to use more effective study strategies? That's the focus of this week's 60-second SoTL from Elon University's Center for Engaged Learning. I'm Jessie Moore.

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In "Challenges of Shaping Student Study Strategies for Success: Replication and Extension," published in the open access journal, *Teaching & Learning Inquiry*, Trent Maurer and Emily Cabay studied whether a classroom demonstration of successive relearning would lead students to change their study habits. They also explored what students identify as influencing their decision to adopt more effective study strategies.

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Reviewing the prior scholarship, the authors identify self-testing and spaced practice across multiple days as high-utility study strategies, while re-reading and highlighting are low-utility – or less effective – study strategies. The *combination* of self-testing and spaced practice is a highest-utility – or especially effective – strategy. Several studies suggest that students have misconceptions about the relative effectiveness of these varied strategies, though, and students self-report more use of low-utility strategies than high-utility strategies.

1:16

In this IRB approved study, Maurer introduced students to successive relearning – the combination of self-testing and spaced practice – and demonstrated the strategy over four class sessions. The students were enrolled in two sections of an introductory child development course at a university in the southeastern United States. Maurer used a foundational concept from the course to demonstrate successive learning, and pre- and post-questionnaires included questions about students' confidence that they could correctly list three core components of the concept and their actual ability to do so.

Other questions focused on students' study strategies. Students completed a pretest questionnaire after their first exam but prior to being introduced to successive learning. They completed a posttest questionnaire one week after the second exam.

2:04

Cabay, a student in the class, collaborated with Maurer on cleaning and analyzing the data, and the authors include a rich reflection on their student-faculty co-inquiry. Cabay used Wilcoxon Signed-Ranks analyses for the questionnaires' quantitative data. The authors report no change from pre-test to post-test in students' nonsuccessive relearning study times, successive relearning study times, or total number of study days, but students did increase the number of days they started studying before the exam. Students' confidence and ability related to their recall of the foundational course concept both also increased.

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Cabay used inductive content analysis to identify themes in the qualitative questionnaire responses. In their pretest questionnaire responses, several students demonstrated an awareness that their current study strategies weren't working for them. They indicated that they were most likely to adopt a new study strategy if their instructor explained or demonstrated the strategy or if the instructor provided evidence of the strategy's effectiveness.

In the posttest questionnaire, approximately 1/3 of the students reported using successive relearning to study for their second exam. Six of the students noted that Maurer's demonstration convinced them of the strategies' value.

Among 26 students who reported not using successive relearning, 13 indicated that time management was a barrier, and 7 reported using other methods.

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Maurer and Cabay suggest that these results reiterate the importance of instructors providing students both with information about high-utility study strategies and with scaffolded opportunities to practice them. The authors also reiterate that time management challenges can hinder students' use of high-utility strategies like successive relearning, amplifying the need for additional research on teaching time management.

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To learn more about this study, visit our show notes for a link to the open access article and related resources.

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Join us next week for another snapshot of recent scholarship of teaching and learning on **60-second SoTL from Elon University's Center for Engaged Learning.** Learn more about the Center at www.CenterForEngagedLearning.org.

(Piano Music)