60-Second SoTL

Episode 0061 – Allocating Time for Multiple Choice Tests

(Music)

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Jessie L. Moore:

How much time should students have to take online, multiple-choice tests? 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 "Best Practice for Online Tests: How Long Do Students Actually Need?", Lynne Kennette and Dawn McGuckin analyzed data from more than 500 college students taking online psychology quizzes and unit tests to gauge the amount of time that students need for multiple choice assessments, while attempting to maintain test integrity. Their article appears in *Teaching & Learning Inquiry*, an open access journal.

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Kennette and McGuckin's literature review spans nearly 100 years, demonstrating the longstanding interest in the amount of time needed for multiple-choice assessments of learning. Ruch, writing in 1924, for example, offers varied suggestions depending on whether questions have 3 response items or 5. In 2002, McKeachie recommended one minute per question. Other studies adjust the recommendation depending on whether the assessment is low-stakes or high-stakes.

Drawing on the range of recommendations in this published scholarship, Kennette and McGuckin hypothesized that most college students would use approximately 30-45 seconds per question across their assessments.

The researchers focused on 13 weekly quizzes and 4 unit tests in the online Introduction to Psychology courses they taught during a two-year span, 2021 to 2023. With data from 519 students, they had a total of 5,897 assessments available to analyze. They omitted any data points with fewer than 5 seconds per question or more than 800 seconds per question.

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For tests, average response time per question ranged from 5 seconds to 177 seconds. For quizzes, average response time per question ranged from 5 seconds to 763 seconds.

On average across all questions, students took about **39 seconds per question**. Looking at assessment type, the average response time increased to approximately **55 seconds per question** on unit tests, compared to about **30 seconds** per question on quizzes. This difference in average response time between unit tests and quizzes was statistically significant.

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So what's the takeaway? The researchers suggest that a 30–45 second per multiple choice question guideline seems about right, though instructors may want to allow a bit more time for major assessments. And, of course, every learner is different—reading speed, learning disabilities, and language proficiency all play a role. Therefore, the authors advocate taking a nuanced approach to any decisions about how much time to allocate for multiple choice assessments.

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

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Jessie Moore:

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.

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