32. Mastery Quizzing: An Efficient Way to Maximize Student Learning

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What is mastery quizzing?

- Mastery quizzing recruits several active learning techniques (e.g., retrieval practice, feedback, spacing) into one activity.
- Timed (i.e., 10 minute) weekly quizzes of 10 multiple-choice questions cover content from the week's readings and lecture material.
- After each quiz attempt, students are able to view feedback as to which questions they got right and wrong, along with a brief explanation.
- Students must finish each quiz by the end of the week with a perfect score, and they have an unlimited number of attempts until the deadline.
- Credit is all or none, meaning students will only earn the full 10 points if they earn a score of 10 on the quiz by the end of the week. If they end the week with any score other than a 10, they receive a zero on the quiz.

How can I implement this technique in my class?

- Several online learning management systems (e.g., Canvas, Blackboard, Desire2Learn) have quiz capabilities with various features, though Qualtrics can also serve as a slightly less intuitive alternative.
- By creating a question bank, you can set up a pool of questions for your quizzes to pull from.
    - Example: If I cover autobiographical memory and memory errors in my cognition class in a given week, I can make one question bank for each topic and ask Canvas, for example, to randomize five questions from each.
- For each question, include feedback for both the correct and incorrect answers
    - Example: For the question, "Autobiographical memory is a facet of _____" the correct answer is explicit memory. If a student chooses an incorrect response your feedback may simply be corrective (e.g., Autobiographical memory is a facet of explicit, or conscious memory), or you can choose to be more elaborative.
- When set up in this way, your mastery quizzes will grade themselves, and all you must do is check the grades at the end of the week to change any scores that are less than 10 to zero. You now have an active learning technique in your class that will not take up valuable class time!

Discussion questions

- What are common barriers to using frequent quizzing in your own classes?
- What comes to mind when you think of "active learning" strategies?
- How do you provide effective feedback to your students?
- What does effective feedback look like?