



Enhance Student Learning Using Frequent Low-Stakes Assessment

A Quick Summary of the “Testing Effect” Research

Answering questions is a far more effective study technique than re-reading material.

The testing effect is particularly powerful for long-term learning.

Answering multiple choice questions is helpful, but formulating an answer to an open-ended question has a somewhat stronger effect.

Answering questions need not look like taking a traditional quiz; students can also use ungraded, in-class writing to answer questions.

Left to their own devices, students typically use the least effective study strategies: rereading, underlining, and repeating material to themselves.

The bottom line: Frequent, low stakes quizzes—in many different formats-- are a powerful learning tool

Implementing “Testing-Effect” Strategies without Killing Yourself

1. Include “no-tech” strategies in your repertoire since they can be done well with just a little planning.
2. Grade only when you must—and when you do grade, keep it simple and low stakes.
3. Emphasize automatic or group feedback—avoid writing all over individual student papers.
4. Repeat the same activities (to save time spent explaining) and drop a few low grades (to save time spent arguing).
5. In Learning Management system (Blackboard, Moodle, Canvas,...) tests, avoid short answer and fill-in-the-blank formats so the program can automatically grade quizzes and record scores. With a few clicks, you can also get the program to drop lowest grades. If you also use some of the other quizzing strategies, students will still get enough work with the more labor-intensive short-answer questions.
6. Use *Socratic*, *Kahoot*, *Poll Everywhere*, or other polling activities as ungraded activities.
7. For longer review quizzes, have students create some questions. Periodically, teams of students submit M/C or T/F questions. Even if student questions need a little re-writing, they still comprise a bank of questions to work with. If the teams submit their work electronically, you can cut and paste items, lessening your work even more.
8. Administering frequent, low-stakes quizzes has lots of potential to improve student learning, so instructors should feel no guilt about finding sustainable ways to do it.

Selected References

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Technology Tools: An Overview

Tool	Question Formats	URL(s)	Default grading mode	Notes
Socrative	Short answer, TF, and MC	socrative.com	generates individual scores	-Best used in class -Questions “pushed” to student devices
Learning Management System (Moodle, Blackboard, Canvas, D2L, ...)	Many formats	campus license	generates and records scores	-Best used outside class -Tools for student-authored quizzes
Kahoot	TF and MC	kahoot.com (teacher) kahoot.it (student)	ungraded	-Best used in class -Questions displayed for class, student device for MC only
Poll Everywhere	variety of survey and poll formats	PollEverywhere.com (teacher) PollEv.com (student)	ungraded	-Best used in class -Designed for professional polls and surveys

No-Tech Strategies: An Overview

Strategy	How does it work?	Grading?
Think/Pair/Share	-The instructor poses a question after a portion of a presentation, video, or class activity -Students think and share their responses with a partner -Instructor asks a few pairs to share their answers with class -As a testing-effect strategy, pose factual questions	-Works best as an ungraded activity
Make a list	-At key moments, instructor asks students to list important facts/concepts they have learned Examples: “What were the most important concepts we discussed last class?” “List three features of behaviorism.” “List the major reasons the video gave for fast food’s popularity.”	-Works well ungraded; a few students share. -Can be graded with one point for a credible response and none for a poor one
Exit permit	-At the end of class, the instructor asks a question that involves remembering key points. -Students turn these in as they leave -Instructor may begin the next class by sharing a strong answer and/or addressing common errors	-Works well with a low stakes grade -Use the activity often, and drop a few of the lowest grades
Paper quizzes	-Begin or end class with a short written quiz -Scratch-off IF-AT answer sheets help quizzes feel like a game; they provide immediate feedback and encourage students to keep thinking even if their first answer was wrong	-Low stakes grading is best -Consider revealing correct answers immediately after class completes a quiz
Finger quizzes	-Works well with PowerPoint -At any time of class, beginning, middle, or end -Multiple choice answers are <i>numbers</i> , not letters	- Works best as an ungraded activity t -Provides feedback to instructor