Assessment

Khadija Mahsud, Instructional Consultant
July 2020

Angie Maxwell
@AngieMaxwell1

Found the kid playing with her dog instead of Zooming with her teacher. She told me not to worry. She took a screenshot of herself "paying attention," then cut her video & replaced it with the picture. "It's a gallery view of 20 kids, mom. They can't tell." She is 10. #COVID19

Background

1. Face-to-face courses
also streamed remotely from the classroom for those students who cannot be in the building

2. Remote —scheduled class time, instruction via videoconferencing

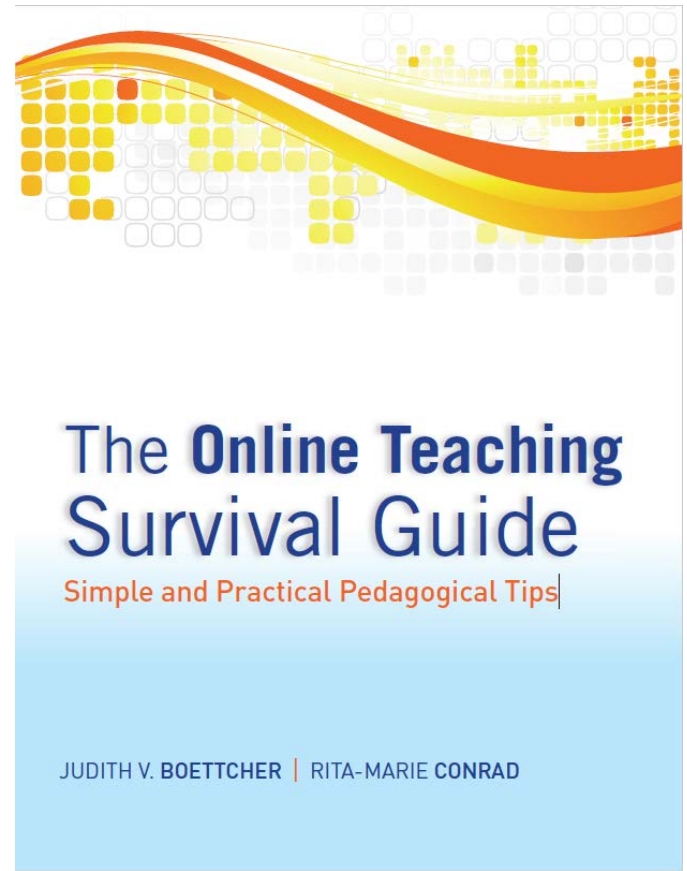3. Online — no face-to-face interaction

Any real-time assessment – e.g. quizzes, exams, in-class writing for credit – must be remote or have a remote option
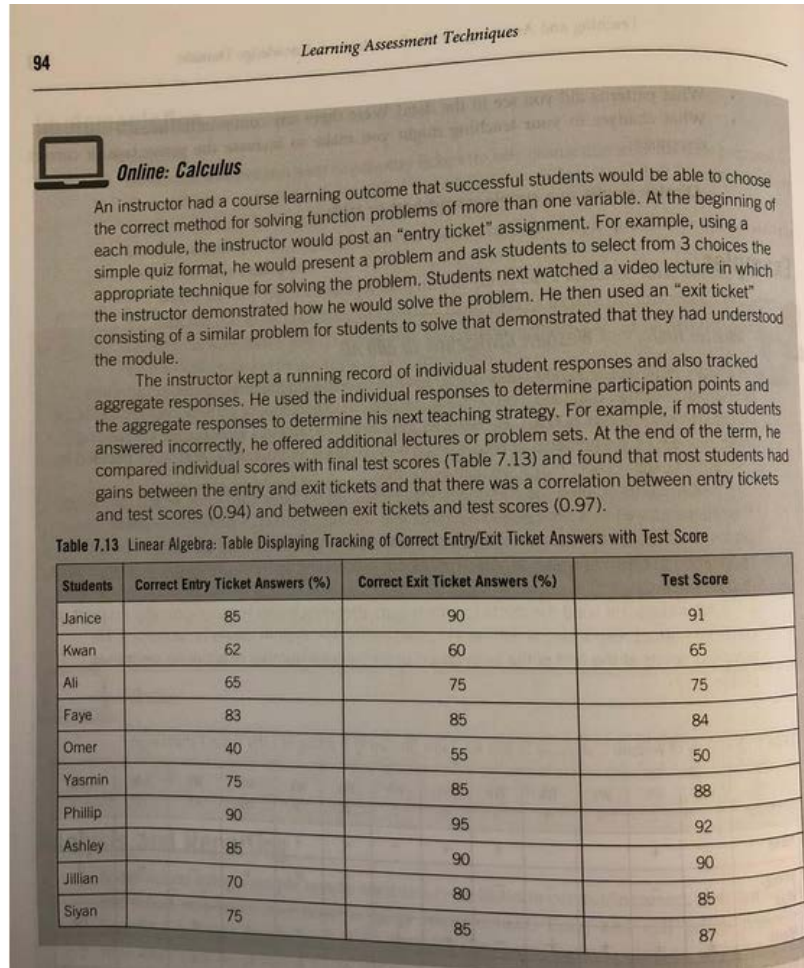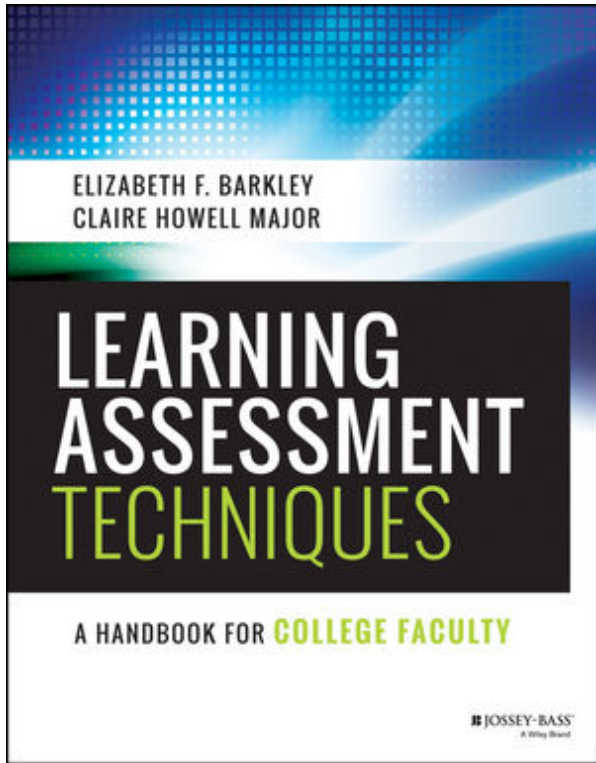
Resources

5. *Assessment is continuous.* Assessment in online courses is continuous, multiphased and often community based rather than concentrated, monitored, and primarily individual (Moallem, 2005). This is pedagogically beneficial and makes cheating and other forms of fraud more difficult. In other words, continuous assessment means that you get to know the students and students get to know other students. Assessment in online courses is also more varied, using low-stakes automated quizzes; frequent, regular postings in discussion forums; short papers; case studies and scenario building; and customizable projects. This means redesigning course assessment plans. Effective assessment in online courses requires getting to know learners as individuals and investing more time in coaching and mentoring. The good news is that most online course assessments are not closed book tests and thus do not require proctoring, eliminating a whole range of potential challenges.

Pg. 9
2010 edition

The **Online Teaching** Survival Guide

Simple and Practical Pedagogical Tips

JUDITH V. **BOETTCHER** | RITA-MARIE **CONRAD**

Online: Calculus

An instructor had a course learning outcome that successful students would be able to choose the correct method for solving function problems of more than one variable. At the beginning of each module, the instructor would post an "entry ticket" assignment. For example, using a simple quiz format, he would present a problem and ask students to select from 3 choices the appropriate technique for solving the problem. Students next watched a video lecture in which the instructor demonstrated how he would solve the problem. He then used an "exit ticket" consisting of a similar problem for students to solve that demonstrated that they had understood the module.

The instructor kept a running record of individual student responses and also tracked aggregate responses. He used the individual responses to determine participation points and the aggregate responses to determine his next teaching strategy. For example, if most students answered incorrectly, he offered additional lectures or problem sets. At the end of the term, he compared individual scores with final test scores (Table 7.13) and found that most students had gains between the entry and exit tickets and that there was a correlation between entry tickets and test scores (0.94) and between exit tickets and test scores (0.97).

Table 7.13 Linear Algebra: Table Displaying Tracking of Correct Entry/Exit Ticket Answers with Test Score

Students	Correct Entry Ticket Answers (%)	Correct Exit Ticket Answers (%)	Test Score
Janice	85	90	91
Kwan	62	60	65
Ali	65	75	75
Faye	83	85	84
Omer	40	55	50
Yasmin	75	85	88
Phillip	90	95	92
Ashley	85	90	90
Jillian	70	80	85
Siyan	75	85	87

ELIZABETH F. BARKLEY
CLAIRE HOWELL MAJOR

LEARNING ASSESSMENT TECHNIQUES

A HANDBOOK FOR COLLEGE FACULTY

JOSSEY-BASS
A Wiley Brand

50 techniques

Background | Resources
Use the LMS| Automate
Testing | Technology
Oral Exams | Presentations
Projects| Open book tests
Do what works | Get started

Use the LMS

Create or use a bank of questions that it can draw from (you can do this for each category e.g. T/F, MCQs, etc.)

Use features to time the assessment – open/close

Respondus Lockdown Browser – unable to print, copy, go to another URL, or access other applications, third-party tool that integrates with the LMS, free but download needed (?)

LMS

Use the LMS

"... In another class that used a number of publisher test bank questions it was pretty much a free-for-all, but I kind of expected that."

Susie Science has discovered a mutant form of insulin that lacks a signal peptide. What will be the final cellular destination of the mutant insulin? — Stem

Answer	A. Cytosol
Distractor	B. Endoplasmic reticulum
Distractor	C. Extracellular space
Distractor	D. Golgi apparatus
Distractor	E. Peroxisome
Distractor	F. Plasma membrane

— Alternatives

[Writing Good MCQs](#)

Use the LMS

If you don't like the interface of the LMS you can create and administer your assessment outside of it and have students upload their work as an assignment (exams, essays, draft work/progress report for credit, etc.)

or use Google Drive since it's often smoother/faster

walk the students through how to upload **one file** instead of multiple photos
https://www.nytimes.com/wirecutter/reviews/best-mobile-scanning-apps/

Automate

MCQs, T/F

Points for completion – 0 or 1 if students posted a question, answered a short question*, worked out a problem, etc. by a deadline

Works really well if you want to transition from high-stakes tests to more frequent lower-stakes tests without a proportionate increase in the time taken to grade (there is, of course, always a trade-off, more frequent feedback takes time but the payoff is high)

- Give them a proof with a flaw in it. Have them identify the flaw.

- Give them a design for something. Have them outline three calculations they would perform to test the design and what the criterion for acceptability is.

Background | Resources
Use the LMS| Automate
Testing | Technology
Oral Exams | Presentations
Projects| Open book tests
Do what works | Get started

Proctored Testing

1. Paid-for options
by department
students cannot work things out by hand
companies sell data to third-parties

2. Zoom

Gallery view enables up to 49 screens at a time (fewer if on a laptop)

Proctors for different breakout rooms and/or multiple Zoom meetings

Options to limit chat

Testing

Testing, when done right, is extremely effective because it helps you learn

Actually helps you learn- the act of retrieving information is often more powerful than storing it in the first place

Cumulative tests are more impactful than other kinds of tests

The higher the stakes get for a test the more other factors (stress) begin to interfere with the learning the test would have occasioned

Verbally discussing academic integrity has been shown to make a difference (applies not just to tests but all kinds of student work)

Researchers Find That Frequent Tests Can Boost Learning, *Scientific American*

Technology is fickle

1. No iron-clad method to eliminate cheating

2. Don't punish students who have internet problems

(display one question at a time or not, how to time the test – too much v too little time on each question ... all of these decisions are going to impact your students)

Technology is fickle

Put it all down in writing –the apps or software they will need, what the protocol for submissions/tests is, etc.

Do a test run (online peer review, online exam/quiz, whatever it is)

Be flexible (your students *will* have tech trouble, what is your plan for handling it?)

… yet firm (reopening the last 10 weeks of problem sets, posting on a three week old discussion board for credit … doing things like this negates the purpose of frequent, low-stakes assessment)

I CAN'T DECIDE.
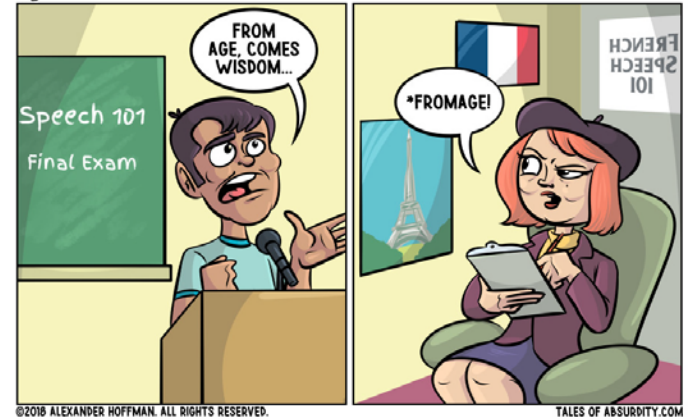Fickle Pickle
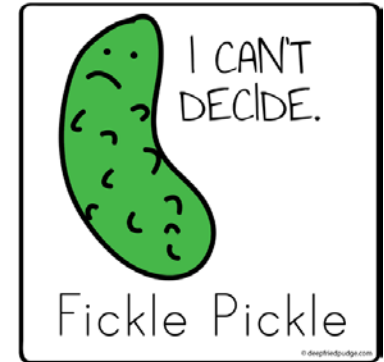
Oral Exams

10 - 15 minutes per student

Take notes

Use a rubric or a checklist to provide feedback

Compile and use a set of short answer questions

You will need to record them

Speech Final Exam

FROM AGE, COMES WISDOM...

Speech 101 Final Exam

©2018 ALEXANDER HOFFMAN. ALL RIGHTS RESERVED.

*FROMAGE!

FRENCH SPEECH 101

TALES OF ABSURDITY.COM

Background | Resources
Use the LMS| Automate
Testing | Technology
Oral Exams | Presentations
Projects| Open book tests
Do what works | Get started

https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/developing-assignments/exams/questions-types-characteristics-suggestions

Presentations

Live - for those who do not want to send in a recording

Recorded - have students upload them to eCampus or Google Drive to avoid clutter in your inbox

Group presentations - if someone does not want to show their face, then appoint them as the editor of the video

Presentations can be used to provide

- Updates on a project/process
- Outcomes of a project/product
- content knowledge and the ability to apply it in useful ways - *try this if assigning new presentations*

Projects

Something that can only be efficiently done in a group

Things to plan *before* the project starts:

team formation
communication strategy – have students agree on one
communication times - have students agree on a time
grading – individual portion plus team portion
check-ins – how often, what for
deliverables – how often, how graded

Office 365
TAMU Gmail suite

Bernice discovers the pitfalls
of procrastination.

Background | Resources
Use the LMS| Automate
Testing | Technology
Oral Exams | Presentations
Projects| Open book tests
Do what works | Get started

Open Book Tests - Timed (not take-home)

Draw specifically on course content/lectures. Asking students a basic identification question will send them straight to Wikipedia. Instead, ask them to analyze the author's argument on page 34, or interpret the results shown in a diagram.
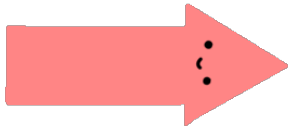
Make the questions tough. Use application and analysis questions that challenge students to fully understand and synthesize the concepts related to the learning outcomes.

Keep the time tight. When time is limited students won't be able to blindly scavenge the course notes for the answer. They will recognize the need to prepare and have some familiarity with the material or they will simply run out of time.

https://www.facultyfocus.com/articles/educational-assessment/why-open-book-tests-deserve-a-place-in-your-courses/
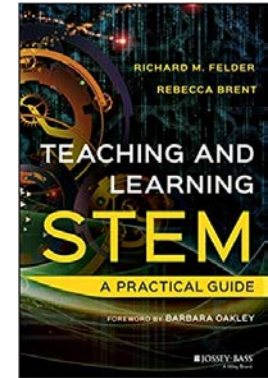
Open Book Tests

The kind of test you should give depends on the nature of the course content, your learning objectives, and your teaching philosophy. If it's important to you that your students have some information committed to memory, give them a closed-book test on it. If you don't care whether or not they have it memorized, let them look it up in the course text or a handout you prepare (which you should show them in advance of the test). If you are testing information of both types, give them a closed-book portion of the test, and when they hand it in, give them the open-book portion.

Be aware of one danger with open-book tests, especially if your students are unaccustomed to them. When you announce your first open-book test, many students will leap to the conclusion that it will be easy—if they need to know something, they can just look it up. They will study superficially and then spend a significant amount of time during the test frantically flipping pages, looking for worked-out examples similar to the test problems. Because you're not going to put duplicates of worked-out examples on an open-book test (right?), the students won't do well and some will fail. Do them a favor. About a week before your first exam, warn them against doing what we just described, and remind them about it when the graded tests are handed back. (Later in this chapter we offer other ideas for helping students prepare for and take problem-solving tests.)

Don't give tests that only the fastest problem solvers in class have time to finish.

RICHARD M. FELDER
REBECCA BRENT

TEACHING AND LEARNING STEM
A PRACTICAL GUIDE

FOREWORD BY BARBARA OAKLEY

JOSSEY-BASS

Open Book Tests

I don't ask any definition type questions or really anything that can be answered by checking the index. I ask nearly all synthesis and application questions - and if they roll into the exam not having already read the book, they're pretty s******.
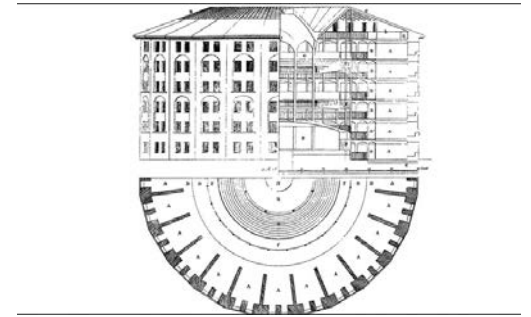

Application and Synthesis focused questions only.The book show various ways HOW to do it, but the student has to figure out WHICH one is right, and the WHY. Typically, they are asked to justify their decisions and the questions, despite them being engineering questions tend to have more than one "right" answer, but they have to correctly identify the trade-offs. For example, instead of asking to determine the flow rate through a piping system, the question would ask which one of 4 pumps would be the best design decision. Calculating required flow rates they could look it up in the open book, But, noticing that the system needs to handle two different input pressure heads and that one [#3] of the two pumps [#1 and #3] that meet the flow and cavitation prevention design specs, tends to require customized modification after delivery [increasing costs] so they should chose the other one is what I am really looking for. They have to explain WHY they choose pump #1. I don't test the ability to monkey punch a calculator or memorizing a formula, which would never be needed in the field, I focus on testing the application and design thought process.

Background | Resources
Use the LMS| Automate
Testing | Technology
Oral Exams | Presentations
Projects | Open book tests
Do what works | Get started

Do what works for you and your students

My view is that the camera will not stop cheating if it would happen. It will just make it more difficult.

I'm never ever using software called "Lockdown" or "Panopto." What? No. It feels like some developer took a philosophy class but didn't actually read.

Jeremy Bentham's Panopticon

Background | Resources
Use the LMS| Automate
Testing | Technology
Oral Exams | Presentations
Projects| Open book tests
Do what works | Get started

Do what works for you and your students

I teach math, both in class and online. I still do proctored exams IN PERSON for my online math classes. (A lot of my students are dual enrolled high schoolers). They can complete an online quiz/test with no problems, getting grades in the 90s. Then they take my proctored, written exam, and get a 12/100. That's right, a 12. It happens semester after semester. The classes I teach are often prerequisite courses to get into nursing programs, sonography, etc. I'm working with them the best I know how, but I have to have some degree of confidence that if you took my class you actually learned something. I can't tell you how many times the nursing school has complained about under prepared or inadequately prepared students who take an online version of a course to get an A, when if they had taken it in person they would have failed miserably. They are unable to handle the rigor of these programs and won't be successful.

Do what works for you and your students

I think that the answer, to some degree, is based on level of teaching. I use anti-plagiarism software and that can be seen as punitive OR as realistic. I think realistic. The first time we began using that, in our program on capstone papers, the results were STUNNING. I've never seen so much plagiarism (and that was after check the errors of the computerised analysis). Now, the students know that we are looking and that has curbed the behavior. That is not punitive on my part--that is realistic.

Do what works for you and your students

I'm not using lockdown or any other serious surveillance for exams. Instead, I'm shuffling questions, shuffling responses, and allotting 1 minute per question on multiple choice exams and quizzes. I let them know up front that I can't control whether they use their notes but that they simply will not have enough time to look up every answer in their notes. I figure this is the best of all worlds: They know they have to study if they want to do well, and they can look up a few questions to get a better grade if so motivated. My goal is education, and I think the setup requires studying and learning to do well.

Get started

How much of each type are you doing?

SUMMATIVE

EXAMPLES:

Students self-assess and receive a grade for this judgement.

Students and staff both grade the work (summative co-assessment).

Students self-review and/or peer review to make a judgment (critical evaluation) of their work.

Students judge their work based on holistic or analytic criteria, or by comparing exemplars.

Students collaborate to develop their own shared assessment criteria.

EXAMPLES:

'High stakes' graded end or mid semester exam, project, essay.

GPA grade/degree classification.

'Low stakes' graded in-class participation; MCQs online primarily for feedback purposes.

Written/oral feedback to students; Staff-student dialogue; Feed-forward (actions to improve); Early feedback to staff to improve teaching.

Students request feedback based on their self-monitoring.

Teacher
is responsible, is decision-maker

Student
is responsible, is decision-maker

Assessment **OF** Learning
To demonstate achievement

LEARNING

Assessment **AS** Learning
To self-regulate and critically evaluate

Assessment **FOR** Learning
To give feedback on learning and teaching

High Stakes

Low Stakes

FORMATIVE

Background | Resources
Use the LMS| Automate
Testing | Technology
Oral Exams | Presentations
Projects| Open book tests
Do what works | Get started