Assessment Redesign and Academic Integrity

March 26, 2020





COVID19 Topical Meetings

- Next Week, Thursday, April 2 @noon: Proctoring Tools
- Week of April 6: Accessibility
- Upcoming remote teaching discussions...
 - Focusing on key course outcomes
 - Enhancing social presence
 - Balancing equity and quality
 - Designing experiential learning
 - Taking a proactive role with at-risk students
 - Transitioning back to F2F
 - More...?



Goals of this Topical Discussion

- Identify critical contexts and messages for faculty in mass, fast move to remote instruction, assessment
- Define foundations of academic integrity in assessment design
- Survey key approaches to online assessment development
- Connect initial move to remote instruction with foundations for meaningful online learning



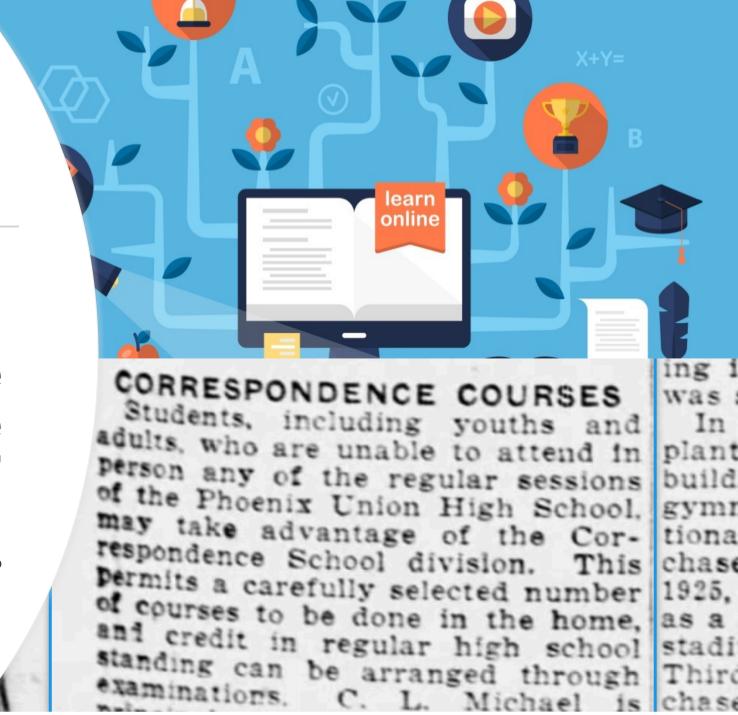
Contexts and Foundations



Key contexts and messages

"All online education is remote learning but not all remote learning is online education."

-Maybe me?



Remote teaching

Online learning

CORRESPONDENCE COURSES

Students, including youths and adults, who are unable to attend in plant person any of the regular sessions of the Phoenix Union High School, may take advantage of the Correspondence School division. This permits a carefully selected number of courses to be done in the home, and credit in regular high school standing can be arranged through examinations. C. L. Michael is principal of the correspondence The phase.

Teaching delivered at a distance

Learning often happens asynchronously

 Rooted in the history of extension students

 Not new to education, but new to many in higher



- Tech tools strategically deployed for engagement and outcomes
- Wrap-around services and support for student lifecycle

Key messages and context

- Immediate goal = supporting faculty and students this term
 - Beg, borrow etc. ... just cite your sources
- Immediate goal ≠ creating imperfect replica of f2f class
 - The factor of untranslatability

Take 2 mins: In the Zoom chat:

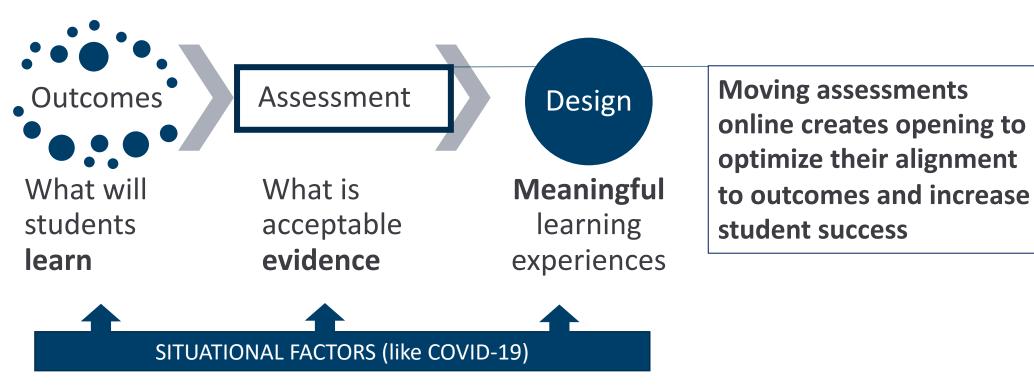
Each student in the image presents a different persona of student engagement. How could you discern these personae online? What are ways to ensure each personae succeeds?



https://www.vectorstock.com/royalty-free-vector/student-raising-hand-in-class-for-an-answer-vector-14280254

Key messages and context

The value of returning to first principles of backwards design to ensure authenticity





The criticality of authenticity

- Imperfect, incremental transition can be academically sound, authentic
- Authentic assessments central to authentic education
- A definition of authentic education:

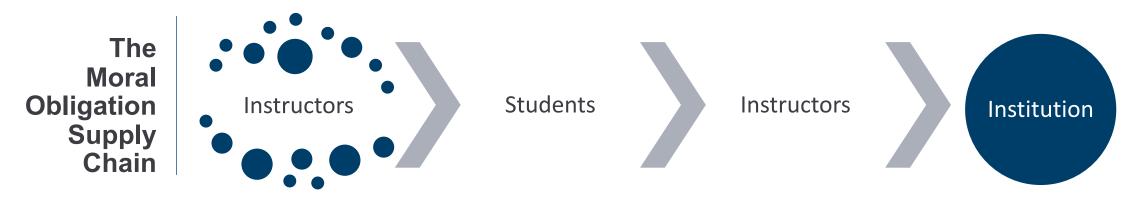
Academic Integrity

The commitment, even in the face of adversity, to six fundamental values: honesty, respect, responsibility, fairness, trust, and courage.



The criticality of authenticity

- Imperfect, incremental transition can be academically sound, authentic
- Authentic assessments central to authentic education
- Authentic education pivots on authentic assessment



Design fair and honest assessments

Fairly & honestly demonstrate learning

Fairly & honestly assess student learning

Certify student's knowledge & abilities

But just what is authentic assessment?

Authentic assessments are "engaging and worthy problems or questions of importance, in which students must use knowledge to fashion performances effectively and creatively. The tasks are either replicas of or analogous to the kinds of problems faced by adult citizens and consumers or professionals in the field."



But just what is authentic assessment?

- Authentic assessment
 - is realistic.
 - requires judgment and innovation.
 - asks the student to "do" the subject.
 - replicates or simulates the contexts in which adults are "tested" in the workplace or in civic or personal life.
 - assesses the student's ability to efficiently and effectively use a repertoire of knowledge and skills to negotiate a complex task.
 - allows appropriate opportunities to rehearse, practice, consult resources, and get feedback on and refine performances and products.

What authentic assessment is and is not ...

TRADITIONAL ASSESSMENT	AUTHENTIC ASSESSMENT		
Generally relies on forced-choice, written measures	Promotes integration of various written and performance measures		
Relies on proxy measures of learning to represent skills	Relies on direct measures of target skills		
Encourages memorization of correct answers	Encourages divergent thinking to generate range of answers		
Goal is to measure acquisition of knowledge	Goal is to enhance development of meaningful skills		
Curriculum directs assessment	Assessment directs curriculum		
Emphasis on developing a body of knowledge	Emphasis on ensuring proficiency in applied skills and activities		
Promotes "what" knowledge	Promotes "how" knowledge		
Provides a one-time snapshot of student understanding	Provides an examination of learning over time		
Emphasizes competition	Emphasizes cooperation		
Targets simplistic skills or tasks in concrete, singular modes	Prepares students for ambiguities and exceptions found in realistic problem settings		
Priority on summative outcomes or products	Priority on learning sequence and process		

Let's try this at home!

Imagine:

Your authentic-assessment evangelism has worked. A faculty member has approached you seeking to replace their multiple-choice exam on Nutrition, Digestion, and Metabolism.

Take 2 mins:

In the chat, suggest ways to help this faculty member introduce a more authentic assessment.



Let's try this at home (again, if there's time)!

Imagine:

Now everyone wants your help. This time, the English Department Chair, Prof. Biblio Phile, approaches you about participation grades. Participation is graded in all English courses, and the department is going to use Zoom for virtual participatory experiences. Dr. Phile wants your help creating an approach to participation in Zoom that can be authentically assessed.

Take a minute: In the chat, suggest ways to help Dr. Phile with this request.



Modality is not ethically deterministic

- Not a given that students cheat more online
- But stress and pressure are key drivers of cheating behaviors
- Beware the risks of deficit-model emphasis in moves online
 - Stigmatizes all/most/many as cheaters
 - Shifts focus from the pedagogical to the punitive
 - Crowds out space for reflective design of online assessments
- Academic integrity (online or off):
 - Aligned assignments and assessments
 - Active and engaged teaching and learning
 - Focus on the students invested in authentic education

Harris, L., Harrison, D., McNally, D., & Ford, C. (2019). Academic integrity in an online culture: Do McCabe's findings hold true for online, adult learners? Journal of Academic Ethics, https://doi.org/10.1007/s10805-019-09335-3

¹⁶ Bertram Gallant, T. (2017). Academic Integrity as a Teaching & Learning Issue: From Theory to Practice. Theory Into Practice, 56 (2), 88-94.

Online Assessment Design

What we do now will shape the future

The assessment basics: Supply vs. Construct

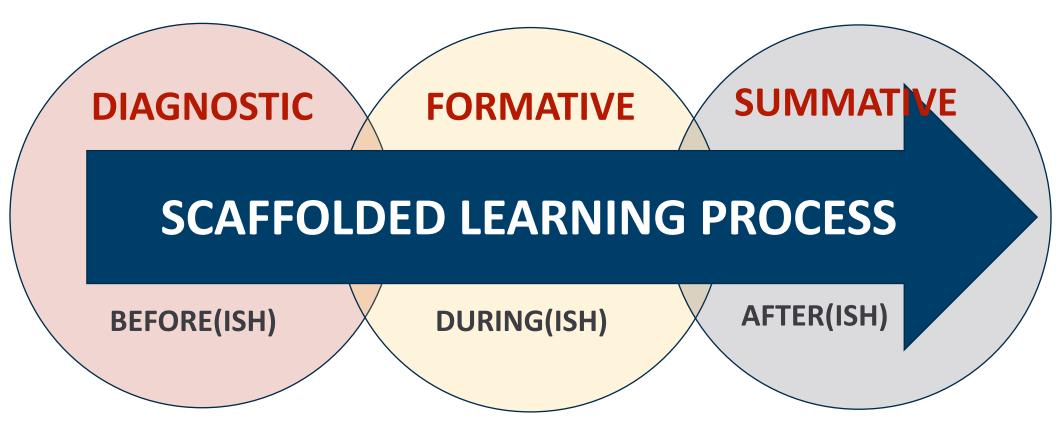
FORMAT	EXAMPLES	CONSIDERATIONS		
Supply response: Predetermined options from which students make a selection	Multiple choiceT/FMatchingBinaryChecklists	 Popular and easy to grade Narrow-gauge measures Measures only decontextualized knowledge 		
Construct response: Students create their own response as the answer	EssaysShort answerBlank fillsSentence completion	 Shorter forms typically measure lower-level knowledge More extended responses measure higher-level knowledge. 		

Typically, authentic assessments invite students to construct responses



Understand summative assessment's function

Summative assessment should build on what's come before





Yes, Bloom's taxonomy ... still, again, and always

Taxonomic goal of assessment helps shape assessment design

Produce new or original work

Design, assemble, construct, conjecture, develop, formulate, author, investigate

Justify a stand or decision

appraise, argue, defend, judge, select, support, value, critique, weigh

Draw connections among ideas

differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

Use information in new situations

execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

Explain ideas or concepts

classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

Recall facts and basic concepts

define, duplicate, list, memorize, repeat, state

understand

apply

create

evaluate

analyze

remember



Objec	LOWER BLOOM		Facts Understanding of ideas Applications of principles	 Fast grading Assesses broad topic spectrum 	•	Difficult to assess procedural or conceptual knowledge Very difficult to validate items Harder, not impossible, to assess higher-level thinking Can't assess organization and originality		
Scenario-based projects		•	Depth of knowledge Creativity and organization Writing and documentation	 Assesses higher-ordered procedural and conceptual knowledge (meta- understanding) 	•	Resource intensive grading Risk of subjective evaluation, lack of validity, and reliability without well developed and tested rubrics		
Portfolios		•	All above Multiple levels of knowledge – facts, analysis, evaluation, self-reflection	 Encourages display of knowledge and understanding in multiple formats Assesses higher-ordered procedural and conceptual knowledge, meta- understanding 	•	All above		
Essays	HIGHER BLOOM		Understanding of ideas Ability to think Ability to formulate evidence-based argument	 Assesses higher-ordered procedural and conceptual knowledge Allows expression of knowledge authentically 	•	Requires rubrics for validity Resource intensive grading Risk of subjective evaluation Requires scaffolded writing instruction in disciplinary context		
	Adapted from https://elearningindustry.com/developing-good-online-assessments-guidelines							

PROS

CONS

ASSESSMENT

ASSESSING

Mapping learning interactions to tools

TOOL or RESOURCE* ACTIVITY LMS self- and peer assessment Self-assessment Reflective journal writing OneNote, Google/O365 Docs, etc. Discussion boards, Flipgrid, YellowDig, etc. Discussions Blogs/Wikis OneNote, Google/O365 Docs, etc. Peer Assessment -LMS self- and peer assessment Electronic portfolios Canvas Folio, free trials for software apps Case Studies LMS student group tools Role playing/simulation/games Zoom, Webex, Flipgrid, Teams Adobe Spark (in Canvas) and similar tools Storytelling Shared whiteboarding Jamboard and similar tools Group projects LMS student group tool Teams, Google hangouts/chats, etc. Chat and collaboration



Purely tactical tips for tests and exams

- Alter test-bank questions to limit searchability
- Make stems clear, interrogative, and brief
- Avoid all-/none-of-the-above (or, make it correct only 25% of the time)
- Don't announce your distractors
- Distractors should isolate student weakness to address errors in thinking
- Parallelism, parallelism, parallelism
- Eschew categoricals and double negatives
- Use 4 answers, not 3
- Avoid double(+)-barreled responses
- Calibrate exam time for prepared students
- Activate LMS assessment security options

- Assume tests are open note/open internet, with clear guides for acknowledging sources
- Clarify what openness means (i.e., others can't answer for you)
- Consider formative quizzes/exams as warm-up practice for summative exams
- Proctor exams via Zoom where practicable
- Activate LMS assessment security functions
 - Exam time limits
 - Browser lockdown
 - Randomize and scramble item sequence and answer choices
- Use similarity detection tools (Turnitin, SafeAssign, etc.)
- Conduct oral follow ups where possible (ask student to talk through at least one question)

https://elearningindustry.com/developing-good-online-assessments-guidelines

ICAI "Going online with Integrity" https://youtu.be/44q3ESYn6hI

Endeavor to persevere ...

- Online education is a driver of pedagogical innovation
 - My favorite example: "Strategies and Principles to Develop Cognitive Presence in Online Discussions"
- Now is an opportunity to set the bar for academic quality and authenticity in online teaching and learning
- It's less scary when you're on the other side
- And remember: start by trusting students and faculty*



Thanks and attributions

- In addition to the sources cited in the slides, the following people contributed or shared in the development of this presentation:
 - MJ Bishop
 - Paul Walsh
 - Nancy O'Neill
 - Lou Pugliese
 - Tricia Bertram Gallant
 - Robert Gibson
 - Jen Simonds
 - Too many mentors to name but here are the best of the best: Peter Seldin, Carol Hurney, Beth Miller, Pamela Barnett, Kathryn Klose



Grab bag of resources

- International Center for Academic Integrity
 - Recent webinar on <u>Going online with Integrity</u>
- Remote Teaching Resources for Business Continuity (crowdsource doc)
- UCSD's "Moving to Remote Assessments with Integrity"
- "How to be a Better Online Teacher" (Chronicle)
- Online Accessibility and Anti-Discrimination
- Microsoft Word Accessibility Overview
- EdSurge Advice for Newly Remote Instructors
- "Moving to Digital Learning Fast: Where to Start" (Campus Tech)





Discussion

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