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?

https://www.newspapers.com/clip/9015794/19270911-correspondence-courses/
Remote teaching

• Rooted in the history of extension students

• Not new to education, but new to many in higher

Online learning

• Distinctive educational architecture intentionally designed for online learning

• Tech tools strategically deployed for engagement and outcomes

• Wrap-around services and support for student lifecycle

Teaching delivered at a distance

Learning often happens asynchronously
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?
Key messages and context

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

Outcomes
What will students learn

Assessment
What is acceptable evidence

Design
Meaningful learning experiences

Moving assessments online creates opening to optimize their alignment to outcomes and increase student success

SITUATIONAL FACTORS (like COVID-19)

https://www.deefinkandassociates.com/GuidetoCourseDesignAug05.pdf
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.

[https://www.academicintegrity.org/fundamental-values/](https://www.academicintegrity.org/fundamental-values/)
The criticality of authenticity

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

**The Moral Obligation Supply Chain**

**Design** fair and honest assessments

**Students** Fairly & honestly **demonstrate** learning

**Instructors** Fairly & honestly **assess** student learning

**Institution** **Certify** student’s knowledge & abilities

*Image: Tricia Betram Gallant*
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.


https://citl.indiana.edu/teaching-resources/assessing-student-learning/authentic-assessment/index.html has a great side by side chart of traditional vs authentic!
What authentic assessment is and is not …

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

[https://www.researchgate.net/figure/Traditional-vs-Authentic-Assessment-Methods_tbl1_255625745](https://www.researchgate.net/figure/Traditional-vs-Authentic-Assessment-Methods_tbl1_255625745)
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.
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


Online Assessment Design

What we do now will shape the future
The assessment basics: Supply vs. Construct

<table>
<thead>
<tr>
<th>FORMAT</th>
<th>EXAMPLES</th>
<th>CONSIDERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply response:</td>
<td>Multiple choice</td>
<td>Popular and easy to grade</td>
</tr>
<tr>
<td>Predetermined options from which</td>
<td>T/F</td>
<td>Narrow-gauge measures</td>
</tr>
<tr>
<td>students make a selection</td>
<td>Matching</td>
<td>Measures only decontextualized knowledge</td>
</tr>
<tr>
<td></td>
<td>Binary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Checklists</td>
<td></td>
</tr>
<tr>
<td>Construct response:</td>
<td>Essays</td>
<td>Shorter forms typically measure lower-level knowledge</td>
</tr>
<tr>
<td>Students create their own response</td>
<td>Short answer</td>
<td>More extended responses measure higher-level knowledge.</td>
</tr>
<tr>
<td>as the answer</td>
<td>Blank fills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sentence completion</td>
<td></td>
</tr>
</tbody>
</table>

Typically, authentic assessments invite students to construct responses.

https://elearningindustry.com/developing-good-online-assessments-guidelines
Understand summative assessment’s function

Summative assessment should build on what’s come before

https://elearningindustry.com/developing-good-online-assessments-guidelines
Yes, Bloom’s taxonomy … still, again, and always

<table>
<thead>
<tr>
<th>Taxonomic goal of assessment</th>
<th>Helps shape assessment design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remember</td>
<td>Recall facts and basic concepts</td>
</tr>
<tr>
<td>Understand</td>
<td>Explain ideas or concepts</td>
</tr>
<tr>
<td>Apply</td>
<td>Use information in new situations</td>
</tr>
<tr>
<td>Analyze</td>
<td>Draw connections among ideas</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Justify a stand or decision</td>
</tr>
<tr>
<td>Create</td>
<td>Produce new or original work</td>
</tr>
</tbody>
</table>

- **Taxonomic goal of assessment:**
  - Remember: recall facts and basic concepts (define, duplicate, list, memorize, repeat, state)
  - Understand: explain ideas or concepts (classify, describe, discuss, explain, identify, locate, recognize, report, select, translate)
  - Apply: use information in new situations (execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch)
  - Analyze: draw connections among ideas (differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test)
  - Evaluate: justify a stand or decision (appraise, argue, defend, judge, select, support, value, critique, weigh)
  - Create: produce new or original work (design, assemble, construct, conjecture, develop, formulate, author, investigate)

*Image source:* [https://www.flickr.com/photos/vandycft/29428436431](https://www.flickr.com/photos/vandycft/29428436431)
<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>ASSESSING</th>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective exams</td>
<td>• Facts</td>
<td>• Fast grading</td>
<td>• Difficult to assess procedural or conceptual knowledge</td>
</tr>
<tr>
<td></td>
<td>• Understanding of ideas</td>
<td>• Assesses broad topic spectrum</td>
<td>• Very difficult to validate items</td>
</tr>
<tr>
<td></td>
<td>• Applications of principles</td>
<td></td>
<td>• Harder, not impossible, to assess higher-level thinking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Can’t assess organization and originality</td>
</tr>
<tr>
<td>Scenario-based projects</td>
<td>• Depth of knowledge</td>
<td>• Assesses higher-ordered procedural and conceptual knowledge (meta-understanding)</td>
<td>• Resource intensive grading</td>
</tr>
<tr>
<td></td>
<td>• Creativity and organization</td>
<td></td>
<td>• Risk of subjective evaluation, lack of validity, and reliability without well developed and tested rubrics</td>
</tr>
<tr>
<td></td>
<td>• Writing and documentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portfolios</td>
<td>• All above</td>
<td>• Encourages display of knowledge and understanding in multiple formats</td>
<td>• All above</td>
</tr>
<tr>
<td></td>
<td>• Multiple levels of knowledge – facts, analysis, evaluation, self-reflection</td>
<td>• Assesses higher-ordered procedural and conceptual knowledge, meta-understanding</td>
<td></td>
</tr>
<tr>
<td>Essays</td>
<td>• Understanding of ideas</td>
<td>• Assesses higher-ordered procedural and conceptual knowledge</td>
<td>• Requires rubrics for validity</td>
</tr>
<tr>
<td></td>
<td>• Ability to think</td>
<td>• Allows expression of knowledge authentically</td>
<td>• Resource intensive grading</td>
</tr>
<tr>
<td></td>
<td>• Ability to formulate evidence-based argument</td>
<td></td>
<td>• Risk of subjective evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Requires scaffolded writing instruction in disciplinary context</td>
</tr>
</tbody>
</table>

LOWER BLOOM

Adapted from https://elearningindustry.com/developing-good-online-assessments-guidelines
Mapping learning interactions to tools

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

*Examples are purely illustrative; not an endorsement of any tools or platforms

Adapted from QM Standard 5: Learning Interaction
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/44q3ESYn6hl
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*

*Adapted from Jesse Strommel
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 *Going online with Integrity*
- **Remote Teaching Resources for Business Continuity** (crowdsourced 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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