Fundamentals of Course Design III: Assessment and Exam Design

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Dan Hubert, Associate Program Director
Kelly Kuznicki, Graduate Associate
Kaneb Center for Teaching and Learning
Previous Workshops in Series

- FCD I
  - how to develop learning goals

- FCD II
  - how to develop a syllabus around those learning goals

- FCD III
  - how to approach assessment and exams

- FCD IV
  - how to develop lesson plans
Backward Design

1. Identify Desired Results.

   Big Ideas and Skills

2. Determine acceptable evidence.

   Culminating Assessment Task

3. Plan learning experiences and instruction.

   Learning Events

Integrated Course Design

Learning Goals

Teaching & Learning Activities

Feedback & Assessment

• What should students know, understand, and be able to do?

• How? By using:
  • Established standards, benchmarks, skills determined by industry, professional orgs, etc.

• Then prioritize
2. Determine acceptable evidence.

• Have students achieved desired results? How will we know?

• Need evidence to document or validate desired learning achieved

• Not by just covering content
Today

- Assessment and Exam Design
  - Types of Assessment
  - Exam Creation
  - Grading
  - Workshop
  - Wrap-up
Learning Goals

• After today’s workshop, you will be able to:
  – Use backwards design to develop exams and assessments with learning goals in mind
  – Identify whether students are meeting course expectations
  – Begin designing some assessments and exam questions for your class
Types of Assessment
Summative Assessment
# Types of Assessment

<table>
<thead>
<tr>
<th>Formative</th>
<th>Summative</th>
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<tbody>
<tr>
<td>Monitors student learning</td>
<td>Evaluates student learning</td>
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<tr>
<td>Low stakes</td>
<td>High stakes</td>
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<tr>
<td>Examples:</td>
<td>Examples:</td>
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<tr>
<td>– Have students write 1–2 sentences identifying main points of lecture</td>
<td>– Midterm exam</td>
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<td>– Turn in research proposal for early feedback</td>
<td>– Final project</td>
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<td>– Paper</td>
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<td>– Senior Recital</td>
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I'm gonna need more specific feedback on my formative assessments.
FORMATIVE SUMMATIVE

WHEN THE CHEF TASTES THE SOUP
WHEN THE GUESTS TASTE THE SOUP

FROM STEVE WHEELER’S BLOG “THE AFL TRUTH ABOUT ASSESSMENT”
Activity #1: Think-Pair-Share

Develop three low-stakes, formative assessments you could use in your imagined course
Double-barreled

1. Were you satisfied with the coffee and snacks provided at this workshop?
   a) Very satisfied
   b) Somewhat satisfied
   c) Somewhat unsatisfied
   d) Very unsatisfied
Inconsistencies in Grammar, Length, or Style

2. We can confuse learners when we:
   a) fail to actually complete the sentence we started in the question.
   b) inconsistent grammar in the options.
   c) sometimes we veer off into another idea entirely.
   d) wombats.
Inconsistencies in Grammar, Length, or Style

3. In a multiple-choice question, when is the longest answer the correct answer?
   a) Rarely
   b) Sometimes
   c) It’s almost always the correct answer, and it’s often stuffed with new information that should have gone in the stem but we forgot so now we’re putting it in the answer because we can’t possibly leave out the tiniest detail
   d) Occasionally
Ambiguous or Confusing Stems

4. When is it NOT a good idea to avoid negative questions?
   a) Never
   b) Sometimes
   c) Always
   d) What?
ARE MULTIPLE CHOICE EXAMS AN ACCURATE MEASURE OF ONE'S KNOWLEDGE?

A. YES
B. A AND C
C. A AND B
D. ALL OF THE ABOVE
Common Mistakes to Avoid

- Double-barreled questions
- Inconsistencies in grammar, length, or style
- Ambiguous or confusing stems
- Trying to “trick” students
- “All of the above” or “None of the above”
- “All,” “never,” or “always”
Good Multiple-Choice Question

5. Which statement refers to a summative assessment?
   a) Emily got 90 percent correct on the math test.
   b) Lin's test scores have increased satisfactorily this year.
   c) Justin's score of 20 on this test indicates that his study habits are ineffective.
   d) Keesha got straight A’s in her history courses this year.
Other Tips for Exam Creation

• Include point values for each problem

• Create a detailed rubric

• Talk to students about test taking tips

• Pre-test your exam/Take it YOURSELF first
Activity #2: Multiple Choice Critique and Improvement

In groups, identify errors in “bad” multiple-choice questions and correct them.
Grading
DOES NOT ACCEPT LATE PAPERS

TAKES FIVE WEEKS TO GRADE THEM
Questions?
Activity #3: Workshop

Using what you’ve learned, begin constructing formative and summative assessments for your imagined course
5 Commandments of Assessment and Exam Design

I. Thou shall use formative assessments often

II. Honor thy learning goals

III. Thou shall design your course backwards

IV. Thou shall include higher-order cognitive dimensions

V. Thou shall seek out additional resources
Resources


• Fundamentals of Course Design IV: Lesson Planning (March 2nd)

• Stanford: Tomorrow’s Professor
Thank you!

Kaneb Center