Assessing Learning in Online Courses

Kelly Spoon
Math Faculty
Mesa’s Ongoing Support for Teaching
Online Faculty Mentor
San Diego Mesa College
Grading to Support Learning

Equitable Grading
Oscar Peciado
English Faculty, City College
Kelly Spoon
Math Faculty, Mesa Online Success Team

Your Canvas Ungrading Checklist

Assessing Outcomes
Kelly Spoon
Math Faculty, Mesa Online Success Team
WEBINAR GOALS

● Reflect on traditional grading practices and their impact and effectiveness in online courses.
● Provide strategies for creating effective and equitable online assessments.
● Share resources and techniques to improve assessment practices.
What is the purpose of assessment?

Type your answer in the chat.

You can reply and react to other posts! 👍💕
THE PURPOSE OF ASSESSMENT

- Measure student learning
- Guide instructional decisions
- Provide feedback
- Motivate performance
- Evaluate effectiveness
- Fulfill articulation requirements
THE PURPOSE OF ASSESSMENT

- Measure student learning
- Guide instructional decisions
- Provide feedback
- **Motivate performance**
- Evaluate effectiveness
- Fulfill articulation requirements
According to Jesse Stommel, grades....

- pit students and teachers against one another
- rank students in fiercely competitive ways
- measure output with little concern for the learning process
- demean student work by crudely quantifying it

THE IMPACT OF GRADES
THE PURPOSE OF ASSESSMENT

- Measure student learning
- Guide instructional decisions
- Provide feedback
- Motivate performance
- Evaluate effectiveness
- Fulfill articulation requirements
THREE PILLARS OF GRADING

- ACCURATE: measure objective(s) of interest
- BIAS-RESISTANT: not influenced by subjectivity
- MOTIVATIONAL: encourage students to take risks
CVC-OEI ONLINE COURSE DESIGN RUBRIC

Put your level of familiarity in the chat.

0 – I have no idea what this is
1 – I’m aware of it, but haven’t explored
2 – I’m pretty familiar
3 – I’m a POCR ★
SECTION C: EFFECTIVE ASSESSMENT

- Authenticity
- Validity
- Variety
- Frequency

ACCURATE
BIAS-RESISTANT
SECTION C: GUIDANCE AND FEEDBACK

- Rubrics / Scoring Guide
- Assessment Instructions
- Feedback
- Self-Assessment

BIAS-RESISTANT

MOTIVATIONAL

COURSE DESIGN RUBRIC
What are challenges with assessment in an online course?

Give your answers in the chat.

You can reply and react to other posts! 👍 💕
📍 Brainstorming Space:

https://padlet.com/kspoon1/assessment_online
EXPLORING ACCURACY

ACCURATE
measure objective(s) of interest

BIAS-RESISTANT
not influenced by subjectivity

MOTIVATIONAL
encourage students to take risks
BACKWARDS DESIGN 101

1. Identify the learning goals

2. Design assessments to measure learning

3. Design content and activities to support learning
ACCURACY IN ASSESSMENT

Sample B.

Week 4 - Balanced Fashion
Complete this Discussion Board for the Balanced Fashion Activity. Complete **three** posts by 11:59 pm on **Wednesday**. Click on Create Thread to start your initial post. After submitting yours, you will be able to view others and respond to two posts of your classmates.

- Conduct an analysis of a current year fashion collection, using information presented from Chapter 5 related to Balance.

- Choose an image or images of fashion from any gender category and season of the current year that demonstrate the achievement of visual Balance. You must use an image or images with a minimum of three different looks shown.

- Explain in detail using terminology from the reading and narrated lecture to justify your choice.

- Insert your image(s) directly into your first post, along with two robust paragraphs of written content. Then respond to **two** posts of your classmates.

Example from Central Michigan University’s [DB Based Teaching & Learning](#)
ACCURACY IN ASSESSMENT

Sample B.

Week 4 - Balanced Fashion
Complete this Discussion Board for the Balanced Fashion Activity. Complete three posts by 11:59 pm on Wednesday. Click on Create Thread to start your initial post. After submitting yours, you will be able to view others and respond to two posts of your classmates.

- Conduct an analysis of a current year fashion collection, using information presented from Chapter 5 related to Balance.

- Choose an image or images of fashion from any gender category and season of the current year that demonstrate the achievement of visual Balance. You must use an image or images with a minimum of three different looks shown.

- Explain in detail using terminology from the reading and narrated lecture to justify your choice.

- Insert your image(s) directly into your first post, along with two robust paragraphs of written content. Then respond to two posts of your classmates.

Example from Central Michigan University’s DB Based Teaching & Learning
WHAT ARE THE OBJECTIVES?

Complete this Discussion Board for the Balanced Fashion Activity.

Conduct an analysis
demonstrate the achievement of visual Balance.

Explain in detail
justify your choice
## Writing Objectives

- Specific
- Measurable
- Relevant
- Attainable

### Section A: Content Presentation - Unit Objectives

<table>
<thead>
<tr>
<th>Incomplete</th>
<th>Aligned</th>
<th>Additional Exemplary Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1: Placement of Objectives</td>
<td>Objectives are not included in individual learning units.</td>
<td>Objectives are included in the individual learning units.</td>
</tr>
<tr>
<td>A2: Clarity of Objectives</td>
<td>Objectives do not include demonstrable learning outcomes.</td>
<td>Objectives consistently include demonstrable learning outcomes.</td>
</tr>
<tr>
<td>A3: Alignment of Objectives</td>
<td>Learning unit content is not aligned with or sufficient to meet unit objectives.</td>
<td>Content is clearly aligned with and sufficient to meet the learning unit objectives.</td>
</tr>
<tr>
<td>C2: Validity</td>
<td>Students are evaluated on performance unrelated to the stated objectives.</td>
<td>Assessments appear to align with the objectives.</td>
</tr>
</tbody>
</table>
ACCURACY IN ASSESSMENT

Sample B.

Week 4 - Balanced Fashion
Complete this Discussion Board for the Balanced Fashion Activity. Complete three posts by 11:59 pm on Wednesday. Click on Create Thread to start your initial post. After submitting yours, you will be able to view others and respond to two posts of your classmates.

- Conduct an analysis of a current year fashion collection, using information presented from Chapter 5 related to Balance.
- Choose an image or images of fashion from any gender category and season of the current year that demonstrate the achievement of visual Balance. You must use an image or images with a minimum of three different looks shown.
- Explain in detail using terminology from the reading and narrated lecture to justify your choice.
- Insert your image(s) directly into your first post, along with two robust paragraphs of written content. Then respond to two posts of your classmates.
Purpose
The purpose of this discussion is to demonstrate your understanding of how *visual balance* is used to create cohesive and aesthetically pleasing outfits in fashion.

Prompt
Conduct an analysis of a current year fashion collection by choosing at least three looks from that collection (any gender category / season). Using terminology from the reading and lecture, justify how the looks achieve visual balance...
TRANSPARENT ASSIGNMENT TEMPLATE

- Purpose
- Task
- Criteria for Success

Transparent Assignment Template©
© 2013 Mary-Ann Winkelman

This template can be used as a guide for developing, explaining, and discussing class activities and out-of-class assignments. Making these aspects of each course activity or assignment explicit is clearly to students has demonstrably enhanced students' learning in a national study.

Assignment Name
Due date:

Purpose: Define the learning objectives, in language and terms that help students recognize how this assignment will benefit their learning. Ideally, indicate how these are connected with institutional learning outcomes, and how the specific knowledge and skills involved in this assignment will be important in students' lives beyond the contexts of this assignment, this course, and this college.

Skills: The purpose of this assignment is to help you practice the following skills that are essential to your success in this course / in school / in this field / in professional life beyond school:

Terms from Bloom's Taxonomy of Educational Objectives may help you explain these skills in language students will understand. Listed from cognitively simple to most complex, these skills are:

- understanding basic disciplinary knowledge and methods/tool
- applying basic disciplinary knowledge/tools to problem-solving in a similar but unfamiliar context
- analyzing
- synthesizing
- judging/evaluating and selecting best solutions
- creating/developing a new interpretation, product, theory

Knowledge: This assignment will also help you to become familiar with the following important content knowledge in this discipline:

1. 
2.

Task: Define what activities the student should disperform. "Question cues" from this chart might be helpful: http://www.asainstitute.org/conference2013/handouts/29-Bloom-Question-Cues-Chart.pdf. List any steps or guidelines, or a recommended sequence for the students' efforts. Specify any extraneous mistakes to be avoided.

Criteria for Success:
Define the characteristics of the finished product. Provide multiple, annotated examples of what these characteristics look like in practice, to encourage students' creativity and reduce their incentive to copy any one example too closely.
ACCURACY IN ASSESSMENT

Criteria for Success
● Images included in post & meet requirements: At least 3 different looks from a current year collection.
● Terminology from reading and lecture used correctly.
● Justification of how selected looks demonstrate visual balance consistent with material in Chapter 5.
● Length: At least 2 robust paragraphs of written content.
DIVING DEEPER: BEYOND BLOOM’S

Education Objective
The student will learn to apply the reduce-reuse-recycle approach to conservation

Noun
the reduce-reuse-recycle approach to conservation

Verb
apply

Knowledge Dimension
A. Factual knowledge
B. Conceptual knowledge
C. Procedural knowledge
D. Metacognitive knowledge

Cognitive Process Dimension
1. Remember
2. Understand
3. **Apply**
4. Analyze
5. Evaluate
6. Create
WRITING OBJECTIVES FOR ONLINE

Knowledge and Simple understanding:
- Factual
- Conceptual
- Procedural
- Declarative
- Application

Reasoning and Deep understanding:
- Critical thinking
- Analyze
- Synthesize
- Create
- Problem solving
- Hypothesizing
- Evaluate
ACCURACY IN ASSESSMENT

Exam 2

This exam covers material from Parts 4 & 5 of the lecture notes and the material presented in the last two weeks of our 8 week class. You may use any resources you would like, open book, open note, open Google... but no help from outside people.

You have 3 hours to complete the exam and it must be done in a single sitting. The exam will automatically submit at 11:59pm on Saturday, so start it no later than 9pm.

If something goes wrong and you need a second attempt, you must contact me no later than noon on Saturday so I can create a new exam for you. If you are worried about internet issues or anything else technological, be sure to start your first attempt before 9am on Saturday.

Any evidence of cheating (using an outside tutor or collaborating with a classmate) will result in a zero score on the exam.
ENSURING ACCURACY

Consider and remove ‘confounding variables’

Week 4 - Balanced Fashion
Complete this Discussion Board for the Balanced Fashion Activity. Complete three posts by 11:59 pm on Wednesday. Click on Create Thread to start your initial post. After submitting yours, you will be able to view others and respond to two posts of your classmates.

• Conduct an analysis of a current year fashion collection, using information presented from Chapter 5 related to Balance.

• Choose an image or images of fashion from any gender category and season of the current year that demonstrate the achievement of visual Balance. You must use an image or images with a minimum of three different looks shown.

• Explain in detail using terminology from the reading and narrated lecture to justify your choice.

• Insert your image(s) directly into your first post, along with two robust paragraphs of written content. Then respond to two posts of your classmates.
ENSURING ACCURACY WITH SCAFFOLDING

💡 Give students formative assessments to build skills and knowledge needed for assessment.

What are some ways we could scaffold the needed skills and knowledge for our fashion assignment?
ENSURING ACCURACY WITH OPTIONS

💡 Give students options for how to demonstrate their understanding.

The purpose of this discussion is to demonstrate your understanding of how visual balance is used to create cohesive and aesthetically pleasing outfits in fashion.

What is another way students could demonstrate their understanding of this objective?
## UNIVERSAL DESIGN FOR LEARNING

### Assignment Options

<table>
<thead>
<tr>
<th>Option 1: Create a Casino Game</th>
<th>Option 2: Build Learning Materials</th>
<th>Option 3: Explore Further</th>
</tr>
</thead>
</table>
| The most structured option. You will create some sort of Casino game using dice, cards, coins, etc... and create a probability distribution for how much your game will pay out to determine how much to charge to play your game. This is a great option for students who:  
  - want to know exactly what to do  
  - felt good with the material in 5.1 | Less structure here. As you know, I'm still building my newer version of this course. I would love more student voice, more options, more everything... You will create some learning materials for the first four modules. This option is great for students who:  
  - like to be creative  
  - want to build something to help future students | Go learn about a probability topic beyond what was covered in our material and create a one-pager with an example to illustrate! This is a great option for students who:  
  - are more mathematically-oriented  
  - want to learn more |
REDUCING BIAS

ACCURATE
measure objective(s) of interest

BIAS-RESISTANT
not influenced by subjectivity

MOTIVATIONAL
encourage students to take risks
## Module 2 Discussion

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display Provided</strong></td>
<td>Standard Met&lt;br&gt;Image of display is embedded in post.</td>
</tr>
<tr>
<td><strong>Accessible Link</strong></td>
<td>Standard Met&lt;br&gt;Link is given as descriptive text as described in 2.3</td>
</tr>
<tr>
<td><strong>Graph Purpose</strong></td>
<td>Standard Met&lt;br&gt;A good description for the inclusion of the display in context is given.</td>
</tr>
<tr>
<td><strong>Communication Assessment</strong></td>
<td>Standard Met&lt;br&gt;Assessment of title, axes labels, and legend for graph is accurate.</td>
</tr>
<tr>
<td><strong>Accessibility Assessment</strong></td>
<td>Standard Met&lt;br&gt;Accurate assessment of color contrast and inclusion of alt text provided.</td>
</tr>
<tr>
<td><strong>Alt Text</strong></td>
<td>Standard Met&lt;br&gt;Alt text follows format given in 2.3: “A of showing ____.”</td>
</tr>
</tbody>
</table>
BACK IN FASHION

From Criteria to Single-Point Rubric:
- Three looks provided illustrating visual balance
- Correct terminology usage
- Justification referencing course materials
BIAS-RESISTANT IDEAS

- Grades based on work, not timing of the work.
- Alternative consequences for cheating.
- Excluding participation and effort grades.
- Grades based entirely on summative assessments.
USING GRADES TO MOTIVATE

ACCURATE
measure objective(s) of interest

BIAS-RESISTANT
not influenced by subjectivity

MOTIVATIONAL
encourage students to take risks
“Research has found that once we put a score or a grade on an assignment, the student is less likely to review comments or learn from that grade (Butler & Nisan, 1986).”

Joe Feldman
“Grading for Equity”
### Probability Displays With Unmatched Width

<table>
<thead>
<tr>
<th>Out of 20</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>16.5</td>
<td></td>
</tr>
<tr>
<td>15.5</td>
<td></td>
</tr>
</tbody>
</table>

#### Full Marks
- Correct notation and value

#### No Marks
- Comments: Remember the thing after IF, OF or GIVEN goes use the formula to find these.

#### Value OK, Notation is off.
- Comments: You have one mistake in your work! But the notation is okay.

---

**Equity Gap**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>67.5%</td>
<td>8.8%</td>
</tr>
<tr>
<td>67.9%</td>
<td>-17.5%</td>
</tr>
<tr>
<td>68.8%</td>
<td>-6.8%</td>
</tr>
<tr>
<td>54.3%</td>
<td>-9.6%</td>
</tr>
<tr>
<td>4.7%</td>
<td>-26.5%</td>
</tr>
<tr>
<td>11.5%</td>
<td>-39.9%</td>
</tr>
</tbody>
</table>

---

**Assignment Comments**

Nice first pass. I've added feedback to the rubric to help resubmit. If you need more help, reply here or send me a question.
A COMMON ‘GRADE-LESS’ ALTERNATIVE

0 point - Incomplete / Complete

- Can’t use Module requirements for tracking progress
- Harder to manually enter grades for things like in-person quizzes
- Only two levels...
Created a three-level grading scheme in Canvas.
THREE CONSIDERATIONS

01 DETAILS
How many levels? What language?

02 WHERE
Which assignments will you use this for?

03 OVERALL
What will your overall course grades look like?
# Grading Scale

## SBG Grading Scheme

<table>
<thead>
<tr>
<th>Name</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Success!</td>
<td>100%</td>
</tr>
<tr>
<td>☢️ Almost</td>
<td>&lt; 51%</td>
</tr>
<tr>
<td>✗ Not Yet</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>

The grading scale ranges from 100% to 0%.
“Do we do enough to create classroom environments for students to be intellectually curious?”

Zaretta Hammond
“Culturally Responsive Teaching & The Brain”
AUTHENTIC ASSESSMENTS

01 ACTION
Do something to demonstrate understanding.

02 PURPOSE
Contextualize and apply learning.

03 GOAL
Make connections and be remembered.
Typical assignments “add no value to the world”— after a student spends three hours creating it, a teacher spends 30 minutes grading it, and then the student throws it away.”

- David Wiley
## RENEWABLE ASSIGNMENTS

The work is of value **beyond** the students’ own learning.

<table>
<thead>
<tr>
<th></th>
<th>Student creates an artifact</th>
<th>The artifact has value beyond supporting its creator’s learning</th>
<th>The artifact is made public</th>
<th>The artifact is openly licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable assignments</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authentic assignments</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Constructionist assignments</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Renewable assignments</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
SECTION C: EFFECTIVE ASSESSMENT

- Authenticity
- Validity
- Variety
- Frequency
SECTION C: GUIDANCE AND FEEDBACK

- Rubrics / Scoring Guide
- Assessment Instructions
- Feedback
- Self-Assessment
THANK YOU
RESOURCES

Ungrading Stuff:
- Ungrading episode with Susan Blum on Teaching in Higher Ed Podcast
- Alt Grading Resources

Hacking Canvas’ Gradebook:
- Recorded Version of ‘Creating an Ungrading Checklist’ Workshop
- Spencer Bagley’s Google Doc Walkthrough

Authentic Assessment:
- @ONE’s Guide to Authentic Assessments
- Authentic Assessment in STEM Courses (Spring 2024 Webinar with Suzanne Wakim)
- MOST’s Toolkit CI Authenticity Examples

Online Teaching:
- CVC–OEI Online Course Design Rubric
- Small Teaching Online

CREDITS: This presentation template was created by Slidesgo, including icons by Flaticon, and images by Unsplash.
Regarding "Variety" can you fulfill variety by having most assignments be the same format (ie discussion forums), by providing a variety of assignments in terms of content, sources, etc.

Regarding "Frequency" I’m wondering about how to juggle that with my large number of students? I teach 6 classes in History (writing intensive) with about 35 students or more in each class? It takes me at least 25 hours or so to get through all six assignments. And if there is a red flag regarding academic integrity -- well, that adds a huge amount of time?

Would it be possible to see a Sample Module or Course and how you pull all of this together? Perhaps via Commons?

Thanks!