Classroom and Clinical Assessment

Sarah Jacobs, MEd
Sarah Drummond, MAT, MS, EdD
Learning Objectives

• Identify your favorite assessment method as a learner and describe what made it your favorite
• Locate the planning for learning and assessment table
• Write or select a measurable learning objective and add it to your table
• Select a formative assessment activity from the active learning library which is aligned to your learning objective
• Select a summative method for assessment which aligns to your learning objective
• Reflect on equitable assessment methods and share one topic you're interested in exploring further
• Reflecting on your own learning, express one concept from this presentation which educated, elevated, and/or enchanted you.
Think back to when you were a student. What was your favorite kind of assessment? What aspects of the assessment made it your favorite?
Think back to when you were a student. What was your favorite kind of assessment?
What aspects of the assessment made it your favorite? (Use one word responses only, as many as you'd like)
Introduction, Terms, and Structure of Curriculum
Curriculum Design

Resources: Eberly Center https://www.cmu.edu/teaching/assessment/basics/alignment.html
Assessment Terms

Assessment is "the measurement of what an individual knows and can do."

Assessment in higher education is also "the process of providing credible evidence of resources, implementation actions, and outcomes undertaken for the purpose of improving the effectiveness of instruction, programs, and services in higher education."

The Four Step Teaching, Learning, and Assessment Process

1. Establish clear, observable expected goals for student learning
2. Ensure that students have sufficient opportunities to achieve those goals
3. Systematically gather, analyze, and interpret evidence of how well student learning meets those goals
4. Use the resulting information to understand and improve student learning.

“Effective assessment is more like a scrapbook of mementos and pictures than a single snapshot.”

(Wiggins & McTighe, 2005)
### Planning for Learning and Assessment

<table>
<thead>
<tr>
<th>Competency or Course Objectives</th>
<th>Unit/ Sub-Objectives</th>
<th>Formative Assessment</th>
<th>Summative Assessment</th>
<th>Activities and Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: CO #1: On their term paper, learners will be able to clearly and ethically cite their sources.</td>
<td>Learners will be able to correctly cite resources using APA format.</td>
<td>•Interactive self-test</td>
<td>•Term paper •Final project •Presentation</td>
<td>•Citation Jeopardy •Purdue OWL (Online Writing Lab)</td>
</tr>
</tbody>
</table>

*This table can have multiple names and can include multiple components linking objectives to assessment and learning activities:*


Starting with good learning objectives
SMART: A tool for writing objectives

What do I want my learners to know and be able to do when they have completed this course?
SMART in a Nutshell

Who will do how much of what by when?
1. Who
2. Will do
3. How much
4. of What
5. by When

Adapted from Korin (2017)
Active verbs developed based on Bloom's Taxonomy

From: https://www.mesacc.edu/employees/academic-scheduling-and-curriculum/resources/blooms-higher-level-verbs

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Understand</th>
<th>Apply</th>
<th>Analyze</th>
<th>Evaluate</th>
<th>Create</th>
</tr>
</thead>
<tbody>
<tr>
<td>define</td>
<td>explain</td>
<td>solve</td>
<td>analyze</td>
<td>reframe</td>
<td>design</td>
</tr>
<tr>
<td>identify</td>
<td>describe</td>
<td>apply</td>
<td>compare</td>
<td>compose</td>
<td>compose</td>
</tr>
<tr>
<td>describe</td>
<td>interpret</td>
<td>illustrate</td>
<td>classify</td>
<td>create</td>
<td>create</td>
</tr>
<tr>
<td>label</td>
<td>paraphrase</td>
<td>modify</td>
<td>contrast</td>
<td>plan</td>
<td>plan</td>
</tr>
<tr>
<td>list</td>
<td>summarize</td>
<td>use</td>
<td>distinguish</td>
<td>combine</td>
<td>combine</td>
</tr>
<tr>
<td>name</td>
<td>classify</td>
<td>change</td>
<td>infer</td>
<td>formulate</td>
<td>formulate</td>
</tr>
<tr>
<td>state</td>
<td>compare</td>
<td>change</td>
<td>separate</td>
<td>invent</td>
<td>invent</td>
</tr>
<tr>
<td>match</td>
<td>differentiate</td>
<td>choose</td>
<td>explain</td>
<td>hypothesize</td>
<td>hypothesize</td>
</tr>
<tr>
<td>recognize</td>
<td>discuss</td>
<td>demonstrate</td>
<td>select</td>
<td>substitute</td>
<td>substitute</td>
</tr>
<tr>
<td>select</td>
<td>distinguish</td>
<td>discover</td>
<td>categorize</td>
<td>write</td>
<td>write</td>
</tr>
<tr>
<td>examine</td>
<td>extend</td>
<td>experiment</td>
<td>connect</td>
<td>compile</td>
<td>compile</td>
</tr>
<tr>
<td>locate</td>
<td>predict</td>
<td>relate</td>
<td>discriminate</td>
<td>construct</td>
<td>construct</td>
</tr>
<tr>
<td>memorize</td>
<td>associate</td>
<td>show</td>
<td>decide</td>
<td>develop</td>
<td>develop</td>
</tr>
<tr>
<td>quote</td>
<td>contrast</td>
<td>sketch</td>
<td>discriminate</td>
<td>generalize</td>
<td>generalize</td>
</tr>
<tr>
<td>recall</td>
<td>convert</td>
<td>complete</td>
<td>assess</td>
<td>integrate</td>
<td>integrate</td>
</tr>
<tr>
<td>reproduce</td>
<td>demonstrate</td>
<td>construct</td>
<td>choose</td>
<td>modify</td>
<td>modify</td>
</tr>
<tr>
<td>tabulate</td>
<td>estimate</td>
<td>dramatize</td>
<td>convince</td>
<td>organize</td>
<td>organize</td>
</tr>
<tr>
<td>tell</td>
<td>express</td>
<td>interpret</td>
<td>defend</td>
<td>prepare</td>
<td>prepare</td>
</tr>
<tr>
<td>copy</td>
<td>Identify</td>
<td>Manipulate</td>
<td>estimate</td>
<td>produce</td>
<td>produce</td>
</tr>
<tr>
<td>discover</td>
<td>indicate</td>
<td>Paint</td>
<td>grade</td>
<td>rearrange</td>
<td>rearrange</td>
</tr>
<tr>
<td>duplicate</td>
<td>Infer</td>
<td>Prepare</td>
<td>measure</td>
<td>rewrite</td>
<td>rewrite</td>
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<tr>
<td>enumerate</td>
<td>relate</td>
<td>produce</td>
<td>predict</td>
<td>role-play</td>
<td>role-play</td>
</tr>
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</table>
OHSU Graduation Core Competencies

Professional Knowledge and Skills
Demonstrate core knowledge, skills, and practices as defined by the discipline, professional licensing, or accreditation organization while being open to new perspectives, additional voices, and changes in schools of thought that impact the core knowledge, skills, and practices in the discipline.

Professionalism
Demonstrate discipline-specific behaviors, norms, and ethics and also challenge systemic racism inherent in professional expectations that cause undue burden and/or deny the full humanity of ourselves, our peers, and our patients.

Information Literacy
Recognize the power of information in educating, influencing, and understanding the world, while seeking and amplifying missing perspectives. With this lens, locate, critically evaluate, and effectively use information to participate in decision-making, quality improvement, and broader scholarly discourse.

Communication
Communicate effectively and equitably with diverse individuals, organizations, and communities to support stakeholder decision-making and promote culturally responsive exchanges of information. Teamwork

Teamwork
Work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

Community Engagement, Social Justice and Equity
Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

Patient Centered Care
Clinical degree program graduates will collaborate with diverse individuals, families, and communities to provide quality trauma-informed care that is anti-racist and respectful of and responsive to preferences, needs, attitudes, beliefs, and values.
### Activity: Planning for Learning and Assessment

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Write a learning objective or two from your own course, lecture, or session.
- Who will do how much of what by when?

If you do not have one, you can practice by starting with the OHSU Core Competencies.
Formative Assessment
Formative assessment

"Formative Assessments are those undertaken while student learning is taking place rather than at the end. Because formative assessments are done midstream, faculty and staff can use evidence from them to improve the learning of current students by making immediate changes to classroom activities and assignments and by giving students prompt feedback on their strengths and weaknesses."

# Formative vs. Summative Assessment

<table>
<thead>
<tr>
<th></th>
<th>Formative Assessment</th>
<th>Summative Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Learners Practice</td>
<td>Learners demonstrate</td>
</tr>
<tr>
<td></td>
<td>Instructors monitor</td>
<td>Instructors evaluate</td>
</tr>
<tr>
<td><strong>Grading</strong></td>
<td>Not graded</td>
<td>Graded</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Improvement</td>
<td>Judgement</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
<td>On whether learners can do specific skills or know specific information</td>
<td>To demonstrate a range of skills and knowledge</td>
</tr>
<tr>
<td><strong>Effort</strong></td>
<td>Requires little time from instructors or learners Simple</td>
<td>Requires more time from instructors and learners Complex</td>
</tr>
<tr>
<td><strong>Where</strong></td>
<td>In class</td>
<td>Out of class</td>
</tr>
<tr>
<td><strong>Feedback timing</strong></td>
<td>Immediate</td>
<td>Delayed</td>
</tr>
</tbody>
</table>

Both should be used in a course for each objective!

(Table adapted from Conrad and Openo, 2018, Table 1.2, pg 17)
## Activity: Planning for Learning and Assessment

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| Example: CO #1: On their term paper, learners will be able to clearly and ethically cite their sources. | Learners will be able to correctly cite resources using APA format. | **Interactive self-test** | • Term paper  
• Final project  
• Presentation | • Citation Jeopardy  
• Purdue OWL (Online Writing Lab) |

- Go to the Active Learning Library [https://teaching.tools/activities](https://teaching.tools/activities)
- Select an active learning technique for your formative assessment
- Add it to your planning table
Summative Assessment
Summative assessment

"Summative assessments are those completed at the end of a course, program, or other learning experience. Summative evidence of student learning can be used to improve the learning of future student cohorts."

A simple strategy for assessment design (and revision)

1. Start with an objective
2. Find/Develop a way to measure it
3. Deliver the assessment
4. Analyze the data
5. Is it working?
6. No? Change it!
Methods for assessing

<table>
<thead>
<tr>
<th>Assessment of Knowledge</th>
<th>MCQs, essay questions, structured oral exams, pre-enrollment assessment</th>
</tr>
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<tbody>
<tr>
<td>Comprehensive/Holistic Review</td>
<td>Program Committee/Panel Review - TAC/DAC reviews, theses, dissertations, capstones, portfolio, proposal defense</td>
</tr>
<tr>
<td>External Performance Observation</td>
<td>Community stakeholder feedback (engagement) - patient, client, employer, other community observers, experiential, portfolio, capstone</td>
</tr>
<tr>
<td>External Review of Student Work(s)</td>
<td>manuscript feedback, external national assessments, IRB approval, grant review, peer reviewed blogs and presentations</td>
</tr>
<tr>
<td>Impact data</td>
<td>Citations, Community health, Patient/Client health metrics, Data on social determinants of health, procedure/policy change</td>
</tr>
<tr>
<td>Institutional Satisfaction/Demographic Surveys</td>
<td>course evaluation, food insecurity, pre-enrollment data, etc.</td>
</tr>
<tr>
<td>Internal Performance Observation</td>
<td>Simulation, Clinical, Research: lab notebooks, experiential, portfolio, capstone, peer evaluation</td>
</tr>
<tr>
<td>Presumptive Assessment</td>
<td>Absence of contrary evidence (e.g. professionalism citation or lack thereof)</td>
</tr>
<tr>
<td>Self-assessment – Oral</td>
<td>interviews, focus group, listening session</td>
</tr>
<tr>
<td>Self-assessment – Other</td>
<td>artistic expression, portfolio development</td>
</tr>
<tr>
<td>Self-assessment – Written</td>
<td>surveys, essays, narrative medicine reflections, journals</td>
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• Final project  
• Presentation | • Citation Jeopardy  
• Purdue OWL (Online Writing Lab) |

- Review the **Methods for assessing** list
- Select an assessment for your summative assessment
- Add it to your table
Equitable Assessment
EQUITABLE ASSESSMENT

"At its core, equitable assessment calls for those who lead and participate in assessment activities to work to ensure that assessment does not feed into cycles that perpetuate inequities but serve to bring more equity into higher education."

-Natasha Jankowski

**Equity-minded assessment entails the following actions:**

- Use multiple sources of evidence appropriate for the students being assessed and assessment effort.
- Include student perspectives and take action based on perspectives.
- Increase transparency in assessment results and actions taken.

Student-centered assessment: Making assessment clear and transparent

"Increase students' understanding of the purposes, tasks, and criteria for their academic work before they begin working." Winkelmes, 2019.

"Researchers demonstrated in a national study that transparency around academic assignments enhances students’ success -- especially that of first-generation, low-income and underrepresented college students -- at statistically significant levels (with a medium-to-large sized magnitude of effect for underserved students)." Winkelmes et al. 2016

What is authentic assessment?

- Realistic context
- Replicates authentic problem
- Requires judgement and innovation
- Learner “does” subject
- Assesses use of varied knowledge and skills
- Learners navigate complex, multi-stage tasks
- Rehearsal/practice, consultation, feedback should be built in
- Results in useful product
What does UDL in instruction look like?

- Provide multiple means of engagement
- Provide multiple means of representation
- Provide multiple means of action and expression

https://udlguidelines.cast.org/
Inclusive Content: "Course materials that are equally accessible and familiar to all students have inclusive content" (Gay, 2010). "Proper alignment, clarity, and scaffolding of assignments all contribute to inclusive content."

Utility Value: "Assignments have high utility value if students perceive coursework to have value beyond a grade (Eccles et al., 1983). "...have personal or professional value (Singer-Freeman & Bastone, 2018)." "...help individuals better understand themselves, have personal value to students, improve student understanding of a subject, and provide students with an experience that will be useful in a future career."
Equitable Assessment Activity

What aspect of equitable assessment are you interested in exploring more?
• Transparency
• Student feedback
• UDL
• Culturally relevant assessment

Waterfall: Type your response in the chat but do not hit the send button. We will all hit send button at the same time. Wait for our prompt.
Some things to consider
### Evidence of learning and impact framework Framing questions

<table>
<thead>
<tr>
<th>Level</th>
<th>Knowledge</th>
<th>Application</th>
<th>Performance</th>
<th>Impact of Learning on Self</th>
<th>Impact of Learning on Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing Questions for Educators</td>
<td>To what extent do learners demonstrate comprehension of concepts they are learning?</td>
<td>To what extent do learners show they can apply knowledge or develop a new skill?</td>
<td>To what extent do learners integrate their learning and demonstrate their depth and breadth of knowledge and skills as they navigate complex tasks and/or situations?</td>
<td>To what extent do learners demonstrate awareness of their whole selves or their purpose? (By whole selves we mean: an integration of learner mental, intellectual, physical, spiritual, and/or emotional self in learning).</td>
<td>To what extent are learners moving knowledge into real-world practice by impacting behaviors, communicating ideas to a broad audience, changing procedures or policies in ways that impact the community, or contributing to scholarship?</td>
</tr>
<tr>
<td></td>
<td>To what extent do learners demonstrate understanding of the why and how of what they are learning?</td>
<td>To what extent do learners transfer knowledge in controlled, formulaic, prescribed, and/or simulated situations/settings?</td>
<td>To what extent do learners navigate unexpected challenges as they apply their learning?</td>
<td>To what extent do you give learners space to bring their unique skills, perspectives, and/or identities to their learning?</td>
<td>To what extent are learners raising alternative viewpoints that shape the ideas and behaviors of others, including enabling other people to perceive the world around them in new ways?</td>
</tr>
<tr>
<td>Reflection questions</td>
<td>Why?</td>
<td></td>
<td></td>
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<td>----------------------</td>
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</tr>
<tr>
<td><strong>What are the most important concepts, skills, and/or attitudes you teach in your course?</strong></td>
<td>Does the assessment(s) align with those concepts, skills, attitudes?</td>
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</tr>
<tr>
<td><strong>Are the assessments aligned with the objectives?</strong></td>
<td>What are the challenges to doing that?</td>
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<td></td>
</tr>
<tr>
<td><strong>Are the assessments aligned with the objectives?</strong></td>
<td>Are there any objectives for which there are no assessment methods?</td>
<td></td>
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</tr>
<tr>
<td><strong>Are the assessments aligned with the objectives?</strong></td>
<td>Does the distribution of time and effort (yours and the learners) reflect the importance of the objectives and assigned weights?</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Is there a balance in, and variety of, assessments and practices across the learning objectives?</strong></td>
<td>Are there any objectives for which there are no assessment methods?</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
What concept from today’s talk educated, elevated, and/or enchanted you?

Minute Paper: Take 1 minute to jot down your answer.