DEFINING ASSESSMENT

“Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance.” (Angelo, 1995)

### Summative Assessment: Assessment of Learning
- Often more high stakes, graded, and/or formal
- Documents performance or certifies attainment of knowledge or skills
- Sums up student’s learning and outcomes, often at end of unit or course
- Examples: final exams, term papers, final projects

### Formative Assessment: Assessment for Learning
- Part of student’s development or learning process
- Often low-stakes, not always graded
- Used to provide feedback to students
- Helpful for developing student metacognition
- Also, can be helpful feedback for instructor!

*The combined use of frequent, low-stakes assessment with feedback on students’ progress toward achieving the learning objectives will help students learn.*

<table>
<thead>
<tr>
<th>Formative Assessment Examples</th>
<th>Summative Assessment Examples</th>
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<td>● Minute papers (short reflections where students respond to 1-2 questions regarding the course content for that day)</td>
<td>● Midterm or final exam</td>
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<td>● Discussions</td>
<td>● Term paper</td>
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<td>● Graphic organizers (a way to express knowledge visually that can be used to illustrate the relationship between ideas or concepts; a common example is a mind map or concept map)</td>
<td>● Final project</td>
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<td>● Practice tests, low-stakes quizzes, or assignments</td>
<td>● Portfolio</td>
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<td>● Rough drafts</td>
<td>● Statewide or national tests</td>
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<td>● Peer or self-assessments</td>
<td>● Placement exams</td>
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<td>● Journals or reflective writing</td>
<td>● Performances</td>
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<td>● Classroom Assessment Techniques (CATs)</td>
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**Authentic Assessment**

An authentic assignment is one that requires application of what students have learned to a new situation, and that demands judgment to determine what information and skills are relevant and how they should be used. Authentic assignments often focus on messy, complex real-world situations and their accompanying constraints; they can involve a real-world audience of stakeholders or “clients” as well.

Authentic assignments (Wiggins, 1998):
- are realistic
- require judgment and innovation
- ask the student to “do” the subject
- replicate or simulate the contexts in which adults are “tested” in the workplace or in civic or personal life
- assess the student’s ability to efficiently and effectively use a repertoire of knowledge and skills to negotiate a complex task
- allow appropriate opportunities to rehearse, practice, consult resources, and get feedback on and refine performances and products

**Examples of Authentic Assessments/Assignments**
- Case studies
  - HBR cases
  - Examples from Johns Hopkins SPH, [Maternal and Child Health Leadership Skills Development](https://sphts.jhmi.edu/leadership-skills-development/)
  - Examples from the National Center for Case Study Teaching in Science
  - Case Consortium at Columbia University
  - Association for Prevention Teaching and Research, [Teaching Case Studies](https://aptr.org/case-studies/)
  - Education for Health: Population Health Models, Case-Based Series in Population-Oriented Prevention, CDC Case Studies in Applied Epidemiology, Instructor Guides)
- Clinical scenarios
- Simulations (using tools like PolicyMaker, developed by AI and the UM School of Public Policy)
- [Learning by Giving Foundation](https://www.learningbygiving.org/): the Foundation provides real $$ for students to award to nonprofit organizations in their local communities.
- Problem-based learning groups that partner with a local organization or industry professional to work on an issue
- Entrustable professional activities (EPAs are units of professional practice, i.e. tasks or responsibilities that are independently executable, observable, and measurable in their process and outcome, and can be entrusted to the unsupervised execution by a trainee once he or she has attained sufficient specific competence)

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1 Adapted from [https://citl.indiana.edu/teaching-resources/assessing-student-learning/authentic-assessment/](https://citl.indiana.edu/teaching-resources/assessing-student-learning/authentic-assessment/)
## Differences Between Typical Tests and Authentic Assessments

<table>
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<tr>
<th>Typical tests</th>
<th>Authentic tasks</th>
<th>Indicators of authenticity</th>
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<tbody>
<tr>
<td>Require correct responses</td>
<td>Require a high-quality product or performance, and a justification of the solutions to problems encountered</td>
<td>Correctness is not the only criterion; students must be able to justify their answers.</td>
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<td>Must be unknown to the student in advance to be valid</td>
<td>Should be known in advance to students as much as possible</td>
<td>The tasks and standards for judgment should be known or predictable.</td>
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<td>Are disconnected from real-world contexts and constraints</td>
<td>Are tied to real-world contexts and constraints; require the student to “do” the subject.</td>
<td>The context and constraints of the task are like those encountered by practitioners in the discipline.</td>
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<td>Contain items that isolate particular skills or facts</td>
<td>Are integrated challenges in which a range of skills and knowledge must be used in coordination</td>
<td>The task is multifaceted and complex, even if there is a right answer.</td>
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<tr>
<td>Include easily scored items</td>
<td>Involve complex tasks that for which there may be no right answer, and that may not be easily scored</td>
<td>The validity of the assessment is not sacrificed in favor of reliable scoring.</td>
</tr>
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<td>Are “one shot”; students get one chance to show their learning</td>
<td>Are iterative; contain recurring tasks</td>
<td>Students may use particular knowledge or skills in several different ways or contexts.</td>
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<td>Provide a score</td>
<td>Provide usable diagnostic information about students’ skills and knowledge</td>
<td>The assessment is designed to improve future performance, and students are important “consumers” of such information.</td>
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2 Adapted from [https://citl.indiana.edu/teaching-resources/assessing-student-learning/authentic-assessment/](https://citl.indiana.edu/teaching-resources/assessing-student-learning/authentic-assessment/)
Steps to Create Authentic Assessments
From: Jon Mueller, Authentic Assessment Toolbox (2016)

1) **What should students know and be able to do?**
   This list of knowledge and skills becomes your...
   
   **STANDARDS**

2) **What indicates if students have met these standards?**
   To determine if students have met these standards, you will design or select relevant ...
   
   **AUTHENTIC TASKS**

3) **What does good performance on this task look like?**
   To determine if students have performed well on the task, you will identify and look for characteristics of good performance called ...
   
   **CRITERIA**

4) **How well did the students perform?**
   To discriminate among student performance across criteria, you will create a ...
   
   **RUBRIC**

5) **How well should most students perform?**
   The minimum level at which you would want most students to perform is your...
   
   **CUT SCORE or BENCHMARK**

6) **What do students need to improve on?**
   Information from the rubric will give students feedback and allow you to ...
   
   **ADJUST INSTRUCTION**