

Guide to Alternative Assessments

How can formative and summative assessments work together?

Assessment is an ongoing process that begins with establishing clear and measurable expected outcomes of student learning, provides students with sufficient opportunities to achieve those outcomes, and concludes with gathering and interpreting evidence to determine how well students' learning matches expectations (Suskie, 2009).

Much like a face-to-face course, instructors will want to create learning experiences aligned with course goals and learning objectives complemented with opportunities for formative and summative assessments. Formative assessments are often low-stakes and ungraded “check-ins” that allow instructors to gauge student learning quickly and possibly inform changes in teaching strategies if needed. These assessments also give students an estimation of how well they are meeting the course expectations. Summative assessments are often high stakes, graded, and formal activities that evaluate student learning for a portion or the entirety of the course material.

Formative Assessment Examples	Summative Assessment Examples
<ul style="list-style-type: none"> • Reflections, Interpretations, Explanations • Discussions • Practice quizzes or tests • Rough drafts • Self or peer assessments 	<ul style="list-style-type: none"> • Paper • Final Project • Midterm or final exams • Placement tests • Portfolio • Final presentation or performance

If you are using high-stakes summative assessments, you are likely also using low-stakes formative assessments to scaffold skills and give students a chance to practice for those larger evaluations. You might also consider replacing summative assessments altogether with smaller, frequent, and sequential formative assessments to alleviate testing anxiety and support student success. Either strategy provides students the necessary time to process, synthesize, apply and adapt their understanding of the course material based on timely and frequent feedback.

Considerations for Online Assessments:

Generally, it's not a good idea to simply duplicate a face-to-face activity or assignment online without first considering strategies available for teaching and assessing student learning online. Even if the technology exists to duplicate an assessment, consider using methods (even if new) that provide the best evidence of student learning relative to your learning objectives.

While there is a perception that online learning environments facilitate academic dishonesty, research suggests that cheating is no more prevalent online than in face-to-face learning environments (Beck, 2014). In either environment, the increased use of technology and internet can facilitate incidents of cheating or plagiarism (McNabb & Olmstead, 2009). Even though instructors have significant concerns regarding academic dishonesty online, research suggests that the majority of students reported never having engaged in cheating-related activities such as having another take an exam in their place, consulting with others during an exam, or copying an online exam. Students did, however, report using online or personal resources during an exam (Jones et al., 2013). Cheating becomes an appealing option when answers for a high-stakes assessment can be found easily by searching online or in notes.

With this research in mind, an effective way to guard against academic dishonesty, whether in face-to-face classes or online, is to design assignments that ask students to apply course concepts to real-world occurrences in students' lives or in their future professions. This strategy also encourages students to continue interacting with the course materials after the course ends (lifelong learning); and helps students transfer their learning in the course beyond the classroom (learning outcomes; Online Learning Consortium, 2015). These kinds of assignments or activities are often referred to as authentic assessments and they can be a very beneficial for online courses.

If you are using traditional summative assessments (e.g. mid-terms, final exams, or final papers), you are likely trying to determine if students can:

- *Apply* the content and skills from your course to solve problems, appropriately respond to case studies or scenarios, or effectively analyze data sets or evidence.
- *Synthesize* theories and major arguments in your subject.
- *Evaluate* information, evidence, or arguments for their soundness or applicability in your discipline.
- *Create* new arguments, designs, or plans that incorporate and build on course skills and knowledge.

The table below outlines alternative strategies to allow your students to demonstrate these higher order thinking skills in ways that scaffold to summative assessments, or can replace traditional high-stakes summative assessments all together.

If you'd like to talk to someone about implementing any of these assessments, please reach out to [Dr. Kim Fournier](#) (Center for Teaching Excellence), [Dr. Cris Elder](#) (Writing Across the Curriculum), or drop into an [Open Lab](#) with the Center for Digital Learning.

General Principles

Strategy	Rationale and Resources
Replace final exams with a portfolio of work from throughout the semester.	Instructors often want a to see a culmination of students' learning at the end of term. Having a more heavily weighted assessment later in the course can support students who may have had a steeper learning curve in the beginning of the semester.

	<p>Rather than a cumulative exam, consider outlining the major skills or content that you would want students to cover in an exam and ask them to collect examples from their quizzes, problem sets, or discussions that demonstrate their understanding of those skills and content. You could ask them to add reflections about how they have used the skills or content in the course, or how they intend to use it after the course is complete.</p>
<p>Layer your assessments so that products students create on one assessment enable them to accomplish the next assessment.</p>	<p>Students may not always see the value of an assessment beyond their grade. By scaffolding parts of a project toward a larger deliverable, you are ensuring that your assessments are immediately useful to students and you are modeling time- and project-management for their future work.</p> <p>For example, you might have students first produce an annotated bibliography, then submit an introductory paragraph and hypothesis to a discussion board for peer evaluation. At the end, have them use both these documents to complete a final paper. Or, you might have students first complete a problem set that can later be used as a resource on a quiz or test.</p> <p>For projects, this strategy can be a great way to have students break large goals down into small manageable steps.</p>
<p>Allow open-note and open-book test or exam completion with questions that encourage students to demonstrate application, evaluation, and synthesis (rather than identification and remembering).</p>	<p>In most real-world scenarios, we can reference resources to solve the problems we encounter. Use low-stakes quizzes to help students practice identifying or using the vocabulary of your discipline, and larger open book exams to have them apply broader concepts or solve more complex problems by synthesizing what they've learned in the course.</p>
<p>Allow students to produce a creative product to document and highlight their learning.</p>	<ul style="list-style-type: none"> • Allow students to produce a video, podcast, MS Sway, or Adobe Spark instead of a final paper or exam. • Invite students to submit an annotated thematic anthology of course readings or a memorandum that addresses a particular course problem or question. • Ask students to create an online concept map demonstrating the main themes from a reading, from a

	<p>lesson, between lessons in a unit, between a lesson and course/professional goals etc.</p> <p>These kinds of assignments allow students to practice valuable professional skills while also demonstrating their understanding of course content. Student responses, reflections, interpretations, and explanations can be uploaded to Learn as documents, added to ongoing online journals, added to discussion boards, or submitted using another form of media (audio file, video, blog, link to an Adobe Spark page, etc.)</p>
<p>Draw on experiences personal to your students' lives or authentic to how they relate to your discipline</p>	<p>Have students respond to case studies from the field, reflect on how the theories or practices from the course play out in their own lives, or make judgements on experiences from your professional experience.</p>
<p>Provide students with choice in demonstrating their learning.</p>	<p>Students often feel a greater sense of motivation when allowed greater autonomy in their learning. You might allow students to choose between a creative project or a term paper, or a paper or an exam. Using clear rubrics will help you create options for your students that document learning equitably even though their final products may look very different.</p>

Considerations for Large Enrollment Courses

It can be particularly challenging to implement more creative assessment strategies in large enrollment courses. The strategies below are applicable for all courses, but may be particularly beneficial for large enrollment courses.

Strategy	Rationale and Resources
<p>Have students check their own paper submissions for plagiarism using originality reports such as SafeAssign.</p>	<p>Anti-plagiarism software uses algorithms that make decisions about the originality of the submitted text. If you allow students to see and use these reports, they can often learn from their missteps.</p> <p>You could have students peer reviews drafts and originality reports in a discussion board before turning in final drafts to you.</p>

<p>Allow students to create projects or complete exams as a group.</p>	<p>By sanctioning peer-to-peer support, you are encouraging students to practice the collaborative skills they'll need to apply moving forward.</p> <p>If you'd like to use small group discussions in a large class, you can assign a group representative to summarize and report out to the entire class.</p> <p>Assigning specific group roles and confidential peer-evaluations can prevent concerns about unequal contributions to the work.</p>
<p>Combine the use of the rubric tool with just-in-time video/audio clips to give global feedback to groups or the course.</p>	<p>While the Learn rubric tool can allow you to grade more quickly, just-in-time video/audio clips substantially increase teaching presence and are useful to provide the groups or the whole class with feedback. For instance, an instructor can record a short video sharing the performance patterns observed while grading paper drafts or problem sets.</p> <p>Balancing the use of these two strategies will help you guide students effectively and efficiently.</p>
<p>Break larger exams or mid-term tests into weekly (or more frequent) open-book quizzes.</p>	<p>Lower-stakes, more frequent assessments help students engage with your content more deeply throughout the term, rather than just around the exams. It also allows students frequent opportunities to gauge how they are doing in your course. The Learn graded survey tool or testing tool can allow you to give students auto-graded feedback to multiple choice questions. Your course textbook might have similar resources available to students.</p> <p>If you would still like to have a mid-term or exam, ask students to complete a low-stakes practice quiz with questions similar to what they might expect on a midterm or final exam. Allow multiple attempts and provide automatic feedback for incorrect answers that guide students to the course material that will help with their misunderstanding (e.g. check out my video on X, or see the article in Module 4).</p>
<p>Provide students with ungraded (credit/no-credit) options for self-evaluation for class participation.</p>	

	<p>You can have students follow-up any graded exercise with a short reflection on how they are doing and which areas they might need to practice more. Consider asking students:</p> <ul style="list-style-type: none"> • How they prepared for the assignment? • What resources were helpful or not unhelpful? • What do they wish they had done differently? • How will this assignment benefit their future goals in school or in life?
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Considerations for Assessments with Numerical Values and Equations

Strategy	Rationale and Resources
Ask students to identify the error in a proof or computation.	This strategy requires students to know and understand the steps for solving a problem.
Ask students to describe the next step in solving an equation.	These kinds of conceptual questions will allow students to demonstrate higher order thinking skills.
Ask students not to simply solve for an equation but to write out the process and what that process is good for when applied to real-world situations.	Asking students to apply their understanding of a calculation will help them demonstrate a deeper understanding of the skills than simply using a formula. For example, don't just ask students to calculate interest but ask them to provide a scenario for how and why that interest would be calculated and what decisions might be made as a result.
Ask students to analyze a dataset that you provide and submit their analysis and explanation of their findings.	Students could complete this individually, or in groups. You could also have students submit an alteration to the data set along with the new resulting analysis.

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