

Assessing Student Learning in Remote Instruction





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Quick Start

We use assessments to give ourselves, and our students, information about their learning. We use that information to improve our courses, and students use that information to adjust their learning strategies. Ideally, assessments have three key qualities:

1. Related to overall course goals, which recognize the complexity of learning,
2. Explicit about the purpose and accompanied by timely and targeted information, and
3. Strategic about when and how students communicate their learning.

In a remote environment, there are two interrelated considerations in assessment design:

 Pedagogy 	 Technology 
<i>How do you characterize successful learning, and what can you do to facilitate learning?</i>	<i>What is the most efficient way to collect, score and provide feedback on student work?</i>

The educational technology ecosystem at UC San Diego contains the following assessment tools:

Tool	Student Experience	Potential Uses
Canvas Quizzes	Respond to a series of questions in a web-based form	Exams, quizzes, self-checks
Canvas Assignments	Submit deliverables individually or in groups	Papers, presentations, group work, peer review
Canvas Discussions	Engage in web-based conversation on their own time	Debates, conversations, information sharing, Q and A
Zoom	Engage in audio/video conversations in real-time	Presentations, debates, group work (real-time)

When pedagogy informs the implementation of these tools, effective assessment strategies can transform remote instruction into a dynamic learning experience.



Introduction: Assessment in the Remote Environment

As educators, we want to conduct authentic analyses of student learning. When teaching face-to-face, we can check in quickly to see how students are understanding material, through questioning or polling, and determine when they would benefit from additional review or direction. We may have an established strategy for measuring student learning through final projects, exams, term papers, or other high-stakes assessments in our courses.

Teaching remotely presents new challenges for assessing student learning because we cannot use our normal in-person tools, or at least we cannot use them in the same way. Students can access course materials at any time, from any place, and they will likely be working through at least some learning activities on their own. Some students may find it easier to lose their place in a course or struggle to plan their work without the structure of regular in-person classes.

An effective assessment strategy can help instructors and students stay in touch in this remote environment by giving students frequent, actionable information about their learning throughout the course, as well as meaningful ways to demonstrate their cumulative learning. Whether you are in the middle of teaching a course remotely for the first time or planning for one in the summer, we have designed this document as a resource for planning course assessments that will give you and your students reliable information about their learning tailored to your instructional context.

Guiding Principles for Effective Assessment

When thinking about assessment, we encourage you to consider the following principles adapted from the American Association for Higher Education and Accreditation (Astin et al., 1996). These principles can guide the [implementation](#) of an assessment strategy.

- **Learning is a complex process.** Learning depends not only on what students come to know and be able to do, but on the attitudes and habits they have toward the material and learning itself. A complete assessment strategy incorporates all of these dimensions of learning, and provides a glimpse into the evolution of learning over time. All assessments should be focused, and [related to course learning goals](#).
- **Assessments work best when they are conducted with a clear, explicitly stated purpose.** Optimally, assessments are aligned with the specific aims of a course. They should direct students' attention to what ought to be taught and learned.
- **Assessment is most effective when it is ongoing.** While a “one-shot” assessment like a final exam can be better than none, *cumulative* assessment gives students the opportunity to improve. By designing a series of assessment activities that are linked,


and provide students with flexibility in how they demonstrate learning, instructors can monitor progress and make mid-course adjustments as needed to support learning.



Ideas and Implementation



There are practical considerations for implementation of the guiding principles, which can vary between face-to-face and remote instruction. Below, you will see a series of guiding questions, along with concrete examples, considerations, and links to tech tools that can support the implementation of these strategies in remote instruction. There is no one way to assess student learning - this is part of the art and science of teaching. If you would like additional help crafting or implementing an assessment plan, please [contact us for a consultation](#) - we are here to help!

Guiding Question 1: What are my goals for the course, and how could students demonstrate they have met these goals?

How will students be different in their knowledge, skills, and/or values as a result of the instruction they receive in your course? How deeply should students understand the concepts (should they be able to recognize terminology, restate concepts in their own words, apply the concept in a novel context, or synthesize new arguments or theories)? Articulating these goals for your course clarifies what aspects of student learning need to be addressed in your assessments, and at what [cognitive level of complexity](#).

 For a closer look at crafting learning goals, see [this screencast](#).

Example: (Course Learning Outcome) Students will be able to define key terms and concepts in their own words.	
 Instructional strategies	 Remote and online implementation
Think-Pair-Share: Have students write definitions during a one-minute paper. Pair them up to share definitions with a neighbor, (if desired) share out and discuss with the class.	<ul style="list-style-type: none"> Place students in Zoom breakout rooms to facilitate pair-and-share, use “raise hands” feature to share out or use collaborative whiteboard and “annotate” features to share Collaboratively develop a glossary as a shared Google doc or a Canvas page that can be edited by all students
Short-answer questions on exam	<ul style="list-style-type: none"> Canvas Quiz with short answer questions



Example: (Course Learning Outcome) Students will be able to support a position based on research	
 Instructional strategies	 Remote and online implementation

Stage an in-class debate	<ul style="list-style-type: none"> ● Graded discussion board posts (web-based conversation) with threaded replies for students to present positions and rebut ● Group or individual assignment where students upload video or transcript of debate
Research paper using library resources, workshopping drafts in class	<ul style="list-style-type: none"> ● Find information on remote access to library resources or contact your subject librarian for more details ● Use Zoom breakout rooms or Canvas's collaborative features to facilitate paper workshops
10 minute individual or group presentation defending a position, with following Q and A from class	<ul style="list-style-type: none"> ● Students can create a video or screencast presentation, individually or in groups ● Create a peer-review process where students can comment on one another's assignments via discussion board or the automatic peer review feature on Canvas

 **Guiding question 2: How can I make sure students regularly receive feedback on their learning throughout my course?**



You might think of an assessment as a conversation, in which the instructor asks the student what they're learning, the student articulates their understanding, and the instructor has an opportunity to affirm achievements, correct misconceptions, and clarify concepts. Well-designed courses incorporate multiple check-points to provide instructors with a glimpse into student progress before they encounter higher-stakes deliverables, exams, or assessments. Information gleaned from these intermediate assessments can inform instructional adjustments for faculty and adjustments to learning strategies for students.

 For a closer look at the different purposes assessment can serve, see [this brief video](#).

Example: I teach a 300-student intro-level course. How can I give students meaningful feedback (and get information about their learning) without overwhelming myself or my IAs?	
 Instructional strategies	 Remote and online implementation
Incorporate " real time " learning checks such as clicker questions into lectures or class sessions to gauge student learning and make adjustments	<ul style="list-style-type: none"> ● Use a polling tool such as Mentimeter or the nonverbal feedback features on Zoom for synchronous meetings ● Add quick assessments on Canvas (brief multiple-choice reading quiz, or short

	open-response box asking students to summarize the main point of a video or reading) for asynchronous elements of the course, to encourage students to retain and consolidate information; review the responses to inform your instruction
Create " micro-classes " within large courses, with an IA assigned to support a more manageable group of students	<ul style="list-style-type: none"> Use the "groups" feature on Canvas to break a large class into smaller communities. Assign discussion board posts or assignments to the groups so students can get to know one another.
Give students feedback in aggregate; skim all submissions for trends and select part of the submissions for more in-depth feedback, rotating every week (be sure to allocate full feedback fairly throughout the quarter)	<ul style="list-style-type: none"> Record brief screencasts or videos that directly address trends you see in student work, or post a discussion board post or announcement in Canvas -- be sure to highlight both the positive and negative, and give specific examples Use Canvas Quiz Statistics to identify trends
Give students tools, such as rubrics, to self-assess or conduct peer feedback	<ul style="list-style-type: none"> Provide students with the rubric for an assignment and ask them to submit a self-assessment on Canvas alongside their submission



Example: Students seem to struggle in the exam with topics that I thought we covered. How can I help them prepare for, and learn from, this assessment?

 Instructional strategies	 Remote and online implementation
Design exams that reward and support learning	<ul style="list-style-type: none"> Consider multiple-stage exams, in which students complete an exam individually, then retake it immediately with a group Ask students to document their thought process (e.g. video, text) for specific exam problems or during practice tests to help identify sources of error Allow students to recover some points by re-working problems that were missed in the original assessment

<p>Design practice questions to uncover and address common misconceptions or errors</p> <p>Practice the format of exam questions in advance, especially unfamiliar formats like multiple true-false</p>	<ul style="list-style-type: none"> ● Provide practice quizzes that students can attempt multiple times ● Add auto-generated answer feedback to Canvas quizzes so students can see an explanation of various answer choices right away
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 **Guiding question 3: How can I offer flexibility to students while maintaining the integrity of my assessment?**

Building flexibility into your assessment practices recognizes that different students may be able to demonstrate their learning most effectively in different ways. This is especially true while we are teaching remotely, as not all students will have access to the same technological tools or reliable access to the internet.

<p>Example: I normally give a multiple-choice final exam in my course. What are my options?</p>	
<p> Instructional strategies</p>	<p> Remote and online implementation</p>
<p>Give open book, open resource, or group exams</p>	<ul style="list-style-type: none"> ● Rethink question types. Questions that ask students to analyze an image or graph, respond to a scenario, find an error in a process, or integrate multiple course concepts to solve a problem are well-suited to open book and group exams (be sure to practice these question types in class) ● Clearly specify resources that can be used (e.g. book, internet, peers), ask students to submit a list of resources they used alongside the exam
<p>Replace the final exam with a project or portfolio</p>	<ul style="list-style-type: none"> ● Incorporate project-based learning, with milestones throughout the term to keep students on track ● Use the assignment feature in Canvas (file upload) rather than Quiz ● Allow students to select from a menu of assignments that they think best

	demonstrates their learning for final assessment
Break the exam into multiple lower-stakes assessments	<ul style="list-style-type: none"> ● Offer multiple quizzes instead of a single high-stakes final exam ● Configure Canvas to drop the lowest score, or replace earlier scores if students score better on later cumulative assessments
Increase the security of your traditional exam on Canvas	<ul style="list-style-type: none"> ● Use question banks on Canvas to randomize questions and answers presented to students ● Ask students to record themselves talking through specific exam problems to explain their answer; upload as an assignment on Canvas alongside exam

Example: Some of my students are accessing the course on their phones, or do not have reliable access to fast WiFi. What assessments will allow them to complete their work?

 Instructional strategies	 Remote and online implementation
Survey your students early in the quarter about their experience, background, and interest in your course	<ul style="list-style-type: none"> ● Add questions about access to technology and time zone to your student survey ● Leave exams open for at least 24 hrs to accommodate students who are in other time zones or sharing/borrowing devices
Promote use of campus resources (e.g. computer labs, library)	<ul style="list-style-type: none"> ● Direct students to Student Affairs resources for technology access during remote instruction
Allow students the choice of medium for assignments: for example, writing a paper, creating a video, or podcast	<ul style="list-style-type: none"> ● Enable different types of submissions in your Canvas assignments, including media submissions ● Allow students to complete work on paper, take a photo, and upload image files in addition to text submissions by adjusting your assignment settings

References

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To Cite this Resource

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