

INSTRUCTOR KIT: Assessment During Remote Online Teaching



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This compilation is Adapted from Boston University and University of Waterloo.

This paper is intended as a reference guide to aid faculty when making decisions about Assessment Tasks and Exams.

Preparing Assessments for Online Courses

Students in online courses generally have access to all of their course materials when doing assessments. They may also be in different time zones and/or require time away from their courses due to illness or caregiving responsibilities which can make synchronous activities difficult. As such, using the following strategies can be helpful:

1. **Faculty Should Develop a clear schedule for assessments, but be flexible:** ensure that deadlines are easy to find in the Moodle course site, but be prepared to be flexible with them. Disruptions may occur, from technological to health-related, which can make deadlines difficult to meet.
2. **Use low-stakes, assignments:** many students find high-stakes, online testing stressful. Instead, consider using low-stakes quizzes, writing assignments or other small assessments to give students frequent but less stressful practice at applying concepts. The assessments should be worth just enough points to hold students accountable, but not so many (nor so numerous) that the activity becomes anxiety producing.
3. **Move beyond simple facts:** reinforce basic facts and concepts via quizzes, but also get students to extend their learning by applying concepts to new scenarios, synthesizing or analyzing concepts, or creating new ideas or materials with more open-ended assessments.

4. **Provide scaffolded projects:** design projects or essays that have multiple steps (e.g., plan or outline, annotated bibliography, draft, and final submission). This step-wise process helps students keep on track, provides opportunity for feedback, and encourages academic integrity.

5. **Reconceptualize group projects:** group projects may need to be redesigned since students will not be able to meet in person or perhaps even synchronously. Group discussion boards in Moodle enable asynchronous sharing.

6. **Employ test banks:** develop banks of questions that can be drawn from to provide multiple versions of quizzes. Check with your textbook publisher to determine if the question banks can be loaded into Moodle. Some textbooks also have their own online quizzing tools.

7. **Use online tools for collecting assignments:** Various tools exist for collecting student work electronically, such as Moodle submission tool. These are preferable to having students email their assignments as they make managing the assignments much easier.

Guiding principles

- As a preamble to any assessment task, focus on the ethical framework of learning rather than on cheating or plagiarism, but provide students with information about consequences for infringements of academic integrity as well.
- Maintain clear communication with students about the assessment requirements, including any changes to style or weighting of assessment. Student input will also be helpful as you make these decisions.
- Make sure students have opportunities to practice accessing all the technological components related to an assessment task (especially a timed exam) before the due date of the task.
- Be aware of the increased cognitive load for faculty and students in these unusual circumstances. This applies to both traditional exams that may be in a different format and with alternative assignments..
- Consider equity for all students in your decisions about assessment tasks, including whether all students will have adequate access to the laptops, software, and Wifi or data plans that they will need to undertake the exam or assignment. Be willing to be flexible if students will find it difficult to take an online, timed test or exam at a specific time – consider if there are other ways you can ask them to demonstrate their knowledge of the material.

Important situational questions to ask as an instructor

- How much time is involved in creating a specific assessment task, including learning about the technology to support it?
- What costs are involved with additional technology, including an additional proctoring service?
- What kind of support will I need and how do I access it?
- How will course, program, school, or institutional decisions about Pass/Fail affect my choice?

Integrating Online Assignments Into Your Course

Many types of assignments can be done online. Some options are outlined below as well as decision-making criteria for using online assignments in a course and course design questions to consider as you start to integrate online assignments into your course. By thinking about the reasons for using them and answering the design questions, you will be able to integrate these engaging tools in a meaningful way with the rest of your course.

What are some possible online assignments?

It is often difficult to imagine what kinds of assignments can be put online if you have never used technology in your teaching. Basically, technology can be used to put almost any assignment online. The key, though, is to have a clear rationale for doing so. Below are some examples of online assignments, but they certainly do not represent all of the possibilities.

- Online discussions
- Case studies
- Online tests/quizzes
- Practice exercises
- Virtual tutorials or labs
- Essays (submit online)
- Online literature searches
- Simulations

Decision-making criteria

Why should we put assignments online? As mentioned above, with the use of any tools or methods in our courses, there should be a clear pedagogical reason for using them. The following are some of the reasons for putting an assignment online.

- **Allow for new types of assignments.** Some assignments simply cannot be done on paper. For example, you can have students work with a simulation (in two or three dimensions) to see what happens when they change one element. Or they can see full colour pictures or artwork to analyze or critique. Allow yourself to think beyond the limitations of paper-based assignments to create new ways to enhance your students' learning.

- **Refocus classroom time.** As with traditional assignments, you can have students cover content and do activities outside of class time so you can spend your in-class time in other ways. For example, students can engage in an online discussion and then be able to bring that knowledge to class for a more in-depth discussion. Or a pre-class quiz can highlight problem areas for you to focus on in your lecture. You may also be able to reduce inclass hours if your online activities are well-planned.
- **Allow for collaboration.** Research has shown that one way to increase student learning is to promote collaboration where groups of students can interact with each other to solve a problem or discuss an issue together. Assignments which allow for such collaboration are often more effective at positively affecting student learning than individually-done assignments.
- **Encourage reluctant participants.** Online assignments, particularly discussions, can allow even the most reluctant participants to join in a discussion. The online (often asynchronous) nature of such assignments gives students an opportunity to reflect and generate a response to a particular question – time not necessarily allowed in a face-to-face, synchronous discussion.
- **Accommodate different learning styles and levels.** Beyond encouraging participation from reluctant students, online assignments can have a multi-modal design (i.e., graphics, text, audio, virtual hands-on activities) and, if designed appropriately, can also help students reach new learning levels or think more deeply or critically about a given concept.
- **Give instant feedback to students.** One of the real benefits to students of online assignments is the possibility for instant feedback on their work. Many tools used to create such assignments can be configured to provide such feedback,

instead of having students wait for assignments to be graded and returned. This way, they know immediately what concepts they need to work on, and which they already understand. This can also help instructors to identify unclear concepts or students who may need remedial assistance.

- **Archive course information.** Online assignments also allow for an archive to be created of relevant course information and discussions. This information can be used by students at a later date while studying for a test/exam, or by the instructor to create a frequently asked questions page or to measure students' understanding of key concepts.
- **Deliver online or distance education courses.** If a course is being offered online or at a distance, then online assignments are a natural extension of this.
- **Provide students with transferable skills for other courses and in their careers.** Some instructors are interested in integrating key skills into their courses that students can use in other courses or take out into the “real-world” upon completion of their degrees. If this is a goal for your courses, then providing some familiarity with certain technologies through the use of online assignments may be a good way to introduce students to skills they can use elsewhere.

Creating your own online assignment

Now that you have some ideas about possible assignments and have reviewed the decision making criteria, you should answer the following questions to consider how to integrate your online assignment into your course.

1. Briefly describe the assignment. (Write 2-4 sentences)
2. Explain how well your assignment fits with the online assignment decision-making criteria and consider how it will impact your overall course design. Consider using the following focusing questions to help you.

Type of issue	Focusing questions
Goals/objectives	What do I most want students to learn from this assignment?
Contextual	Who are my students? Do they know how to use the technology I've chosen for my assignment? Do they have access to a computer?
Content	What about the assignment content or goal lends itself to being an online assignment?
Teaching methods	How do I need to teach so my students can do this online assignment?
Assessment	Why would I use an online assignment? How will I grade this assignment? What kind of feedback do I need to provide to the students on their completed work or work in progress?

CONDUCTING ONLINE EXAMS

Creating and administering assessment during this remote-teaching period is a challenge, but also an opportunity to evaluate how to meet the learning objectives in your class. The options outlined below will help you think about your decisions for assessment tasks over the remainder of the semester.

Option 1: Exam through Moodle

A traditional final exam or shorter quizzes may be offered through Moodle

Pros	Cons	Resources and Support
<ul style="list-style-type: none"> • Students are generally familiar with Moodle • Exams can be timed and synchronous • Exam design may draw on secure design principles (e.g. randomizing of questions) • No additional cost 	<ul style="list-style-type: none"> • Faculty time and learning curve to put exam into Moodle • Not a completely secure environment 	<p><u>Training in Moodle</u>, including secure features</p> <p>CETE support for exam design</p>

Process:

- Prepare your exam in Moodle; if unfamiliar with creating exams/assignments in Moodle, sign up for training
- If taking an exam through Moodle is new for your students, plan a practice session (e.g. a low-stakes quiz) so they know what to expect on the day of the timed-exam.

Option 2 : Test the content in a different way

The remote-teaching period offers faculty the opportunity to consider alternative assessment tasks. So, instead of in-class exams, for example, here are some other ideas for students to demonstrate their knowledge of content:

- a written assignment with short-answer questions submitted via Moodle
- several small quizzes to replace a larger exam
- student presentations through PPT (with voiceover), podcast, or video
- electronic portfolio with discussion of key topics
- digital poster on key topics
- consider using Turnitin or a plagiarism checker for written assignments and PPTs

Pros	Cons	Resources and Support
<ul style="list-style-type: none"> • Smaller spread-out assignments can reduce stress of one large assignment • Assessment design can strengthen integrity framework • May utilize secure tools such as Turnitin, depending on task • Students may appreciate a different form of assessment 	<ul style="list-style-type: none"> • Faculty time to design a different form of assessment • Academic integrity relies on assessment design and individual student • A different task and/or new technology/tools may increase cognitive load 	<p>Moodle Training will be helpful, but may not be essential</p> <p>CETE support for assignment design</p>

Readiness to assess students online

Question	Yes	No
I can create quizzes in Moodle to verify that students understand the material		
I can collect student submissions online		
I can facilitate student presentations online		
I can grade assignments, exams, problem-sets, etc. online		

If you answered "no" to any of these questions, learn more about Moodle tools used for assessing

Delivering the online exam using ZOOM -Guidelines

Recommended procedures for: Live proctored online exams using Zoom:

Students complete the exam through Moodle, while joining a Zoom meeting with their webcam ON and mic available during the exam. This requires more Teaching Assistant support, buffer time to make sure all students are settled in the Zoom Meeting room before starting the exam and a dry run with students and TAs to flag potential issues before the exam day.

You can read the detailed version in this link (Can this be done ?)

http://cei.ust.hk/files/public/good_practices_for_conducting_live_proctored_online_exams_using_zoom.pdf

Can Google Meet be utilized with a Google Form to proctor an assessment?

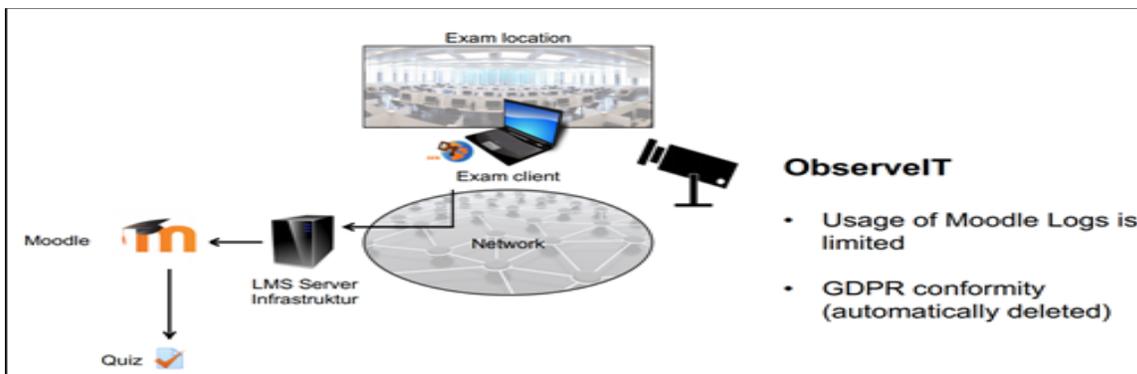
You can have students complete an assessment while they're on a video call on Meet so you can monitor them.

Online exams with Moodle -Something that can be explored with IT

Some universities have provided exams through Moodle using plugging the Safe Exam Browser. This possibility can be explored in consultation with the MNU IT department.



Infrastructure



Maintaining integrity in an online exam

Maintaining academic integrity in an online environment is challenging! Moodle has some ability to create secure exam conditions, but you can also try some of these options to encourage academic integrity:

- Ask students to submit a signed Academic Conduct statement; this can be developed ahead of time or students can be asked to visit the Academic Conduct Code site/document to develop their own statement
- For multiple-choice exams, have a large question bank so that specific questions can be randomized
- Randomize order of questions within tests/exams and have only one question per page; this cuts down on students' ability to share answers
- Use Turnitin or plagiarism checker for longer exam questions

Giving a pass/Fail grade

The Case of Massachusetts Institute of Technology (MIT) (for ideas)

MIT have chosen to make a pass/fail scheme mandatory for all classes.

In MIT, instructors are given the flexibility to re-work certain aspects of their syllabi, specifically: the number and kinds of assignments that will be counted towards the final grade, the schedule for tests and due dates for major projects, whether or not there will be a final examination, and the grading criteria and procedures to be used. Instructors could, for example, decide that instead of a final exam, there will be a final assignment.

However, additional assignments may not be added.

Final exams will be conducted remotely. They will be one to three hours in length as usual, and will be held according to the schedule previously published by, no matter what time zone a student may be in. Finals can be either closed book or open book – however, the information as to whether a final will be closed or open book for a given subject must be provided to students . If an instructor decides to have a final assignment instead of a final exam, they must notify the Registrar’s Office immediately. Final exams will likely need to be revised to reflect changes in content and delivery necessitated by the shorter term and remote/online mechanisms. However, Instructors are also encouraged to not make the remote exams harder in an effort to compensate for concerns about lack of honesty in taking a closed book exam. We need to set high expectations for the integrity of our students and trust them, rather than implicitly induce bad behaviors by seeking to compensate under an assumption of such behaviors. Instructors should assume that students will take the exam in the same way, i.e. they will maintain academic integrity. Please consider that an exam that is much more difficult than would have ordinarily been given could result in significant student stress.

The case of Dalhousie,

Dalhousie, which enrolls more than 20,000 students, has decided to opt for what Wuetherick calls a student-centered approach. The university secretariat recently passed a motion allowing some academic regulations to be waived. With permission from their dean, for example, a professor may be able to reweigh a final exam grade for a particular student who has struggled with technology. Allowing students to resubmit assessments or take incomplete grades also are possibilities.

ASSESSING STUDENT WORK- tools

Dropboxes in Moodle Course Site	Use for the submission, review and evaluation of student work. They can be linked with the Rubric tool for ease and consistency of grading.
Gradebook in Moodle Course Site	A configurable tool that can be linked to Dropbox, Quizzes and Discussions, allowing students to view their progress throughout the term.
Quizzes in Moodle Course Site	Create and manage online quizzes with various question types including multiple choice, multiple select, written response and fill in the blank.
Rubrics in Moodle Course Site	Create rubrics to evaluate an activity, or item, based on a predefined set of criteria. Rubrics can be used with Discussions, Dropboxes, long answer questions in Quizzes, and Gradebooks.
Akindi For integration with Moodle Course Site (not free)	Akindi is a web-based assessment system that automates the creation and grading of multiple-choice exams. Exams can be printed using any sheet of paper and uploaded to the system using any scanner. Instructors now have the option to email an Akindi bubble sheet to their class roster, no printing or scanning required. Each student receives a unique, secure email link that they'll use to access and complete the Akindi bubble sheet online. Instructors are required to post or email the assessment questions to students separately.
Crowdmark For integration with Moodle Course Site (not free)	An online, collaborative marking system offering a paperless way to distribute, collect, grade and return feedback for assignments and tests. Crowdmark is designed for page-at-a-time grading: pages in an assignment or test can be graded by markers and reviewed by instructors concurrently. Crowdmark integrates with Moodle grades are pushed from Crowdmark to Moodle and rosters are pulled into Crowdmark from Moodle. Exams can be written within the Crowdmark system, digitally and uploaded, or on paper and scanned or photographed and then uploaded. Used in cases where handwritten work is important: for example, when students need to give full written answers or solutions, draw graphs or other figures.

<p>Möbius</p>	<p>Möbius is a robust online authoring and delivery environment specifically designed for the needs of STEM classrooms. It includes a rich suite of tools and features for authors looking to design and develop digital assets for their students or peers, and a delivery environment that enables and promotes deep and active learning for users through the combination of instructional material with hands-on activities. Möbius also allows the creation of algorithmically-designed free response and adaptive questions (quizzes) that can be used in conjunction with learning materials for self-assessment or as part of formal assessments. Grades recorded in Möbius can be automatically transferred to LEARN.</p>
<p>PebblePad (not free)</p>	<p>PebblePad supports students as they plan and prepare for learning, record and reflect on curricular and co-curricular learning experiences, and curate and showcase evidence of this learning for different audiences. ATLAS, the assessment space in PebblePad, facilitates formative and summative assessment through self and peer review, qualitative feedback statements, rubrics, feedback templates, and grades. PebblePad also allows assessors to provide feedback on student work.</p>
<p>Perusall (free)</p>	<p>Perusall is a social annotation tool where students read assigned readings (or textbook) in groups and collectively make comments and ask questions. AI grading is available to score quality of responses. Dashboard allows instructors to see confusion reports, student activity etc.</p>

Assess student learning- Activity and Tools

Online tools can provide additional ways for students to demonstrate their learning. These tools help you collect student work online, create quizzes and exams, and grade digital submissions.

Activity	Tool	Synchronous/ Asynchronous
Collect student submissions online	Moodle Assignments	Asynchronous
Check if students understand the material	Moodle Quizzes	Asynchronous
Facilitate student presentations	Zoom, Google Meet	Synchronous
Grading assignments, exams, problem sets (etc.)	Moodle SpeedGrader	Asynchronous
Paper exam (requires students to print the exam, scan their work, and then submit)	Moodle Assignments	Either
Term paper	Moodle Assignments	Asynchronous
Recorded individual oral presentation or a transcript/annotated presentation	Moodle Assignments	Asynchronous
Portfolios (A series of smaller assignments might be an appropriate substitute for a final exam/project.)	Digication	Asynchronous
Group paper	Moodle Assignments (supported by Moodle Discussion Forum)	Either
Group Presentation	Zoom, Google meet	Either

Below are Some interesting and relevant articles about assessment during remote online teaching as a result of COVID-19 pandemic.

1. What to Know as Coronavirus Leads to Online Exams

<https://www.usnews.com/education/best-colleges/articles/what-to-expect-from-online-exams-required-during-the-coronavirus-outbreak>

2. What Do Final Exams Mean During a Pandemic?

<https://www.chronicle.com/article/What-Do-Final-Exams-Mean/248644>

3. Reasons to Stop Doing Timed Online Exams During COVID-19

<https://www.insidehighered.com/blogs/learning-innovation/5-reasons-stop-doing-timed-online-exams-during-covid-19>

4. Giving a Pass/Fail Grade

<https://www.insidehighered.com/news/2020/03/19/colleges-go-passfail-address-coronavirus>

5. Q&A: Toward Better Assessments in Online Courses

<https://www.insidehighered.com/digital-learning/article/2018/10/31/qa-strategies-better-assessments-online-learning>