Instructional Continuity

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Introduction

Thank you for your time and dedication. Over the past few days you have likely spent a great deal of both trying to maintain instructional continuity and switch to online instruction. There is no one way of going about this. As an expert in your subject area and someone who has worked with students, reading this document will hopefully help you decide on how to move forward. If you have specific questions about your class, please reach out to the CTL. We are happy to help.

Whatever changes or decisions you make, communicating them clearly to your students is key. They are in a similar state of confusion.

This document relies heavily on outside sources. All outside sources will be linked and boxed in gray. The <u>Office of the Provost has a Keep Teaching webpage</u> that is helpful and laid out by topic/concern.

Note on the situation from a professor

- Prioritize need-to-know material over nice-to-know material. [Use your learning objectives to help with this.]
- Online classes take a great deal of front-end work. Transferring online is also going to take a great deal of work. But, do not read up on distance learning best practices since they are not written for the situation we are currently in. This is triage.
- Stay in contact with students and be transparent.
- Make videos short, if you're posting them for students to watch later.
- Recreating an online mirror of your classroom is not possible nor should it be the aim.

Paraphrased from https://sites.tufts.edu/teaching/2020/03/13/quickly-preparing-to-teach-at-a-distance/

Synchronous and Asynchronous Teaching

Options for instructors to facilitate class sessions remotely include synchronous and asynchronous teaching. Some faculty adopt a blend of both. For example, they may meet 'live' once a week and choose to upload videos/recordings for other class times.

Synchronous: instructors and students gather at the same time and interact in "real time" with a very short or "near-real time" exchange between instructors and students.

Asynchronous: instructors prepare course materials for students in advance of students' access. Students may access the course materials at a time of their choosing and will interact with each over a longer period of time.

Instructors may choose to engage their students synchronously or asynchronously depending on the course content or material that needs to be taught.

Advantages of Synchronous Teaching

- 1. Immediate personal engagement between students and instructors, which may create greater feelings of community and lessen feelings of isolation
- 2. More responsive exchanges between students and instructors, which may prevent miscommunication or misunderstanding

Disadvantages of Synchronous Teaching

- 1. More challenging to schedule shared times for all students and instructors
- 2. Some students may face technical challenges or difficulties if they do not have fast or powerful Wi-Fi networks accessible

Advantages of Asynchronous Teaching

- 1. Higher levels of temporal flexibility, which may simultaneously make the learning experiences more accessible to different students and also make an archive of past materials accessible.
- 2. Increased cognitive engagement since students will have more time to engage with and explore the course material.

Disadvantages of Asynchronous Teaching

- 1. Students may feel less personally exchanged and less satisfied without the social interaction between their peers and instructors.
- 2. Course material may be misunderstood or have the potential to be misconstrued without the real-time interaction."

From bit.ly/stanfordteachingdisruption.

Assessment

Our LMS offers several assessment options. eCampus can host submissions of various file types. It also allows quizzes and exams to be created using locally made or even publisher-based question banks. There is a software tool called Respondus that assists with creating eCampus quizzes and exams. It can be set up to take a Word document and convert it into eCampus compatible exam format as well. Contact IT to learn more about assessment on eCampus.

It is fairly easy to give small quizzes to hold students accountable or do spot-checks on their learning, and this might be ideal to keep students on track during class disruptions. Providing high-stakes tests online can be challenging, however; they place extra stress on students, and test integrity is difficult to ensure.

- Embrace **short quizzes**: Short quizzes can be a great way to keep students engaged with course concepts, particularly if they are interspersed with small chunks of video lecture. Consider using very-low-stakes quizzes to give students practice at applying concepts—just enough points to hold them accountable, but not so many that the activity becomes all about points.
- Move **beyond simple facts**: It is good to reinforce concepts through practice on a quiz, but generally it is best to move beyond factual answers that students can quickly look up. Instead, write questions that prompt students to apply concepts to new scenarios, or ask them to identify the best of multiple correct answers.
- Check for **publishers' test banks**: Look to see if your textbook publisher has question banks that can be loaded into [Blackboard] ... Even if you don't use these questions for your exams, they can be useful for simple quizzes. Some textbooks also have their own online quizzing tools that can help keep students engaged with the material.

- **Update expectations for projects**: Campus disruptions may limit students' access to resources they need to complete papers or other projects, and team projects may be harmed by a team's inability to meet. Be ready to change assignment expectations based on the limitations a crisis may impose. Possible options include allowing individual rather than group projects, having groups record presentations with Zoom, or adjusting the types of resources needed for research papers.
- **Consider alternate exams**: Delivering a secure exam online can be difficult without a good deal of preparation and support, so consider giving open-book exams or other types of exams. They can be harder to grade, but you have fewer worries about test security.

https://kb.iu.edu/d/arye

Online tests on Blackboard

Blackboard's caveat is that "technology cannot fix character." While framing assessment in terms of how best to mitigate student cheating is not particularly fruitful, it is on many people's minds. There are ways to lower the probability that students will cheat. The videos - available on LinkedIn Learning – give advice on how to set up tests and run them.

A major overhaul of your assessment structure is probably not possible. However, this is a time to pause and examine the alignment of your learning objectives with your assessment techniques.

Real-time questions

If you are teaching synchronously, consider asking real time questions through Socrative, iClickers, or some other tool that tracks individual participation and provides analytics. From now until the end of the semester, participation in these short in-class question exercises could hypothetically count towards the final grade. Be sure to test run this and explain the change clearly to students.

Portfolios

If the vast majority of the class grade is contingent on quizzes and exams, can some of this be transferred over to a project, or a portfolio, for example? Examples exist of engineering courses, among others, featuring an assessment of learning using portfolios.

Open Book Exams

Other options include writing open book exams that can be administered within a specific time frame or given in the take-home style. Open book exams test whether students can take the material you have given them and use it to solve problems. When written well, they test understanding and not memory.

Parallel to open book exams, open-ended problems in general are worth exploring. If you decide to ask students to solve an open-ended problem, please remember to walk them through the process first and solve a few examples. That is, <u>test on what you teach</u>.

Open-ended problems or questions require "students to prepare a specific academic response. Students are expected to think critically and construct a response ... [You can give students the] the rubric that will be used to score the assessment in advance. [These problems are] often ill - structured, requiring the student to develop a strategy to solve it, and divergent in that there is no single best answer. [They] engage the student in analysis, synthesis, and evaluation of the problem, so scoring is subjective. [What this means is that] using a rubric with set criteria [is advised]." Taken from here.

Group Problem Sets/Projects

Unless your homework is already online (usually provided by the publisher of the course textbook), consider assigning group problem sets. This will lead to some free riding, but these students will not do well on tests. Before doing so, be sure to cover these three things: "positive interdependence (if anyone fails to do his or her part everyone loses in some way), individual accountability (all team members are held accountable for all the material in the assignment), and regular self-assessment of team functioning."

Writing

Writing and learning are inextricably linked. Consider assessing student learning through writing. Writing assignments can activate:

a) prior knowledge

List four systems in your everyday life that involve flow of fluids through closed channels.

b) increase relevance of the subject

Estimate a quantity/use mathematics outside of the classroom.

c) clarify and organize course material

Review what you know up until this point about database structures and list questions that arise.

d) establish connections between new and known material

List all the practical applications you can think of for complex variables.

e) develop creativity

Prompt students to explore failure of X by looking at possibilities for experimental and computation errors, invalid assumptions, factors that were not taken into account by the theory, etc.

Online Proctoring

Online proctoring tools are subscription-based and not subscribed to on the university level. However, Zoom has the ability to view up to 49 participants on one screen should you choose to hold a faculty proctored exam on Zoom.

Students have been known to refuse to turn on their webcams. But, simply put, if they do not do so, they will not be able to take the exam and get a grade on it.

HOWEVER, please consider students with documented issues who have lodged official requests for accommodations, including but not limited to extra time on an exam. If you have such students in your class, please contact Academic Affairs to discuss how best to accommodate them and their learning.

Maintaining Academic Integrity

The <u>TAMU Keep Teaching webpage</u> has an "Administer Assessment" section as well as a "Promoting Academic Integrity Online" section that you may find useful.

Establish Expectations: Clearly define your expectations upfront – not all students share the same definition of "cheating", and may not understand the variety of expectations in an academic environment (Feeney, 2017).

Design for Collaboration: Working collaboratively to solve complex problems may actually be a benefit to students' learning rather than a form of cheating. When thinking about collaboration, you may want to review your learning outcomes – what do you hope students to be able to do in this course, and what kind of activities best support that (Farrell, 2015)?

Distribute marks and assessments: Does your course rely on a single final exam? You may want to consider distributing student grades across several shorter assignments or tests.

Ask application questions (higher-level questions)

Provide Practice Exams and Assignments

Make Exams Open Book

Rework your MCQs

Randomize Quiz Questions: Most online quiz tools make it easy to randomize the order that answers appear or the order that questions appear. This can help prevent students from quickly sharing answers.

Use Wildcards and Question Banks: By setting up a Question Bank, you can also draw random questions from a bank of questions, meaning that every student will get a different test (Michael and Williams, 2013). Further still, you can use Wildcards within questions to ensure that even if students get the same question, the numbers and information is different every time.

Set a time limit: Setting a time limit can encourage students to focus their attention on the question at hand, not at scouring their notes. However, it is important to acknowledge that some students will require additional time for accessibility reasons, and you should be prepared to accommodate accordingly. Be aware that time limits can also be restrictive and challenging for distance and adult learners; if you plan to use a time limit, think about providing different windows for the exam period or similar accommodations.

https://onlineacademiccommunity.uvic.ca/learnteachtech/2018/05/31/how-do-i-stop-online-students-from-cheating/

Discussions

To remove technical hurdles and to ensure that students are able to engage with peers and each other in a discussion-based class (even without a strong Internet connection), you might choose to move student discussion to an asynchronous format. Craft discussion questions to be as clear and as specific as possible so that students can build off of the question for a sustained response. ... Assign roles to students so that they understand when and how they might respond to you or their peers. For example, students might "role play" as particular kinds of respondents or you might ask them to do particular tasks (e.g. be a summarizer, a respondent, a connector with outside resources).

From https://docs.google.com/document/d/1ccsudB2vwZ GJYoKIFzGbtnmftGcXwClwxzf-jkkoCU/preview#heading=h.bsm2vj54ofq4

Labs

"Provide raw data for analysis: In cases where the lab includes both collection of data and its analysis, consider showing how the data can be collected, and then provide some raw sets of data for students to analyze. This approach is not as comprehensive as having students collect and analyze their own data, but it might keep them engaged with parts of the lab experience during the closure."

Other options:

Take part of the lab online

Investigate virtual labs

Alternate software access

https://kb.iu.edu/d/arve

Many groups require a physical work/design/lab space. Please decide upon how to accommodate these groups in consultation with your Program Chair.

Main Campus Messaging and the Syllabus

"... Faculty will communicate with students and post a new syllabus." From 'Message from the Provost' here.

Tip: Update your syllabus to include details of how the course will change, including changes to assignments, due dates, grading rubric and contact information. If the syllabus changes, it must be made available to all students via email and posted in a place where students can access it."

https://provost.tamu.edu/keep-teaching

In general, use your learning objectives to guide you as you move the course online. The course objectives are set, but the syllabus, in such circumstances, is not an unchangeable contract. Even in normal circumstances, faculty move dates around, often upon student request, and make changes to their course structure. (This is a luxury that has been afforded to us mostly due to our small class sizes.) In the online environment, please be clear and transparent with your students. Set realistic dates and deadlines. Remember that it is unlikely that you will be able to simply migrate the course as-is to the online format; you may decide to make changes to your course structure in the interest of student learning.

More Resources

Click here for a <u>master list of resources</u> about instructional continuity. Note that they are contextualized for each university, but many precepts are probably applicable to your teaching.

The Association of College and University Educator's has a free Online Teaching Toolkit. It covers six main topics: welcoming students to the online environment, managing your online presence, organizing your online course, planning and facilitating quality discussions, recording effective microlectures, and engaging students in readings and microlectures.

This Chronicle of Higher Education article about "Going Online in a Hurry" is worth a read.

A <u>Slack channel</u> has been set up for you. Join for resources about assessment, synchronous and asynchronous online teaching, as well as a general channel where you can give examples of what you are trying out and share ideas with your colleagues. If you're new to Slack: it's free, just create a username and password. Incidentally, several faculty already use Slack as a tool to communicate with their students. It's necessary to use an **@qatar.tamu.edu or @tamu.edu** email address for signing up. If you already have Slack: the name of the workspace is continuitytamuq.slack.com