Hybrid Instructional Models with Technology Possibilities

Eastern will reopen with hybrid on ground courses in the fall. Faculty with a medical exemption will be permitted to offer all online classes. Faculty without a medical exemption will be teaching primarily in the hybrid staggered student model, while some courses will be offered in the staggered class model. Due to the lack of sufficient large spaces to hold staggered class courses, faculty should begin preparing to teach in the staggered student model.

Technology

Faculty members have a variety of tools at their disposal for engaging students in the content of their disciplines. The most common are Lecture, Discussion, and Demonstration, and it is not uncommon for a class period to incorporate all three. Additionally, the practice of flipping your classroom may provide some benefits.

In the fall, classrooms and labs will be outfitted with a touchscreen monitor, stylus, webcam, and microphone, to be used in conjunction with Blackboard Collaborate, MS Teams, WebEx, and Panopto. The following descriptions are intended to help you plan how you might configure your classes to allow for the use of available technology to engage students as they rotate through in-person and remote experiences.

As a baseline, we recommend using your Blackboard sites for efficiency. All courses are created automatically, with students enrolled automatically. At a minimum, if you upload your physical handouts and other files that you would normally distribute, you can use that single source to display them in class on the projector, which can also display for the remote students using screen sharing in Collaborate (or WebEx or Teams), ensuring that virtual students and in-class students have a similar experience. Students can also access the files outside of class. Blackboard also enables faculty to quickly email all the students in a class and can store links to your WebEx or MS Teams rooms, as well as Panopto videos.

Instructions for the various tools discussed below can be found in the Work at Home and Online Instructions Toolbox for Faculty and Staff article located at
https://easternct.makekb.com/entry/534/

Rotating Student Model
Example: 10 in-class students rotating each class with 20 remote students

Lecture

Professor conveys information to students with the help of visual aids (PowerPoint, whiteboard, video, physical object), responds to questions from students, and checks for understanding by calling on students or conducting polls or quizzes.

The qualifying question for lecturers is whether it is required that students viewing the lecture remotely participate in some way.

Synchronous
If you want your students to participate in real-time during class, then Collaborate, WebEx, or MS Teams can be used to bring them into the class, all three can be recorded for future reference, but also allow for real-time interaction. Collaborate, MS Teams, and WebEx allow all students and

faculty in the classroom to see and hear the remote students and vice versa. All three tools also enable the faculty member to share their computer screen. With screen sharing enabled, the remote students will be able to see the same material as the students viewing the projector in class. Additionally, the touchscreen monitor can be used as a whiteboard that all students can see. Questions from remote students can be submitted via chat or by unmuting their microphone and checks for understanding can be conducted by polls featured in all three tools. Remote attendance is automatically logged in WebEx or you can manually take attendance using the Blackboard attendance tool or physical notes.

Benefits

- Shy students may be more willing to ask or respond to questions in the chat.
- Recorded sessions allow students to review content to solidify understanding and retention of the material.
- Distance between students in the classroom cuts down on the in-room students' abilities to hide behind other students
- Daily seating charts will make checking in-room attendance easier and records of online sessions will make checking remote attendance easier.

Other Considerations

In-room visual aids such as maps, tables, or other physical objects can be shown on the adjustable webcam. Alternately, photographs or scans of the material should be created so they can be presented digitally on the screen for better viewing by remote students.

New microphones in the classroom will capture conversation across the class, however, students who talk very quietly may need to speak up or the faculty may need to repeat questions for remote students.

Participation in polls or quizzes can be accomplished with a combination of physical and virtual hand-raises. This requires the faculty member to communicate the result as the two groups of students will not be aware of each other's votes.

Asynchronous
If remote students are not required to view the lecture synchronously, perhaps viewing the lecture later in the day, you can lecture to the live students and use Panopto to capture the lecture. It will upload to Blackboard automatically, even after you log off, and be available to the whole class after a short period. Blackboard and Panopto enable a professor to conduct the class for on ground students while recording the sound in the room, themselves or any other part of the room, and the activity that occurs on the screen. The material is automatically uploaded to Blackboard for remote students to watch after class.

Benefits

- Reduces faculty member's need to manage both in-room Teams/WebEx platform and the other visual aids.
- Works directly out of Blackboard with no need for separate accounts or tools.

- Students can watch repeatedly or back up when needed

Other considerations

Faculty awareness of whether remote students are comprehending material will not occur in real time. Panopto recording can also be edited to include quizzes that check knowledge along the way, however, at this point these quiz grades will not appear in the gradebook.

Flipped Classroom model (asynchronous for all students)
With a flipped class model, students can watch pre-recorded lectures before class, then use in-class time for discussion and engaging activities that might otherwise be assigned as homework or activities which must be conducted in person (possibly including lab work). Flipped classrooms allow students to watch the recorded lecture on their own time and pace, potentially increasing engagement, and overall achievement.

Faculty can record lectures in Blackboard with Panopto for all students to watch when they have time. Once a lecture is recorded, it can be used for multiple sections of the same class and reused in future semesters. Videos can be recorded in short or long segments, from home, the office, or in an empty classroom, so they will not need to wear a mask. The tool will capture their voice, PowerPoint, computer screen, webcam, or any combination of their choosing. These lectures are the professor's intellectual property and cannot be appropriated by the University or used by the students for other purposes.

Benefits

- Students can review the lectures whenever needed
- Faculty can direct students to certain parts when faced with common questions
- Quizzes can be embedded to gauge understanding or to prevent progress until a sufficient score is achieved
- Faculty can record lectures in otherwise empty rooms, avoiding the need for a mask when lecturing
- Class time is used for more complex or interactive activities

Other Considerations

Faculty who want to have a mistake-free recording may spend extra time re-recording. Learning certain recording techniques to minimize the time spent will make the process more efficient.

Discussion

In or outside of class, students read text (newspaper, novel, poetry, script, advertisement…), observe performance (music, play, speech, business machine, pre-school teacher…), view items (painting, sculpture, drawing…). In class, in response to prompts by the professor, students discuss the text's/performance's/item's qualities, meanings, implications, as a whole class or in small groups.

Synchronous (No Asynchronous Option Available)
Interaction with stimulus material does not need special attention if it is assigned as homework. For example, reading chapters and being prepared to discuss them in class can be assigned. If the faculty

member intends to expose the students to the stimulus material in class, they may need to incorporate the method described in the Lecture section above.

Whole class discussion can be conducted via Collaborate, Teams, or WebEx with remote students being projected on the screen and the camera pointed at in-class students. Alternately, faculty can assign students to groups by cohort, so that all students in a particular group are in the classroom on the same day and remote on the same day. Groups can be assigned to meet remotely outside of class to work on semester-long projects at times that work for them (including their remote days). Faculty can hold multiple instances of essentially the same discussion in class.

Benefits

- Discussion can be recorded for future reference
- Moderation can be managed using tools in Collaborate, WebEx, or Teams
- Screen sharing can be used to prompt discussion, keep notes, or adhere to an agenda

Other Considerations

The professor may have to moderate the discussion more formally to accommodate the remote students and avoid issue that arise from them not being physically in the room. Hand raising or requesting an opportunity to speak may be required rather than just jumping in.

The images of remote students project well in Teams as a grid, though it becomes hard to see the more students you have. Alternately, speaker view allows the person speaking to take up most of the screen and will alternate as students speak. Students may have difficulty using their cameras because of bandwidth or because they wish to multi-task during class and do not want it to be apparent to the professor.

Breakout rooms or small groups would have to be separate for the remote students and in-class students. The professor can drop in on the remote groups as needed.

Demonstration

Professor and/or student demonstrates solution to problems (logic, computer, math, systems, accounting, finance), application of technique (painting, playing instrument, speaking language, interviewing, storytelling, programming, mapping, marketing, exercising..), operation of equipment (camera, computer, microscope, telescope) and students practice/critique/discuss as a whole class or in small groups.

<u>Synchronous</u>
Demonstrations (including labs) can be performed for students in class while sharing the screen or pointing the webcam at the activity, as described in the Lecture section above (Collaborate, WebEx, or Teams). If this method is not sufficient, the demonstration can be recorded with Panopto and hosted in Blackboard prior to class and displayed for both in-class students and remote students during class.

Students can be scheduled to give live demonstrations on their day in the classroom if social distancing can allow the student to stand in the front of the class. Students can be paired or put in small groups for observation or critique. Tools in Blackboard, Teams, and WebEx can allow them to share documents and write comments.

Benefits

- Recorded demonstrations can be reused throughout the semester, and in future semesters
- Faculty can direct students who missed the demonstration to the video, rather than demonstrating again

Other Considerations

Demonstrations that require prerecording may require more preparation and effort to produce.

<u>**Asynchronous**</u>

Using the flipped classroom, faculty may assign all students to watch a recorded demonstration on their own time and divide up class time for small numbers of student to stagger their attendance for the purpose of replicating the demonstration for the professor to evaluate.

Benefits

- Time normally spent demonstrating can be reclaimed for student activity.
- Recorded demonstrations can be reused throughout the semester, and in future semesters

Other Considerations

Faculty will not be able to field questions about the demonstration in real time unless they devote some class time to it before or after the activity. Alternately, questions can be resolved over email or other communications methods outside of class.

Rotating Class Model

All students in class one day per week and all students remote remaining days

Lecture

Social distancing would require the one in-class session to occur in a large enough room (unfortunately we have very few rooms that are large enough to accommodate a 40-person class with social distancing). The remaining sessions would be conducted remotely for all students, using Collaborate, WebEx, Teams, or Panopto (Synchronously or asynchronously) as described above.

Benefits

- All students in one live class alleviates the issues of having some students in-class and some remote.
- All students remotely connecting for remaining classes enables faculty to use more tools without having to consider how to engage in-class students at the same time.
- Students receive a consistent experience across the class

Discussion

Discussion on the remaining days of the Rotating Class Model would be conducted using Collaborate, WebEx, or Teams synchronously as described above. Faculty can use breakout rooms in all three tools if necessary.

Benefits

- With all students connecting remotely there are no barriers to breakouts groups.
- All students remotely connecting for remaining classes enables faculty to use more tools without having to consider how to engage in-class students at the same time.
- Students receive a consistent experience across the class

Demonstration

Demonstration in a Rotating class Model would have the same options as the Rotating Student Model. Either demonstration can be presented physically in class or recorded for viewing outside of class with the same benefits and other considerations.

Center for Instructional Technology

Instructions for the various tools discussed above can be found in the Work at Home and Online Instructions Toolbox for Faculty and Staff article located at https://easternct.makekb.com/entry/534/

In order to help faculty prepare for the possibility of teaching hybrid courses during the Fall 2020 semester, CIT will offer a virtual workshop on Pedagogical Concepts and Tools for Hybrid Courses on Wednesday, July 8 at 2pm.

The session will focus on methods and tools that enable faculty to conduct hybrid courses, where an instructor could present to both a live and virtual audience. Tools that will be discussed include WebEx, MS Teams, Panopto, Blackboard, and PowerPoint, as well as webcams and touchscreen monitors. The session will be delivered over WebEx, anyone can join using the WebEx link below.

All faculty are invited to attend and can do so using the above link, however, for planning purposes, if you plan to attend, please complete this MS Form using the link below in order to RSVP. It requires just your name and email address. If you have any trouble using this link to RSVP, you may send me an email with your information. To RSVP for the Hybrid Courses workshop please click the l and complete the form: https://forms.office.com/FormsPro/Pages/ResponsePage.aspx?id=6Eq8AGxX40WUnU8SnYtnCua-hUi-VP5IrbAvbohKmbFUNzAyS1E3QzVGTjNMNjRRR1dMSDk0ME5ERC4u

Pedagogical Concepts and Tools for Hybrid Courses
Wednesday, July 8 at 2pm
CIT's WebEx Room: https://easternct.webex.com/meet/cit | 1204178082

Join by phone:
1-650-479-3208 Call-in number (US/Canada)
1-877-668-4493 Call-in toll-free number (US/Canada)
Access code: 120 417 8082

In the Spring semester we surveyed faculty to assess their training needs for the possibility of online teaching in the Fall of 2020. Many of these same resources can be used for hybrid online teaching. Below you will find some data from the survey as well as some useful links to get started exploring this technology for possible use in your Fall 2020 classes. More information can be found on the CIT work from home toolbox page https://easternct.makekb.com/entry/534/ . Faculty can also schedule one-on-one training sessions with CIT.

81 faculty requested training related to **Web Conferencing WebEx/Teams.**
Using MS Teams for Classes
Polling in MS Teams
Sign Up for Webex Account
Using Webex for Polling and Whiteboarding
Webex Training - Breakout Sessions

59 faculty requested training related to **Blackboard**.
Blackboard Quick Start Guide
Recording Audio Over an Existing PowerPoint and Uploading to BlackBoard

56 faculty requested training related to **Panopto Lectures**
Configure your BlackBoard course for Panopto use
Installing Panopto
Recording with Panopto