

Classroom Tips and Suggestions in the Time of Covid-19

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When planning to use classrooms for face-to-face, hybrid, or mixed-mode meetings, we need to keep issues of equity in mind. Even when teaching a class where all of the students are on campus, it is likely that some will need to miss in person class time due to isolation or quarantine. Ensuring that your class can continue to run equitably when students are not physically present will keep students from being penalized for missing due to illness or exposure and will therefore decrease the barrier to students reporting symptoms and/or going into quarantine. Considering how to use the physical space is only part of the equation, and we encourage everyone to consider [principles of resilient pedagogy](#) that have been a focus of LTC work during the past months.

The following suggestions are based on the experience and observations gleaned from a series of classroom simulations in July and August 2020. They represent our best understanding of what works more or less well in teaching in the physical classroom especially when you try to add in students who are remote, whether off campus or on campus and quarantined or isolated.

The tools and equipment are the standard classroom computer, Logitech camera and mic, the classroom audio system (where applicable), and sometimes the instructor's own laptop, Ipad with Apple pencil, or phone. [Instructions for your specific classrooms, with photos and seating charts are online](#). The software used was Zoom, Explain Everything, PowerPoint, Google docs, and Google slides.

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Teaching face-to-face in the socially-distanced classroom

Be sure to check your assigned room with a colleague to find out how audible you are and how audible your students will be for you. Masks make a difference, so consider trying a couple of different models; you may sound clearer with a different mask (possibly one that allows more space between your mouth and the mask, while still fitting closely around the edges).

The furniture needs to stay put. In some rooms, the chairs swivel. But in other rooms, the students will have to swivel in the chairs which will limit who they can talk to and for how long. Some rooms will have fixed seating; some rooms will have tables and chairs or tablet chairs -- all of this will have an impact on your interaction with students and students interacting with other students.

Be mindful of your own movements: If you are a walker, remember to stay in the front of the room. You cannot check in with students in the back of the room as you are used to.

Bringing remote students into the face-to-face classroom

Whether you are in a space that has a camera provided or you are bringing your laptop to connect to remote students, here are some guidelines on what to do ahead of time and during class to make sure remote students are included into the class. We recommend spending some time on the first day of classes to work with your students through the logistics of the technology so that everyone has some time to practice and troubleshoot:

Setting up your Zoom meeting ahead of time:

- set Zoom [to hide non video participants](#) - if you ask all students to be on Zoom and then ask the in-room students to turn off their video, you will be able to see the remote students more easily and you can use Zoom to create connections between the in-room and remote students.
- allow private chat: by default, Carleton has chosen to turn off the ability for private chat - students chatting among themselves. If you find this function important to establish student community, you will need to [enable this under your Carleton Zoom profile](#), and then it is enabled for all of your meetings. Please note that private chat is only visible to people in that private conversation; this includes the downloaded chat file.
- Remind all students that they also need to be logged in through their Carleton Zoom account.

Getting started with Zoom in a classroom with a camera

- Follow the instructions on the computer desktop to sanitize the teaching space.
- [Log into Zoom with your Carleton account \(using the SSO option\)](#) - if you don't do this, the previous user may start using Zoom in a different location, disrupting your Zoom call
- Set the sound using the control panel on the classroom computer. If necessary, you can test that the microphone is working with Zoom, by going to your Zoom app, finding your account info in the top right corner, going into Settings, Audio, and [finding the Test Mic option](#))
- Check the location of the camera and mic and spend a little time checking its field of view and where the mic can pick you up clearly. Mark out a box for yourself and stay inside it. Use the controller (a square pad with buttons in a plastic sleeve) to zoom the camera in and out; test it a bit to get an idea of the range.
- Figure out where the camera is and look at it! It's easy to teach only to the people in the room, making the remote students feel very remote and left out.

- Practice using PowerPoint and Zoom screen sharing: the classroom computers see the projection screen as a second monitor and extend to it. This can make it difficult to choose the correct screen to share and to get back to the Zoom session to interact with remote students. Use CTRL + Tab (Mac) or Cmd+Tab (Windows) to switch between applications.
- If you are using your laptop in this classroom as a secondary resource, make sure that it is completely muted - both in the Zoom application and the laptop itself (using the mute key on the keyboard), to avoid feedback. This is also something your students in-room need to do, if you want them to be on Zoom.

Getting started with Zoom with any computer

The following tips are more general - they apply not only to classrooms with a camera but also if you want to use your laptop either in a classroom (without camera installed) or at home

- Make sure you can see the remote students on the classroom monitor. If you want them to talk to the class, put them up on the screen.
- When you share slides, have a student monitor the chat for questions because it will be hard to keep track of the activity

Student use of Zoom during Class

If you are teaching in a physical classroom and you want all of your students to be on Zoom for breakout rooms and other collaboration, be aware of the following:

- Student computer batteries will be drained by using Zoom for the entire class, which can be problematic because there normally will not be accessible outlets. If possible, it may be better to have physically present students to use Zoom for only part of the class.
- Students in the room need to
 - mute their computers as well as muting themselves on Zoom
 - turn off their video (if you only want remote students to appear on the classroom screen)
- You should spend some time at the beginning of the class showing students how to optimize Zoom for class work:
 - Gallery view for discussion
 - Speaker view for lecture, presentations, and screen sharing
 - You can drag the slider to make the speaker view smaller and the slides bigger
 - You can blow up the size of the slides and then pan to see the entire slide if you are looking at detail [using the “View slides” function on the menu bar]

Teaching Tips with Zoom

- Consider having all links and instructions in Moodle and training the students to log into Moodle at the beginning of class if you expect to use a lot of interactive tools and techniques. It makes it much easier to find the tools and to keep track of the instructions! Remember that on a laptop (or a phone!) managing multiple windows can be a challenge.
- You can put information in the Zoom chat (for example, links to Google Docs, the PIN for a Kahoot quiz etc), but remember that students who arrive late can't see the chat from before they entered the meeting. A Moodle announcement with this information creates more consistent access for students.
- Be sure tell the students (both in the room and remote) how to let you know if they run into problems. For example, the Google Docs setting may not give them access or they may miss the pin for the Kahoot quiz. Have a way for them to signal these problems before they get left behind.
- If you will be creating breakout rooms during class, it can be helpful to have the students rename themselves (for example, Remote Victoria Morse or Weitz Wiebke Kuhn). It makes it easier for you to pair remote/in person or to group all remote students in breakout rooms.

Is recording a class session and putting it on Moodle equitable enough access for a remote, quarantined, or self-isolated student?

There is no single answer to this question. If your class is mostly lecture, then it may be fine to record yourself and have the student watch the lecture remotely, but other types of interactions can be difficult to capture effectively with our recording technology. Consider the following tips for different types of class meetings.

Lecture with slides or board work:

It is possible to capture the sound from live lectures reasonably well using classroom cameras and the associated microphone. However, the video is often not adequate to capture much board work. We suggest that you mostly avoid writing on chalk or whiteboards when video is captured with the classroom camera. When utilized, writing should only occupy a small part of the board to ensure capture by the camera. It is far easier to use slides or Explain Everything, which can easily be shared over Zoom and recorded. If you use Explain Everything with a tablet, you can use the space as a whiteboard or annotate slides as you talk, and everything can be saved as a .pdf to share with students afterward.

Lecture with Q&A:

If you have synchronous Q&A with students, students on Zoom may not be able to hear questions asked by students in the classroom, and the remote students will also need an opportunity to ask their own questions. To capture voices from the room, you will need to turn the microphone toward the speaker and stand close to the mic yourself (beside or behind works if you are close). In larger rooms, you will likely have to repeat the question before answering it. For longer questions or presentations, experiment with having students come near the mic. Check for safe social distancing.

Be sure to ask students' permission before you record them or their voices and especially before you share the recordings. If students do not want to appear on a recording, find a way for them to be out of camera range and to ask questions without being recorded. Allowing students to ask questions by Zoom chat can be a good workaround, but you may need to assign someone in the classroom to monitor chat and alert you to questions or comments that are posted.

Interactive Lecture:

Consider [Kahoot](#) or [Zoom polling](#) to ask questions and check students' comprehension. Have a student assigned to monitor the chat for questions which they can relay to you. During our simulations, we found that while Kahoot is a wonderful tool, it can be difficult to have students use Kahoot and Zoom simultaneously on the same device. If you have students who are using Zoom during class and you plan to share your Kahoot questions via Zoom, encourage participants to use their phones to answer Kahoot questions. Note - faculty can request a Kahoot license through Carleton's ITS HelpDesk.

Group work and discussions:

If you have the in person students do small group work or discussion, how will the remote student see and hear that? What will it feel like to watch and not participate? How will that affect their learning? You might consider having the small group work take place outside of class time as homework or course prep; that way students can work in either face-to-face groups or via teleconferencing so that remote students can be included and have social and intellectual contact with their classmates. If you have enough remote students, you could consider having them connect and discuss in a breakout room while the in person students are discussing in the classroom.

Discussions can be moved into Moodle Forums; faculty might use group class time to comment on the discussion and highlight themes that students brought up (or ones they missed). It is

also possible to organize group work that includes remote students. If there are several, they can be their own small group. Groups can “report out” using a tool like Google Docs or by making a slide which they can share with the class. Using Zoom and the classroom sound system, remote students can be heard in the classroom better than in person students can be heard on Zoom.

Alternatively, students can be put in pairs (1 remote/1 in person) to discuss via Zoom (either voice or using the chat within a break out room). If the speakers in the classroom work well, the remote students can be the ones to report out. With board work, in person students can write; remote students can speak/report out.

To share student work, consider having them work on a shared Google Doc you provide, as you can monitor their progress and nudge individual students if that seems necessary. Other ways of sharing work is for students to share their Zoom screen or to take pictures of their work to upload into Moodle.

In some rooms (Weitz 235, for example) there may be enough white board space to allow students to work at the boards and maintain 6 feet of distance. Students would need to bring their own markers; black is more visible at the greater distances we are now working with.

We hope you find these tips helpful. They are not exhaustive and we are confident that you all will find many other creative solutions to the challenges of teaching this fall. We do hope, however, that these insights give you a good starting point for addressing the needs of students in and out of the classroom. Please don't hesitate to contact Wiebke (wkuhn) with technology and teaching questions or Victoria (vmorse) and Matt (mwhited) with questions about course design, teaching, and managing the tech while teaching.