

Online Learning Pilot Program Technology & Online Program Delivery Resources

Online program delivery and technology recommendations:

1. **Lighting** - Think about webcam placement including the angle and proximity to you and what you are demonstrating. Make sure some of the lighting in your space is coming from in front of you so the light is shining on your face and you aren't a shadowy figure. See this [Zoom guide for lighting](#) recommendations.
2. **Webcam** - It is recommended to use an external webcam with at least 1080p resolution for the best quality and to allow for movement of camera when showing different mediums (check out [this](#) option). Be sure to keep your camera angles in mind when sharing different mediums.
3. **Microphone** - It is recommended to use an external microphone to have high-quality sound delivery (check out [this](#) option). Be careful not to place the microphone so close to your mouth that the sound becomes fuzzy. See this [Zoom guide for acoustics and audio](#) recommendations.
4. **Sound** - Depending on your teaching environment, consider wearing headphones or earbuds while teaching. A big impediment to online communications is poor audio quality. It is important to eliminate audio feedback loops, background noises and other disruptions. See this [Zoom guide for audio](#) recommendations.
5. **Teaching Environment** - Consider the space in which you are teaching and make sure there are no visual distractions in the picture, such as laundry, dirty dishes, personal information, etc.
6. **Eye Contact** - You can simulate eye contact by looking at the camera (most likely on the top of your computer screen/monitor). If you put your notes at the top of your computer screen you can look at the camera more.
7. **Communicating via video calls** - Keep in mind that there is a slight delay when using video conferencing systems. It is very easy to talk over other participants in a video call so a good rule of thumb is to wait a beat or two before speaking to make sure the person speaking is finished talking.
8. **Internet** - Make sure you have a reliable internet connection. You can check your connection by [clicking here](#). and selecting "Begin Test." For a good connection,

download and upload speeds of 2.0 Mbps or above are recommended. A [wireless hotspot](#) on a high-speed network is an alternative.

9. **Screen Recordings** - Consider recording your sessions for a participant that is not able to join a class or if you'd like to review how your session went afterward. [Loom](#), [Screencastify](#) or [Quicktime](#) are all platforms that can support screen recordings if the platform you are using does not have a built-in recording function. Be sure to get your participant's permission before recording a class.

10. **Testing** - Conduct a test session before opening up the class to your participants. Be sure to test your audio and video while getting used to talking to and with your testing audience.

11. **Accessibility**

- ii. Think through the potential accessibility barriers for offering online programming. Check out this [accessibility resource](#) specific to the University of Michigan and this Online Teaching and Accessibility [Twitter thread](#) as examples.
- iii. Keep in mind that automatic live captioning is not available in Zoom (automatic captions are visible if you record a Zoom session). You may wish to use Google Slides and enable the live captioning feature within Google Slides. If you share your screen using Google Slides, your voice will be captured and live captions will appear. See [Present Slides with Captions \(via Google Drive support\)](#) for more information.
- iv. Consider including additional touchpoints with your students, outside of the live online interactive experience, such as:
 - 1. Individualized check-ins via e-mails and/or phone calls
 - 2. Digital work-share via an app such as [Marco Polo](#), [Class Dojo](#) or a private [Facebook](#) group
 - 3. Completing and sharing a finished product or step-by-step directions ahead of time via email with participants via photo, pre-recorded video or written work.
 - 4. Creating and sharing class content on a public site such as [Google Sites](#).