Technology in the Classroom

Demonstration videos for classroom equipment is available to faculty through an internal Canvas resource site. Zoom will be the primary and standard platform for live streaming and recording activities in the classroom for remote or absent participants. Primary considerations in the Zoom environment relate to content sharing, video sharing, and audio sharing.

Standard classrooms will have the following video sharing capabilities available:

1. Document Camera
Typically the output setting on the document camera is set to HDMI to send the image to the room projector. The output setting can be changed to USB so that it becomes available as a webcam for sharing through Zoom. The Zoom window will also be projected on the screen in the classroom, so F2F students will see the document camera image through Zoom just as the remote students see it.

2. Front of Classroom Webcam
A webcam will be provided at the teacher's station that can be either directed towards the class, so that remote students can see the F2F students, or towards the instructor. This webcam will be connected, by default, to the computer at the teacher's podium.

3. Chalkboard/Whiteboard/Demonstration
Many faculty are accustomed to presenting material on a chalkboard or whiteboard or conducting physical demonstrations in the classroom. Such activity can still be captured and shared with remote participants via Zoom. One effective strategy for sharing this content involves using a smartphone that is logged in to the same Zoom call, sharing its camera. The smartphone can then be positioned on a tripod to capture any view desired, or connected to a selfie stick at the chalkboard to share a view of the board. Tripods and chalkboard mounts will be provided in classrooms. Faculty who believe this to be an effective option for course delivery should contact helpdesk@messiah.edu making known the need for a Zoom-capable smartphone.

4. Additional webcam
An additional webcam will be provided in each classroom to provide an auxiliary perspective that the instructor considers important for the remote participants. For example, this webcam could be located in the rear of the room, providing remote participants a global perspective of the space, and connected to a student's computer that is logged into the Zoom session.

Audio Sharing
The default condition of all standard classrooms will be to have a single microphone input for Zoom that is synthesized from three physical microphones in the room. There is no need for switching between microphone inputs in Zoom, nor balancing microphone feeds in real-time during the class hour.

The physical microphones are:

1. A lavalier microphone worn by the instructor
The microphone itself will be assigned to the instructor for semester-long ownership. In the classroom, the instructor will plug that lavalier into the wireless transmitter in the classroom (typically worn on the belt or in a pocket, wiped down between users).

2. The front-of-classroom webcam includes an on-board microphone
This microphone will capture student voices near the front of the room or in close proximity to the teacher’s podium.
3. A wireless conference microphone
This microphone may be placed anywhere in the room - typically centered near the rear - in order to capture voices further from the front-of-class webcam.

Upcoming Training
In addition to the classroom demo and tour available on the faculty resource Canvas site, content will include detailed instructional tutorials on the use of the technology. Near the middle or end of July several remote training sessions will be organized by School. In early August faculty will have access to test the technology in their classrooms. Some faculty have been assigned to teach in atypical classroom spaces. Educational Technology Services and Facilities are working together to outfit these spaces with standard classroom technology, such as document camera and projector.