Northland Pioneer College
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Connected Classroom Student Guide

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I.   Room Layout and Hardware

Figure 1 shows the typical layout of a Connected Classroom and the hardware contained therein. There are 2 front monitors (Monitors 1 & 2), 1 QuadCam w/speaker bar, 1 side monitor (Monitor #3), 1 side camera (Presenter Track), 3 ceiling mics, 1 mini-computer, 1 external DVD player, and an Instructor Desk with 1 desktop monitor, 1 wireless keyboard, 1 wireless mouse, and 1 Room Navigator control console.
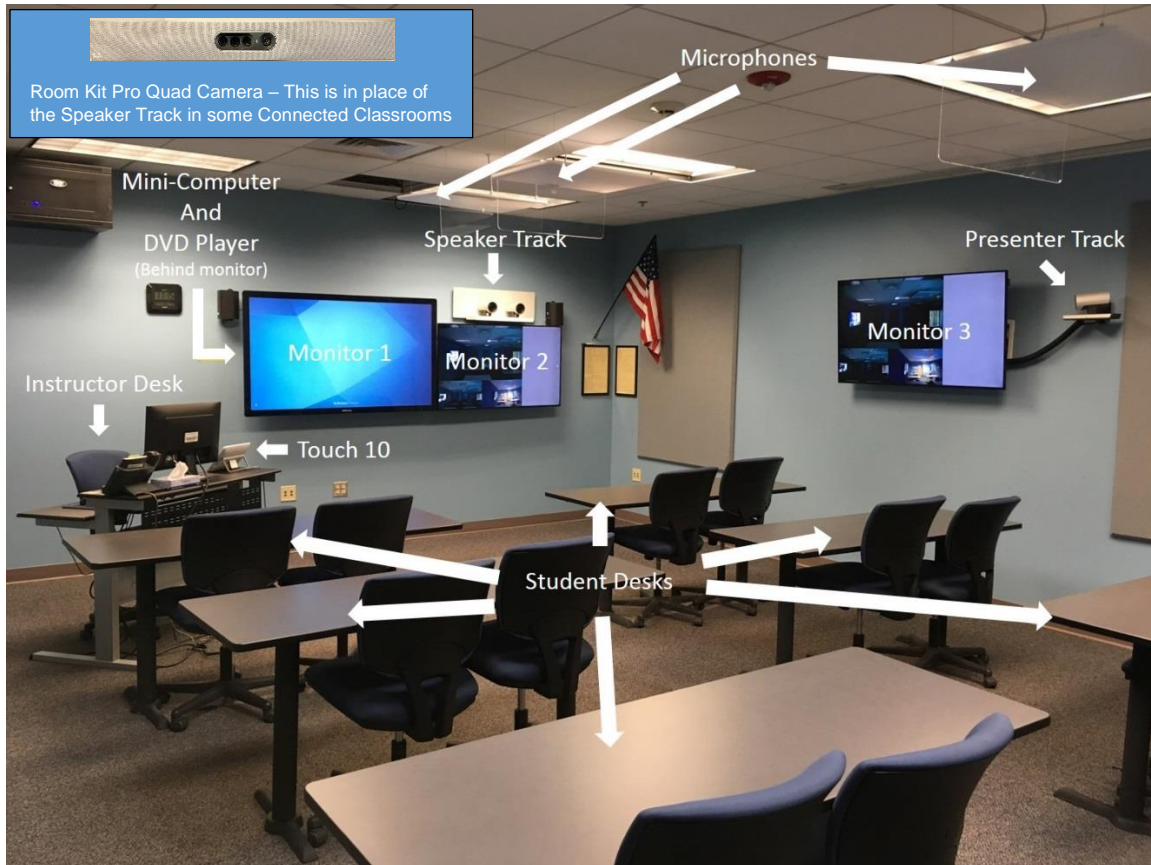

Figure 1. Hardware in a Connected Classroom (Layout may be slightly different at other locations)

1. Monitor 1 – Content Screen

    Monitor 1 is either a 75" SMART panel or 65" InFocus touchscreen display that shows the instructional content being shared with all connected locations. It shows the content from the mini-computer mounted behind it and mirrors the display of the monitor on the Instructor Desk. Being a touchscreen, Monitor 1 allows the instructor to interact with the content using their fingers or approved stylus pens. In many classrooms, Monitor 1 has an up/down sliding wall mount for ADA compliance.

2. Monitor 2 and Monitor 3 – Connected Classroom Display

    Monitor 2 is located in the front of the classroom next to Monitor 1, and Monitor 3 is located on the side wall of the classroom. Both monitors are 55" Samsung displays that show the camera view of the other connected locations in a video conference.

3. Quad Camera (Room Kit Pro) and Speaker Track (SX80) – Front Cameras

    These cameras are located above Monitor 2 and track the students in the classroom.

4. Presenter Track – Side Camera

    This camera is located next to Monitor 3 and tracks the instructor as they teach.

5. Ceiling Mics

    There are typically 3 mics mounted to the ceiling. One of the mics is located above the instructor area or "instructor zone" and the other two are located above the student area.

6. Instructor Desk

    The Instructor Desk consists of a desktop monitor, wireless keyboard and mouse, and a Room Navigator control console.

7. Room Navigator

    The Room Navigator is a control console located on the Instructor Desk. It has a touchscreen that allows the instructor to connect the equipment to a video conference and adjust various settings pertaining to the video conference environment.

    A couple of important features controlled on the Room Navigator are:

    7.1 Selfview

        Instructors have the ability to see a camera shot of themselves, on Monitor 2 and Monitor 3, while they are teaching. This can give an instructor an idea of how their site is showing on the screens of the other connected locations. Figure 2 shows a screenshot of the Room Navigator and where to find the Selfview icon. Figure 3 shows how to use the Room Navigator to show or hide the Selfview as well as reposition the Selfview as it appears on Monitor 2 and Monitor 3 while connected to a video conference.
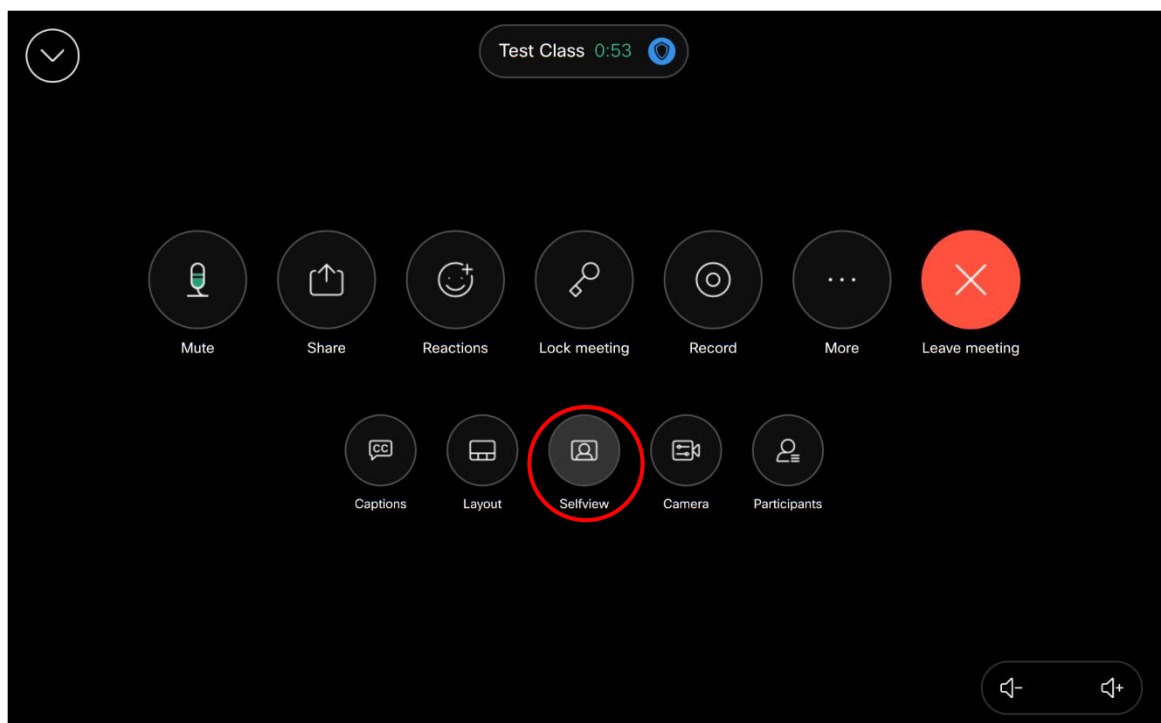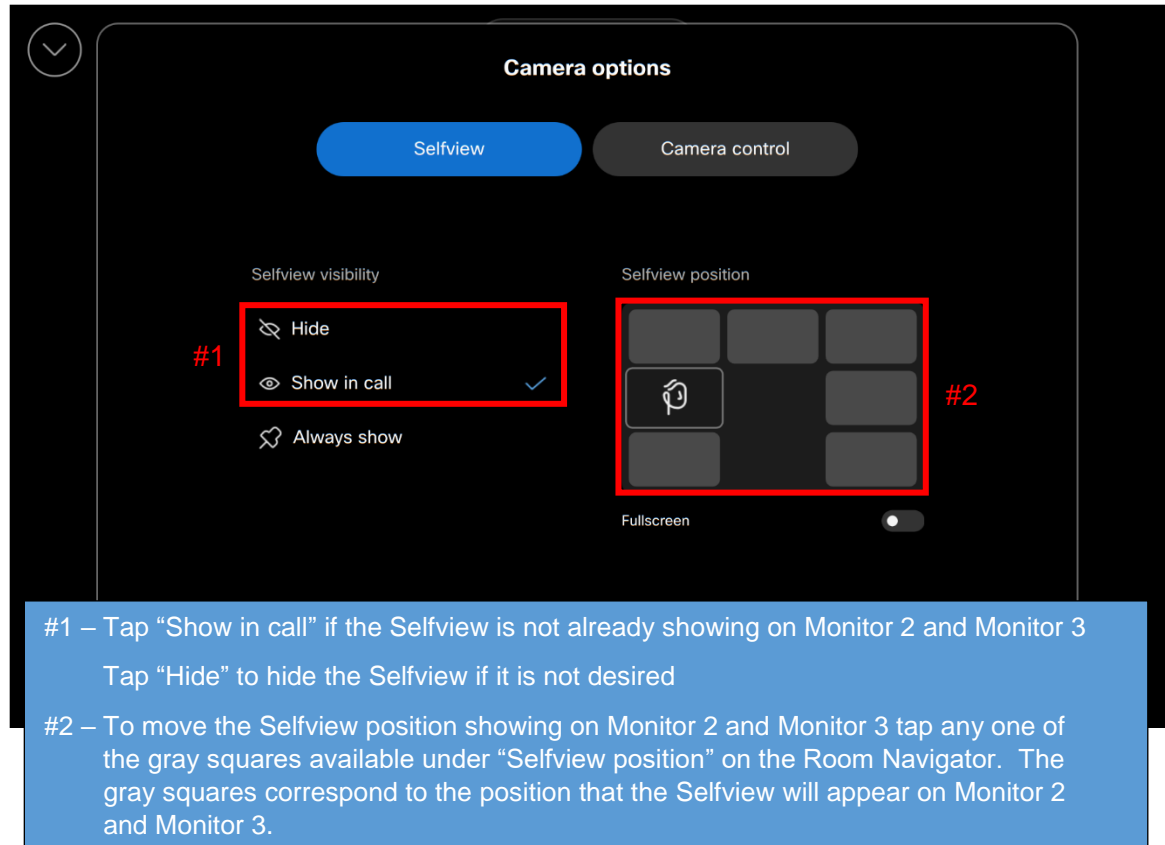

Figure 2. Selfview selection

Figure 3. Selfview show / hide and reposition

7.2 Content Sharing

During a video conference, an instructor can share the content from the computer to Monitor 1 in their classroom and to Monitor 1 in all of the other connected classrooms in the video conference. Tap the Share icon on the Room Navigator and then tap "Share in call" on the next screen. The option of "View" will also appear. If "View" is selected, this will only put the content from the instructor computer on their Monitor 1 and not on Monitor 1 in any of the other connected classrooms. See Supplement B for more information on content sharing.

8. Mini-Computer

The mini-computer is mounted to the wall, behind Monitor 1. The computer is running Windows 10 and is loaded with Microsoft Office, SMART Notebook, and other basic productivity software.

9. External DVD Player

There is an external DVD player mounted on top of the mini-computer (behind Monitor 1) and connected to the mini-computer via USB. The external DVD player allows an instructor to show DVD content when sharing.

Note: Document cameras are not available in Connected Classrooms.

II.   **Additional Information for Participating in a Connected Class**

Here is some additional information that may be found useful while participating in a Connected Class:

1. Mask wearing, hats, and their impact on camera response

    The equipment in the classroom is constantly searching for the eyes, ears, nose, and mouth of participants in the classroom to properly frame shots. When wearing a mask, a participant's nose and mouth will be covered which may cause the cameras to be slower at tracking and may also cause them to have difficulty creating close up shots of the participants. Wearing a hat can also possibly create enough of a shadow on the face that the cameras may have some difficulty with recognition and tracking.

2. Stay within the "instructor zone" if presenting

    The "instructor zone" refers to the area within the Presenter Track camera's tracking range. The "instructor zone" can vary from classroom to classroom, but it typically covers the instructor desk in the front of the classroom to the far side of Monitor 1. Staying within this area allows the Presenter Track camera to follow the presenters properly.

3. Do not touch the cameras

    Touching the Presenter Track camera or Quad Camera may cause damage. If the cameras are not properly tracking the instructor, the instructor can submit a support ticket to have the cameras inspected.

4. Do not move the instructor desk or student desks

    The positioning of the desks in each classroom are due to the Cisco suggested layout for Room Kit Pro endpoints. The "instructor zone" and cameras are setup and fine-tuned based off the suggested layout. Changes to the positioning of the desks can cause the cameras to not properly track and not provide proper framing of the instructor and/or students.

5. Get help

    Should you experience any technical issues, you should call the Support Center immediately by using the classroom phone and dialing ext. 7447.