

HyFlex Room Technology Guidelines

In reference to: Chancellor's Expectations - Technology Goal II [*\(see below\)](#)

Minimum Standard for HyFlex Classroom Technology

This first email contains the **MINIMUM HyFlex classroom technology standard** to meet the Chancellor's Expectations. This standard is not based on any specific hardware or software, but on the room configuration. Colleges can and should fulfill this requirement as fits the room design and their budget for purchasing hardware. (To help colleges without AV expertise, there will be another email with hardware/software recommendations and configurations.)

These elements should be addressed by each classroom solution:

1. A pan-tilt-zoom camera should be mounted on the wall or ceiling at the end of the room facing the instructor desk/podium that can be moved and focused via remote control or via a digital interface that controls the entire room.
2. A camera should be added at the instructor end of the room facing the seated students, so that the at home students can see their classmates. There is no formal recommendation for this, and it CAN be something as minimal as a webcam mounted on an arm.
3. Microphones need a mixer or other means of individual zoning to create separate input from instructor mic(s) and student mic(s) and prevent at home students from hearing too much classroom noise over the instructor or student given permission to speak.
4. An Instructor* display should be placed on the wall or the floor (not blocking students), so that instructors can move away from the lectern and still see at home students with hands raised or questions posed in the chat. There is no requirement for this display in terms of specific hardware ... TV monitors, Smartboards, pull down screens with projectors are all viable options.
5. A Student** display is required at the front of the room, so that students in the classroom can see shared documents, work being done with a document camera, or the at home students when nothing is being shared.
6. When feasible, it is recommended that a standard room interface/control be adopted to ensure a consistent method of utilizing room technology. This may include digital touch panels, push button interfaces or any other consistent approach that fits within the college's budget with the goal of providing a consistent and simplified user experience.
7. *Because Zoom Rooms do not offer the features necessary for successful Hyflex instruction in a classroom setting, and because of the inherent risk, we do not recommend using Zoom Room licenses as the basis for HyFlex classroom instruction at this time. Zoom Rooms are all in one solutions that are ideal for use in Conference rooms and unique spaces that serve only one purpose, but they are not practical for deployment as a solution for classroom instruction and should not be used as such. For matters of functionality and security, Synchronous class sessions in Zoom should always be scheduled using Zoom Meeting instead.*
 - a. Zoom interactive features are not available in Zoom Rooms

- b. Zoom Rooms will not work with Class (a Zoom overlay that adds additional features and ease of use to Zoom)
- c. Zoom Rooms use a hardware setup that is not meant to carry the load of dozens of at home students and campus off site attendees.
- d. Zoom Rooms default to a setting that does not allow faculty to “see” students who have their video off (A common occurrence for those with unstable internet connections). Additionally, the faculty member will not see those students’ “reactions” while that setting is enabled.
- e. In addition to not offering the necessary functions for classroom use, using the default behavior of the Zoom Room, creates a meeting with an unchanging meeting id, creating a significant security risk. Avoiding this risk requires advanced planning and knowledge.

*Instructor Display is the display where instructors are viewing the Zoom student gallery, chat, etc. while teaching the classroom students. Instructor displays can be mounted on the wall behind students on the floor in front of students.

**Student Display is the display classroom students use to view instructor presentations, at home students, document camera, etc. This display mirrors the instructor’s lectern/desk monitor.

*For those looking for less expensive ways to mount technology, Virginia Western has demonstrated mounts made using a 3D printer. Please view their creations here:

<https://www.thingiverse.com/jgarnett/designs>

NOTE: The Chancellor’s Technology Goal II states as follows:

“Virginia’s Community College faculty and students will have access to current and relevant electronic teaching, learning and student services resources and opportunities.

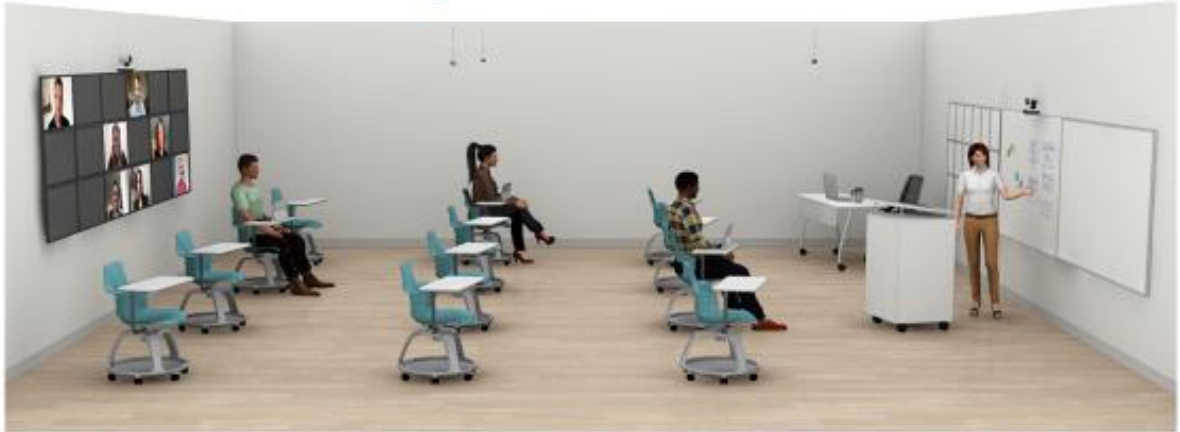
To support a variety of instructional approaches, colleges, with the support from the System Office (ITS, Academic, and Workforce Programs) will provide access, training, and support to students, faculty and staff using synchronous and asynchronous teaching tools and services.”

This memo addresses item #2 under that goal: “Upgrade 10% of classrooms to HyFlex Classrooms”. Again, this recommendation **ONLY** addresses the upgrading of classroom infrastructure, not any other issues implied in the language of the goal.

Committee:

Dabney Lancaster – Wayne Rauenzahn
 Germanna – Page Durham
 J. Sergeant Reynolds – CJ Bracken
 John Tyler – L. Mitchell
 Lord Fairfax – Josh Fitzpatrick
 SouthSide – Terri Milroy
 Tidewater – Matthew Blancard
 Virginia Western – Joe Bear
 System Office – Sheri Prupis

HyFlex Classroom



Hybrid – students go through the pattern of online and in-person together

HyFlex – students have the *choice* on how they participate *from session to session*

HyFlex: choose from 3 modalities

- Face-to-face synchronous class sessions (in a classroom)
- Face-to-face class sessions via video conferencing (Zoom)
- Fully asynchronously (Canvas only)