



Technology Guide for HyFlex Teaching

What is “HyFlex”?

In a HyFlex model, students can decide for each class whether to attend remotely or in-person (assuming classroom capacity requirements are adhered to). Classroom lectures are recorded and streamed synchronously over Zoom using in-class camera technology (lectures can be viewed by learners later for review or, if a learner was not a synchronous participant). Remote learners can communicate synchronously with classroom learners using Zoom, Sakai Chat, or an alternate live communication technology.

Visit the Remote Learning and Instructional Continuity Sakai site for tutorials and links to training resources: [bit.ly/ITDPsakai](https://sakai.providence.edu/x/nBodFY) as well as ITDP’s [HyFlex Resources \(https://sakai.providence.edu/x/nBodFY\)](https://sakai.providence.edu/x/nBodFY), including video examples.

HyFlex Content Delivery Options...

In order to ensure that remote students have access to all the same learning materials and resources as in-class students, there three different approaches to consider:

- 1. Asynchronous Content Delivery:** Students are able to access all course content remotely and based on their individual availability.
 - Record all classroom sessions and post to Zoom Cloud (alternate platforms to consider are Microsoft OneDrive, Microsoft Teams, or Stream)
 - Share all classroom resources in Sakai (I.e. PowerPoints, handouts, links to recordings, etc.)
 - Provide asynchronous options for class discussion (i.e. Sakai discussion forums, Student Pages in Lessons, Perusall, a collaborative OneDrive document, etc.)
- 2. Synchronous Content Delivery:** Remote students are able to join a live-stream version of classroom sessions.
 - Use a camera device to capture the classroom session and go live via Zoom. Most classrooms at PC have a ceiling mounted webcam available for use with the podium PC.
 - Share slides and other presentation materials both on the projector, and by using ‘share screen’ in Zoom.
 - Use the software’s chat to monitor remote questions and allow remote students to “raise their hand”.
 - Utilize the software’s built-in annotation or whiteboard.
 - Use collaborative/cloud-based software, like OneDrive (OneNote, Office Online, Excel Online, PowerPoint online) to create, build and share collaborative documents in real time.
- 3. [Recommended] Blend of Synchronous and Asynchronous Content Delivery:** Remote students may join live-stream classroom sessions, but sessions and materials are recorded and available asynchronously as well. This is a recommended approach because it allows remote students the option of live participation, while also accounting for scheduling conflicts or technological glitches that can make live-attendance problematic.
 - Use a camera during classroom sessions to live-stream via Zoom. This allows even remote students to engage in lectures or class discussions in real time.

- Record live streams and post to Zoom Cloud, so they are available to students who could not make the live session, or who simply want to review the content again. You can also Post links to recorded class sessions in Sakai, if available or share with students as needed.
- Share all classroom resources via in Sakai before class starts, so they are accessible during the live session and afterwards as well.
- Monitor the Zoom chat for remote questions and participation.
- Allow for asynchronous discussion options for those students who were unable to be present during synchronous sessions.
- Use communication tools to follow up with your students regarding available resources (ex. Sakai Messages, Announcements, Chat, Discussion Forums, etc.).

HyFlex Support Technology:

Harkins 107 has been designated as a “Test Classroom” for faculty who would like to sign up and practice using the space to prepare for this teaching model. To see examples or learn more, visit the [Remote Learning and Instructional Continuity](#) Sakai site from ITDP.

In general, to effectively teach using the HyFlex model, you will need to make the following considerations:

- **Syllabus Considerations:** It is important to adapt your course syllabus to reflect new expectations demanded by this new pedagogy. For example, if in-class students need to bring their own devices and headphones, that should be included in Course Materials. Some policies may change as well; in particular you may wish to use the syllabus to drive Zoom etiquette and other expectations of such as how class participation will be assessed.
- **Policy Considerations:** In addition to adjusting syllabus policies, be mindful of adhering to campus-based policies.
- **Student Technology:** Ideally, remote students will access the class from a laptop or desktop computer as this is optimal for visibility and utilizing features such as Zoom chat and annotations. However, be mindful that some students may be accessing the session from a smartphone or tablet, and thus their options for participation may be limited. Additionally, students may come into the class with varying levels of knowledge on how to properly use Zoom in the HyFlex context. Consider sharing “[Student Guide for the HyFlex Classroom](#)” with them prior to the first session. Remote students should connect via the Zoom tool in your Sakai course site.
- **Recording/Streaming Classroom Sessions:** Zoom is available on all PC classroom computers. Most of the classrooms on campus have been equipped with webcams so you can stream on Zoom or Teams using the in-classroom computer. However, if you prefer to avoid “shared surfaces”, an alternative consideration would be to use a laptop to record/stream classroom sessions. Keep in mind that microphone and camera placement could be a limitation to laptop usage, so it’s important to scope out your classroom space in advance. If you need to inquire about an additional microphone, contact AMS@providence.edu. Other best practices include:
 - Always remind students they are being recorded.
 - When possible, enable auto-captioning (available via Zoom Cloud or in MS Teams or Stream).
 - If you do not record a lecture or narrated presentation for asynchronous review, you could also provide a transcript of lecture content for students (for example, a PowerPoint presentation with notes or an outline of material covered).
 - If you save to the classroom computer, instead of Zoom Cloud, it will save to D:\Documents\
- **Visual Considerations:** Although most webcams are poised to capture the front of the classroom, including the whiteboard area, glare and other obstructions can make it very difficult for remote viewers to see what is being presented. Additionally, the size of the screen that the student has access too (mobile device versus computer monitor) may severely limit what they are able to see. For this reason, it is suggested that you mainly present from your computer and use Zoom screenshare. It is also highly recommended that you upload any PowerPoint

slides, videos, or other presentation materials to Sakai so students can follow along live, or access asynchronously. If you do activities while in class, ask students to help capture material for remote students (for example, take a picture of a whiteboard and upload to a class shared resource folder in Sakai or OneDrive).

- **Audio Considerations:** A wireless mic can help ensure that your voice is being picked up while streaming or recording. However, in the absence of this technology, it's important to ensure you are speaking towards your recording device. If you have students on live stream, check in periodically to ensure they can hear you. Ask that comments and questions be added to the chat, or pause for questions and comments, so you control interruptions. Be mindful that audio may not always pick up questions from "in class" students, so verify that any discussion that occurs in the room was heard by those joining virtually. Another issue to consider is audio limitations based on the remote- students microphone. If a virtual student can't be heard, consider asking them to type the question or comment in Zoom chat instead. Note that students should always keep mics muted when entering Zoom, and that they can easily mute/unmute simply by clicking the space bar on their laptop/computer.
- **Monitoring Live Streams:** If you are live-streaming content to students, be sure you have a plan to monitor chat or hand-raising features. It can be helpful to see if a tech-savvy, in-class student is willing to function as a Monitor, using their own laptop to check the chat and bring any questions or concerns to the instructor's attention. This is also an option for guest speakers or co-instructors. Keep in mind that chats can be saved by the host at any time, allowing for follow up after the class has ended. Zoom can also auto-save chats for all meetings but remember to access and save them from the classroom computer. Another advanced host option is 'Remote Control'. When enabled, hosts can actually ask permission and take 'remote control' of a participant's computer. This can be helpful if the class is covering technical instruction and content.
- **Group Work/Partner Work:** Group work can be a challenge in the Hybrid setting, but there are a few options to consider:
 - Send virtual students into Zoom breakout rooms while in-class students pair off. This limits interactions between in-class and virtual students, and also poses physical challenges for in-class students due to the 6-foot-seperation policy.
 - Have everyone enter Zoom breakout rooms. This would require in-class students to bring their own devices and headphones so they could enter the Zoom breakout room from their desk and join groups with both in-class and virtual students.
 - Save all group/partner work for after class, and host in Zoom. Whether it becomes "homework" or you end class early, this would be a method to have both in-person and virtual students work together using Zoom.
- **Whiteboard and Annotations:** Although in-class web cams are set up to show the front of the classroom, glare or poor resolution can make it challenging for students to see anything shared on the whiteboard or projector. Instead, consider utilizing Zoom whiteboard (especially effective when using a tablet), Zoom annotations, or screensharing annotation tools like OneNote. You can also facilitate annotation activities using Perusall or Hypothes.is (which are tools that can be added to your Sakai site). If you do use the whiteboards or share any content to the projector that isn't being presented through Zoom, be sure to share pictures or copies of that content to a resources folder for virtual students to access. Another option is using the built in annotation tools in other presentation products, like MS Powerpoint (client, not Online), MS OneNote and Apple Keynote
- **Asynchronous Support:** It is highly recommended that all classroom sessions get recorded and uploaded to OneDrive. You can also use the Zoom Cloud feature to save recordings. Additionally, Sakai can be used to hyperlink to video recordings, upload learning materials, create Lesson pages, and facilitate discussion forums. Sakai is a useful tool for fostering ongoing, asynchronous learning.

Resources:

[Replicating Classroom Activities Online](#): This PDF from ITDP provides suggestions for how you can replicate some of your favorite class activities in the online setting. It also links out to tutorials on how to implement each of the web-based tools listed.

[ITDP Remote Teaching and Continuity Resources](#)

- Remote Learning and Instructional Continuity Sakai site (includes many tutorials, links to training resources, etc.) - bit.ly/ITDPsakai
- [Accessibility](#) - Resources and tutorials for remote teaching

Center for Teaching Excellence Resources

- Academic and Course Continuity - bit.ly/CTEonline
- [BlendByDesign](#) – self-directed training modules for faculty

Information Technology

- [Microsoft Teams Instructions](#)
- [Microsoft Stream Instructions](#)

Teaching and Pedagogy Continuity Subgroup Documents

- [Course Delivery](#): Outlines various modalities of course delivery and provides links to additional resources for supporting those models.
- [Adapting Courses for New Modalities](#): Best practices for adapting course content to fit different modalities of course delivery.

Zoom Resources

Modify Zoom Profile and Meeting Settings to reflect your preferences for class meetings. Zoom is now available via all Sakai course sites, but you will need to log in to providence.zoom.us to modify your profile and meeting preferences/settings. Here are some helpful

- [Customize Profile](#)
- [Personal Meeting Room](#)
- [Automatic Recording](#)
- [Auto save chats](#)
- [Closed captioning](#)
- [Remote Control](#)