



Five Recommendations for Faculty Considering Multimodal Instruction

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Humanizing the Digital Experience in Multimodal Instruction

Since the start of the COVID-19 pandemic, the increasing prevalence of multimodal classrooms—where teaching and learning occur through varying combinations of digital and in-person, synchronous and asynchronous experiences—has potential to create more accessible learning environments for students, but also presents challenges to instructors and students.

To better support faculty interested in blended learning, EDLI, in collaboration with MSU IT, conducted an institutional research study on multimodal classes taught fall semester 2021 in the College of Arts and Letters and the College of Natural Science. The study explored instructor and student experiences in multimodal courses and perceived student engagement.

This guide is informed by the study findings and intended to support MSU instructors in determining if and how multimodal course design may benefit their students.

We offer three course design recommendations to support equitable student experiences:

1. [Intentionally \(re\)design your course for multimodal delivery](#). What works in one modality doesn't automatically work in another, much less multiple in parallel.
2. [Engage all students](#). It is easy for online students to feel isolated and forgotten.
3. [Facilitate student interactions](#). Be aware of all students, both within and across modalities, in and out of the physical classroom.

And two recommendations for planning technology and accessing resources to support positive teaching and learning experiences:

4. [Learn your classroom and plan technology in advance](#). All campus classrooms include an in-room cart PC, projector, and lapel microphone, but the interface, controls, and add-ons can vary.

5. [Access classroom management support](#). It's a lot to manage the in-person and online classrooms.

Each recommendation includes explanation and suggestion from MSU faculty experiences and advice. We also included a list of resources at the end of this document to help you think through the recommendations.

1. Intentionally (re)design your course for multimodal delivery

What are the planning considerations for a successful multimodal course? When and where will course materials be made available?

Create class session agendas

You may need to adjust your expectations of how much can be accomplished during a synchronous class session since it takes extra time for in-person and online students to transition into breakout rooms, get to know each other, and complete tasks. Plan each class session with your course learning

objectives, classroom setup, and diversity of students in mind. Build in time at the beginning of each synchronous session to set-up the meeting, have informal check-ins with in-person and remote students, pause throughout the class session to check the chat and answer questions, and provide (and repeat) instructions for in-person and online students.

“Really consider: Is this the best way for me to be teaching this class, and conveying this content?”

Sharing an agenda that outlines the topics and activities for the class session with all your students in advance of the synchronous meeting can help students know what to expect, and how to engage with their peers and course materials.

Make materials accessible and available

Multimodal instructors repeatedly emphasized the importance of making all course materials available online through D2L or Teams in advance of synchronous sessions, using pre-class announcements, and sharing verbal and written directions during class activities to minimize confusion and/or frustration about how to engage course materials.

- Post all materials (including class agendas, announcements, readings, handouts, lecture recordings, assignments) that students will need for a synchronous class session ahead of time in your learning management system (e.g. D2L, Google Classroom, Teams).
- Use University supported tools (these are free for students and meet basic accessibility and privacy standards) and try to use what is consistently used in your department or college.

Practice flexibility and be empathetic with yourself and your students

Multimodal/hyflex instructors frequently named the need to balance careful course planning with an ability to be flexible when technology issues arose or making a change became necessary. One instructor shared advice for faculty wanting to try multimodal teaching: “flexibility, empathy, forgiveness. Grace, with yourself and your students.”

2. Engage all students

How will your course aim at similar levels of engagement for all groups of students? How will you engage all students in a multimodal course regardless of how a student chooses to attend?

Include all students in every synchronous class session

For synchronous class sessions, it is important to plan for in-person and remote students.

- Talk with your students about norms in your multimodal classroom, how to engage with one another, and what technology you’ll be using and how (e.g. ask all in-person students to login into the online meeting session so they can engage their online peers, ask all in-person students to mute microphones unless speaking to avoid audio feedback), and explain the options students have to participate, and expectations for interactions (e.g. student-to-instructor, student-to-student, student-to-TA, if applicable). Communicate about technology set-up, needs, and expectations with all students.
- Remember to pay attention to both your in-person and online synchronous students. Welcome all students (in-person and online) at the beginning of every synchronous session; look into the camera to greet remote learners and acknowledge their presence; give yourself time to respond to the Zoom or Teams chat and to in-person students.
 - Offering a quick icebreaker at the beginning of class that all students engage the same way (e.g. through the Zoom chat) and then comment on all responses, asking follow-up questions when appropriate, and talking through responses.

“I really can't see myself willingly going back to a single modality. I just see the benefits of HyFlex in particular. After what we've experienced with the pandemic, my students are really appreciative of being given that choice and given that flexibility. And I have not noticed any performance difference.”

Experience working with remote teams

Faculty in the College of Arts and Letters use the multimodal class format to model what students may experience in the workplace as more jobs are remote or combine co-located peers and remote teams.

- CAL faculty members believe that the multimodal model gives students experience troubleshooting technology issues and collaboratively reflecting on the process. One faculty member shared that this experience also supports students in job interviews, providing them with specific work experiences to draw from so they can say: “I've already worked remotely with distributed teams, and it was successful in these ways and unsuccessful in these ways.”
 - These faculty members also approach the multimodal format as an active learning process to work through with students, troubleshooting, and experimenting with different methods and ways of collaborating throughout the semester.

3. Facilitate student interactions

How will your course encourage interactions between in-person and remote students? How will you create a learning community for all students?

Plan activities that engage all students and connect in-person and online students with each other, helping all students develop a sense of belonging in the class community.

- Set up discussions that require universal participation and create opportunities for your remote students to engage with their in-person peers during synchronous sessions. During discussion or when posing questions, make sure you pause and give time for all students to contribute, check the chat for contributions, and repeat aloud comments shared in the chat.
 - Group work in class between modalities: EDLI’s hyflex study conducted during fall semester 2021 found that students in courses with intentionally designed interaction between students across modalities (in-person, online synchronous, and online asynchronous) reported higher levels of connection to their peers, and were more likely to have made progress toward their learning goals.
 - To facilitate interactions across modalities, in-person students bring their laptops and are logged into the Zoom or Teams meeting to interact with their peers in breakout groups, and synchronous document editing or group activities.
- Depending on the type of class, effective collaborative digital spaces include Google Documents and Google Slides, Zoom polls, and iClicker quiz questions following small group work.

“I preface class in the very beginning that we were doing this sort of experiment with Hyflex and to expect that everything is going to break, to expect that it will not be perfect, but that we're all going to get through it together and we'll adjust things as necessary so that we still meet our learning goals.”

- Teams is also a great platform for casual classroom chat interactions, questions, and asynchronous chatting and resource sharing. Another perk of using Teams is that it saves an archive of the chat and any shared resources in the course channel as opposed to Zoom chat disappearing for participants after the meeting ends.

4. Learn your classroom and plan technology in advance

How will you use your classroom space and the online environment to teach? What tools and technologies will support your teaching and student learning?

Visit your assigned classroom before the semester begins. All classrooms include in-room cart PC, projector, and lapel microphone. Some campus classrooms have ceiling microphones (see [Resources: Classroom Technology](#)).

Test out the technology in your classroom, including the camera settings and audio options to ensure that your remote students will be able to see and hear what is going on in the classroom. Create a quality online experience making sure that all students can hear the instructor, see the presented content (shared slides, physical whiteboard, document camera).

“Get in the classroom and practice. Set it up and run a mock class for yourself, and try to get a couple of undergrads that work in your lab and have them come down and pretend to be students and see where the barriers are. Then call IT and have someone come in, and have your list of problems ready, so that you can solve them before day one.”

Book a 20-minute consultation with IT Services to meet in your classroom before the semester begins to go through the video streaming platform you plan to use, and to troubleshoot how a hyflex/hybrid class session will run (link to this resource).

- Many instructors use both the in-room cart PC and their own laptop/tablet due to the need for the instructor tech to serve multiple functions:
 - Space for screen sharing, running in-class slides or presentations
 - In-cart PC to connect to room microphones and run sound system
 - Screen space available to display and monitor Zoom chat or other online chat
 - Running video feeds from classroom via Zoom or Teams
- Video set-up
 - Many instructors use screen sharing to display a PowerPoint or other course material for online and in-person students

- Helpful for online students to see the instructor and if possible the classroom/face-to-face students
 - Some classrooms have a camera to display the classroom, but if not, instructors can use their laptop/tablet camera to display the instructor and podium space and share screen from the in-room cart PC.
- Audio set-up
 - In the hyflex-capable classrooms, the ceiling microphones allow online participants to hear the instructor throughout the room and any in-person students.
 - To avoid feedback from the ceiling microphones all TVs should be muted
 - If the ceiling microphones are not working or not available in your assigned classroom, some other solutions that instructors have used:
 - Run audio off their laptop or the cart PC, and repeat questions or comments from in-class students to online students.
 - Have in-class students use their laptops to sign onto Zoom and either unmute when they speak (requires only one student unmuting at a time to avoid feedback), or use the Zoom chat feature rather than audio.
 - Carry their own laptop around the room and use that microphone (this also requires muting the in-room sound system and using the laptop speakers).
 - Use the in-room lapel microphone and pass it around to in-person students when they speak.

5. Access classroom management support

Will you have a teaching assistant or co-instructor? How will you engage and respond to in-person and remote student questions and discussions?

Partner with a teaching assistant

Facilitating a multimodal class is complex and collaborating with co-instructors or teaching assistants with defined roles can help with managing interaction and engagement. These responsibilities can include:

"I think that for me personally, sometimes I don't anticipate the problems I'm going to run into. So when I'm taking the training, everything sounds good, it sounds and makes sense and and it's only when reality hits you and you're actually in the classroom trying to do what you think you want to do and realize you can't, that all of the question starts surfacing."

- Helping the instructor test technology and software before class begins, perhaps accessing the class as a remote student or helping test the classroom with the instructor and IT services.
- Monitoring the chat during synchronous class sessions to ensure that online students are not experiencing any technical issues, understand directions, and can contribute to class discussions.
- Setting up breakout rooms and checking in with groups during class sessions to make sure directions are clear, to answer questions, and to gather and share feedback with the instructor.

Assign rotating roles to students

If you don't have a designated TA, another option is to ask students in the class for assistance. It's helpful to assign a very specific role with defined expectations, such as a chat monitor in which a designated in-person student monitors the chat and raises their hand to share when an online student has asked or answered a question during discussion. Assigning the role to a different student every class session helps include everyone and distributes the responsibility.

Resources

Design

- Michigan State University (2022). [Virtual Training Session: Defining and Exemplifying the Modalities](#).
- Columbia University. [Hybrid/HyFlex Teaching & Learning Instructor Guide](#).
- Columbia University. [Five Tips for Hybrid/HyFlex Teaching with All Learners in Mind](#).
- Kevin Kelly, EdD, San Francisco State University (2021). [HyFlex Course Design – Example 50-Min & 75-Min Class Sessions](#).
- Beatty, B. J. (2019). [Hybrid-Flexible Course Design: Implementing student-directed hybrid classes. Unit 1, Chapter 4: Designing a Hybrid-Flexible Course](#).
- University of North Carolina. [Hybrid-Flexible \(or Hyflex\) Implementation Guide](#)

Student Engagement

- Minero, E. (2021, August 21). [8 Strategies to Improve Participation in Your Virtual Classroom](#). [Edutopia](#). Retrieved April 20, 2022
- Conatser, J. A. A. T. (2021, March 25). [How to Make Your Virtual Discussions Engaging, Effective, and Equitable in Eight Steps](#). [Faculty Focus | Higher Ed Teaching & Learning](#). Retrieved April 20, 2022

- Wiley Education Services Authors. (2022, February 22). [9 Student Engagement Strategies for Online Discussion Forums](#). Wiley. Retrieved April 20, 2022
- Michigan State University (2021). [Virtual Training Session: Online Discussion Forums](#).

Classroom Technology

- Michigan State University (2021). [Virtual Training Session: Classroom Strategies from a UDL Perspective](#).
- MSU has a category of classrooms called [Rooms for Engaged and Active Learning \(REAL\)](#), which are specifically designed to enable lively interaction, enhanced learning, and increased faculty and student engagement.
 - Here is a [video overview of REAL rooms](#)
 - Here is a [training video for using the Crestron control panel in REAL rooms](#)
- [Submit a ticket](#) to the campus-wide IT Help Desk asking for live technology training in your specific classroom.
- Learn about the [tiers of room capability](#), including which rooms are “Learner-Centric Interactive Technology” or “Room for Engaged and Active Learning (REAL)” classrooms.
- Learn about your classroom on [25Live](#), which includes a picture of the room and the current room schedule to find time to practice using the classroom technology.
- There are six classrooms across campus that were upgraded with additional technologies (primarily enhanced cameras and ceiling microphones) specifically for Hybrid/Hyflex teaching:
 - [EBH 310 \(REAL Classroom\)](#)
 - [BCC N124 \(Node Chair room\)](#)
 - [EH 128 \(group tables\)](#)
 - [NS 116 \(classic lecture auditorium\)](#)
 - [PSS A148 \(classic desk & a blackboard classroom\)](#)
 - [COM 175 \(classic desk & a blackboard classroom\)](#).
- Johnson, K. (2022). [Add live transcription to a Daily call with our newest API. Daily API: Developer Tips To Build Video and Audio Chat](#). Retrieved April 20, 2022.