### Meeting Students Where They Are: Teaching in a HyFlex Environment

**Abstract**

Even before the pandemic, technology enabled more flexible learning formats. Student interest in flexibility has only increased since. In this PDW, we discuss HyFlex classrooms, which allow students to take classes in-person, synchronously online, or asynchronously as they choose. This format creates challenges for instructors who must ensure that students in any modality meet the same learning objectives. We will explain the HyFlex format, share results of our research on faculty and student perceptions of the format, provide tips and tools for improving HyFlex classes, and have an open discussion of the pitfalls and benefits of the HyFlex classroom.

*Keywords*: HyFlex, hybrid, Hypothes.is

**Meeting Students Where They Are: Teaching in a HyFlex Environment**

**Introduction**

Prior to the pandemic, courses at many universities had already shifted to more flexible formats including blended, hybrid, and HyFlex, i.e. demand for online and more flexible options existed even before Covid (Major, 2020). Between the global pandemic and the fast-changing needs of today’s learners, that trend has accelerated, and more and more courses are being offered in non-traditional formats. Teachers may be expected to adopt these more flexible formats during their careers and will need to develop tools to ensure an effective learning experience. As student engagement has long been associated with student satisfaction and academic success, researchers have been concerned with the impact on learning, leading to numerous studies on student perceptions. These studies found benefits to using flexible modalities, but also issues of concern including attendance, interaction, student satisfaction, and engagement (Abdelmalak & Parra, 2016; Bhattacharya et al., 2020; Conklin et al., 2019; Heilporn & Lakhal, 2021).

Beyond completely online, blended, and Hybrid, we now have HyFlex course designs. HyFlex, which comes from the terms “hybrid” and “flexible,” is a course modality that offers students the option, for each class session, to attend live in-person, live virtually (synchronously), or watch the recorded session asynchronously (Abdelmalak & Parra, 2016). This methodology is best known through Beatty’s (2019) work at San Francisco State University. HyFlex is built upon accessibility (students have the technological know-how and equipment to access different class modalities), learner choice (students can decide how to participate), equivalency (participation in different modes results in the same learning outcomes), and reusability (artifacts from different activities in different modes are used to the benefit of all students) (B. J. Beatty, 2019). These values may be difficult to achieve, however, and this format presents serious complications for faculty integrating active learning and experiential lessons as they are dealing with students in three different modalities at once (Heilporn & Lakhal, 2021; Leijon & Lundgren, 2019). In addition, class session planning is increasingly difficult without knowing how many students will attend and in what format on any given day. Although there are benefits to both synchronous and asynchronous learning, using both at once can be frustrating (Watts, 2016). Though many schools used a more flexible format during the pandemic, the expectation may have been to return to traditional classrooms. However, the desire by students for increased flexibility suggests these types of modalities are here to stay. Our goal in this session is to discuss the benefits and challenges of flexible modalities, develop suggestions for working within this type of format, and provide guidance to those developing courses that may be in a HyFlex format in the future. Being prepared for this modality will assist with career development as it increases your flexibility as a faculty member.

Both undergraduate and graduate faculty may benefit from this session, though the data we present will be primarily from graduate faculty. Graduate students may particularly have life conflicts that make regular in-person attendance difficult, and research has found that graduate students appreciate the flexibility of the format (Abdelmalak & Parra, 2016; Conklin et al., 2019; Heilporn & Lakhal, 2021). After this session, instructors will better understand the benefits and challenges of the HyFlex format and will understand some technological tools and practices that can help the mode be successful.

# **Learning Objectives, Engagement, and Takeaways**

Participants will

* Understand the concept of HyFlex or Flex teaching.
* Evaluate the benefits and challenges inherent in this type of varied modality.
* Identify engagement tools that work across varied modalities.

Through research-based evidence, demonstration, and discussions, participants will help generate potential solutions that can be integrated into existing courses and assist in building new courses. At the beginning of the PDW, we will assess attendees’ experience with HyFlex learning, either as instructors or as students. If attendees are more experienced, we will give an abbreviated overview and move to our findings, tips, and discussions more quickly, devoting more time to allow participants to share their own pitfalls and successes in terms of engagement, teamwork, successful learning outcomes, and more.

If participants are less experienced, we will spend more time explaining HyFlex and its benefits, our findings, tools and techniques, encouraging questions throughout so we can tailor the session to our attendees’ needs and interests. We will ask less-experienced attendees to imagine the challenges of the format and how they would address them, as well as asking about the benefits that they see.

One tool that we will demonstrate is Hypothes.is, which allows a class to work together to annotate an article or other work. This application can assist students in different modalities in critiquing and analyzing a work together, allowing a more meaningful “conversation” even with asynchronous students because comments tie directly to particular parts of a text. It also makes reading more visible as students must annotate the text, so you can see whether students have really engaged with an assigned reading (Hypothes.is, n.d.). If possible, we will have attendees actually annotate an article in the session to give them a true feel for the platform. Hypothes.is integrates with LMSs like Blackboard to make assignments and grading relatively easy.

**PDW Overview**

During the pandemic, we conducted a survey of students and faculty about the FLEX format at a small private university to understand the different perceptions of the benefits and challenges faced. We review our findings from the survey and then present suggestions and ideas for increasing engagement from students in all modalities with the goal of helping faculty meet the varying needs of students and provide a beneficial learning experience. We will begin the session by reviewing our findings, especially the disparity between the perceptions of faculty and students. We then present suggestions and ideas from our own work for increasing engagement from students in all modalities with the goal of helping faculty meet their varying needs and provide a beneficial learning experience. Finally, we ask participants to share their own ideas and challenges with the group. Depending upon the experience level of participants, the session may shift to more of a roundtable format to enable extensive sharing and co-learning opportunities.

Format of the session:

* Introductions (10 minutes): We will introduce ourselves and the concept of HyFlex teaching and ask participants to briefly share their level of experience with the format.
* Our findings (15 minutes): We will ask attendees about their perceptions of HyFlex using an online polling tool and then present our findings. There are several major differences between the perception of faculty and students of the FLEX experience. Faculty have a clear preference for face-to-face teaching, while students overwhelmingly attend online when given the option. Faculty also have a very different perception of how students learn more, believing face-to-face provides the strongest learning experience. Students tend to perceive they learn just as well or better online and that they participate just as often when online, suggesting the possibility of different definitions of what constitutes “participation.” Faculty also were more conscious of technology issues than students. To improve the experience for both faculty and students, we suggest the increased use of interactive activities across modalities that improve student engagement.
* Tips and Technology demo (20 minutes): We will share techniques like the Flipped Classroom and tools like Hypothes.is that can engage students across modalities.
* Q & A and Discussion (15-30 minutes): We want to leave ample time to allow participants to share their own experiences and to ask questions. HyFlex is challenging and it may benefit instructors with experience with the format to have a chance to vent frustrations as well as to share wins. If attendees are less experienced, we will ask them to imagine the challenges of the format and discuss solutions in small groups before discussing as a whole.

## **References**

Abdelmalak, M. M. M., & Parra, J. L. (2016). Expanding Learning Opportunities for Graduate Students with HyFlex Course Design. *International Journal of Online Pedagogy and Course Design*, *6*(4), 19–37. https://doi.org/10.4018/ijopcd.2016100102

Beatty, B. J. (2019). Values and principles of hybrid-flexible course design. In B. B. Beatty (Ed.), *Hybrid-flexible course design: Implementing student-directed hybrid classes* (1st ed.). EdTech Books. https://edtechbooks.org/hyflex

Bhattacharya, M., Howard, T. L., & Ulferts, G. W. (2020). A Study of Students’ Perceptions About Online Versus Traditional Teaching. *Journal of Higher Education Theory and Practice*, *20*(15), 117–125.

Conklin, S., Lowenthal, P., & Trespalacios, J. (2019). Graduate Students’ Perceptions of Interactions in a Blended Synchronous Learning Environment. *Quarter*, *20*(4), 45–59.

Heilporn, G., & Lakhal, S. (2021). Converting a graduate-level course into a HyFlex modality: What are effective engagement strategies? *International Journal of Management Education*, *19*(1). https://doi.org/10.1016/j.ijme.2021.100454

Hypothes.is. (n.d.). *Hypothesis for Education*. Retrieved January 23, 2023, from https://web.hypothes.is/education/

Leijon, M., & Lundgren, B. (2019). Connecting physical and virtual spaces in a HyFlex pedagogic model with a focus on teacher interaction. *Journal of Learning Spaces*, *8*(1), 1–9.

Major, C. (2020). Innovations in Teaching and Learning during a Time of Crisis. *Innovative Higher Education*, *45*(4), 265–266. https://doi.org/10.1007/s10755-020-09514-w

Watts, L. (2016). Synchronous and asynchronous communication in distance learning: A review of the literature. *Quarterly Review of Distance Education*, *17*(1), 23–32.