Scenario #13: HyFlex

If there is one scenario that may be adopted more than others, it could well be the HyFlex model. This may be because a hybrid, or “high flexibility,” approach is relatively easy to envision. In HyFlex, a term first coined by Brian Beatty, courses are delivered both in person and online at the same time by the same faculty member. Students can then choose for each and every class meeting whether to show up for the class in person or to join it online. The underlying design ethos behind the HyFlex model is flexibility and student choice.

For HyFlex to work, the classroom needs to be set up with, at minimum, a camera, video conferencing capabilities, and some way of interacting with the students at a distance. Classes are streamed live and could be recorded for later playback. Professors interact with both in-person and online synchronous learners, through platforms such as Zoom or Teams. Class recordings might be complemented by asynchronous discussion boards and other collaborative tools in the campus learning management system. Advanced HyFlex classroom set-ups might include such technology as monitors around the edges of the classroom space that allow professors to see and address students who are participating live in the class at a distance. Perhaps the zenith of HyFlex is the RealPresence Experience rooms that some schools have installed, with students at a distance all appearing life-sized on a large screen in a specially designed classroom.

The appeal to some of the HyFlex model is its flexibility. Courses could be placed in a regular campus classroom schedule. As social distancing requirements shift, the number of students in the face-to-face classroom environment can expand. Students who are unable to attend the in-class sessions can fully participate online, either synchronously or, in some cases, asynchronously. HyFlex, at least in its original conception, is designed for students who live on or close by to campus. It was not meant as a solution for distance education. Instead, it was meant to give residential and commuter students the flexibility to attend class in person or remotely. This flexibility is attractive when the effects of the pandemic are forcing schools to make decisions about how many students can fit into a classroom on campus, even if they live on or near campus. The conceptual flexibility of this model also enables it to function for students who may not be able to attend class on campus at all, which might be the case for some international students.

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unable to return to the United States even if domestic students are able to live on campus.

For students, a HyFlex model holds the potential of maximizing the opportunity to participate in a face-to-face learning experience under conditions of social distancing. How this is managed might vary from school to school. A professor might divide her class up into groups, with each group switching (or rotating, if there are more than two groups) between face-to-face and online instruction. Students might be given the opportunity to sign up for residential learning slots for each class session, up until the “safe” number of in-person spaces is taken. Or in-class slots could be assigned randomly or prioritized along dimensions of student need. Or perhaps, more importantly, students who test positive for COVID-19 and need to quarantine could attend class remotely while they are not showing symptoms. It’s important to note that the goal of HyFlex is to make both the online and in-person experiences equal. Participation in class is necessary regardless of where and how students attend. Online is not meant to be a diminished experience but an alternative. Class sessions are not meant to be passive observations of a class video stream, but rather to have fully interactive engagements, including Q&A, group work (if possible), and student presentations.

For schools, the HyFlex model offers the potential to resume face-to-face teaching, despite uncertainties about the number of students that campus classrooms can safely accommodate. Class lectures could be delivered to a classroom of at least some students, enabling the sort of real-time student reactions and interactions on which professors appreciate (and which they often find harder to recreate in an online environment). Another advantage for faculty is that the structure of a HyFlex does not only have to involve students attending online. Faculty could be the ones who are remote (or shift between face-to-face and remote teaching as public health and personal circumstances change). They could teach from home to a classroom of in-person students and a group of online students at the same time. For faculty concerned about their health and safety, teaching at a distance would give them flexibility, while still giving students the opportunity to work together (albeit in a socially distanced manner).

In discussions with colleagues in leadership roles across the postsecondary ecosystem, the HyFlex model is mentioned often. In an environment of both a strong (almost existential) desire to resume residential educational operations, combined with an almost total lack of certainty around what the public health situation will look like, a HyFlex approach holds out the promise of resuming classroom teaching and learning,
while also being flexible enough to accommodate the full range of synchronous and asynchronous online learning modalities.

**Considerations**

It might sound as if HyFlex is the perfect solution. Social distancing? Check. On-campus instruction? Check. Online flexibility? Check. But, navigating the challenges of teaching to both in-person and online students, while also creating rich interactive learning experiences for students participating in the course asynchronously, is hard. If done poorly, faculty run the risk of making the students at a distance feel like second-class citizens. The last thing anyone who advocates for a HyFlex approach would want is for online students to find themselves “watching” rather than fully participating in class. Without careful thought and intentional design, online students are likely to be at a distinct disadvantage in faculty attention and learning opportunities.

To do it well, then, a lot of things need to line up, including the technology, the course design, the focus on pedagogy, and the engagement of the students. Many schools that wish to scale the HyFlex model across the curriculum will likely need to make a significant investment in classroom technology. Since intentionally designed rooms with sophisticated cameras, microphones, and monitors are the foundation of any good HyFlex classroom, the choice to adopt this approach may come down to cost. For many schools, it might be too expensive to outfit fully the needed number of classrooms over the summer, while not doing so runs the risk of creating more barriers than points of entry for their students. Making the wrong investment can be just as bad. While cameras are important, perhaps the most crucial pieces of equipment are quality microphones to pick up sounds in the room. Without good microphones, the students online are at a distinct disadvantage.

While most concerns about the HyFlex model tend to focus on the not insubstantial technological requirements for running a mixed modality course, the person requirements of this method are no less important. To take full advantage of the technology and the focus on teaching, faculty need help. The most sophisticated tracking cameras and multipoint microphone arrays will not alone overcome the difficulty of juggling both the in-class and live online students. The largest institutional investments at many schools may in fact be in teams of people. Teams who help train faculty and serve as learning designers and classroom technology professionals collaborating with faculty on designing and running a HyFlex course.
Finally, the best HyFlex classrooms have someone assisting the faculty member. These assistants are often called upon to take an active role in the in-class sessions, helping the instructor incorporate questions and feedback from remote learners in real time. In some cases, media professionals participate in the class session to capture both faculty and students for the streamed and recorded versions of the class session. These assistants could also be work-study students who are assigned a particular classroom (or digital space), or they might be volunteers from class who are given credit for assisting in the delivery of the course.

It’s this last role that we think worth reinforcing. So much of what we have been talking about in this scenario (and across all fifteen scenarios) is how schools are thinking about academic continuity and how faculty will need to prepare to teach in these flexible environments. But one of the most important things for schools to consider is how students are asked to participate in their learning. We often assume that these scenarios are just about preparing for the students as if the students are just consumers. This new normal of teaching and learning needs to be different than it was when schools shifted to emergency remote learning in the spring of 2020. We need to ask students to be part of the solution of allowing learning to flourish. This includes asking them to help manage the class if it has a virtual component. It means asking students to work with us as we prepare and teach. It means asking them to serve as in-class course assistants and technology guides. It means making this help part of the course grade and part of their experience.

Perhaps most important, whatever scenario a campus chooses, it must include outreach to students now and going forward. Students need to see that they are part of the campus community and they need to be engaged in this difficult work. This is incredibly important if a HyFlex model is to be successful, and it’s even more important (and perhaps valuable) in the next discussion of a modified tutorial model.