Resource Scan
The HyFlex Model in Online Learning

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Need

At the graduate institution where I serve as instructional designer, the Educational Technology team is regularly seeking new online course formats and learning modalities to meet the needs of our non-traditional adult learners who require the utmost flexibility in their work/school/life schedules. In addition to our fully asynchronous course format, we have effectively utilized blended/hybrid models which are often described as a mix of on-campus and online learning. But "blended" has taken on added definitions: on-campus can mean physical attendance, but also virtual attendance using video-conferencing technology (e.g. Zoom) and hardware (e.g. units equipped with large screens and cameras) set up in the brick-and-mortar classroom. Learning "online" most often means fully asynchronous, but now includes synchronous attendance using video-conferencing with only online attendees.

But now there is another option, known as the "HyFlex" model, a course format option that is highly, or possibly overly, flexible. My school defines a "Flex" course as: "This flexible-format course is delivered via synchronous video sessions (Zoom or On-Campus) and available in the asynchronous online classroom (Moodle LMS). Students may alternate between modes of attendance [weekly] but must fulfill the requirements for that chosen mode." Our experiments with the flex courses have been minimally successful. The benefits and challenges of HyFlex is being studied more and more by scholars in online education. This has prompted me to seek out what scholarship has been published in journals about findings or theories around the HyFlex model.

My key questions: How are educational institutions utilizing the HyFlex model? What are the benefits and challenges? Are there proven best practices to execute a HyFlex model?

Search Method

I used multiple search methods to find peer-reviewed articles that addressed my questions. In the online Auraria Library, a simple search by "Hyflex" filtered by the discipline: "education" came up with a wealth of journal articles. I also went to one of my core sources for higher education IT: EDUCAUSE (https://library.educause.edu/). While I find the research and material they publish online to be highly reputable, I realize it is not formally peer-reviewed scholarship. But EDUCAUSE articles often provide references, including links to articles published in scholarly journals. Finally, I found the website, ERIC: Institute of Education Sciences (eric.ed.gov), to be a helpful resource.

Resources

Beatty, B. J. (2019). *Hybrid-Flexible Course Design: Implementing student-directed hybrid classes*. EdTech Books. https://edtechbooks.org/pdfs/print/hyflex/_hyflex.pdf

Even though this resource is an open-source book rather than a peer-reviewed article, I started here because I discovered that Beatty is considered the "founder" of the HyFlex model. Most HyFlex researchers quote Beatty from his earliest writings, such as his "Transitioning to an online world: Using HyFlex courses to bridge the gap" (2007). Beatty continues to have significant influence upon the practice of the HyFlex mode and many scholars stay abreast of his writings on his website: hyflexworld.wordpress.com. In this 2019 book, Beatty expands the term HyFlex to be "Hybrid-flexible" and then offers a step-by-step guide to implementing teaching and learning in this model. He even expands it to include how to start an entire program using the model. Worthy of note is that Beatty welcomes input by stating: "faculty, instructional designers and administrators who have implemented Hybrid-Flexible courses at their own institutions are invited to propose case report chapters for Unit III of this book" (edtechboks.org/hyflex).

Leijon, M., & Lundgren, B. (2109). Connecting physical and virtual spaces in a hyflex pedagogical model with a focus on teacher interaction, *Journal of Learning Spaces*, *8*(1), 1-9.

I found it fascinating that the authors in this article study the HyFlex model mainly in terms of "learning spaces," further delineated as: physical space, representational space, interactional space, and liminal space. Rather than each mode influencing learning independently, these attendance modalities combine to form the teacher experience. In addition, while most researchers have studied the learner experience, these authors focused on how HyFlex affects teachers. One of their findings was that the HyFlex modes, working simultaneously (e.g. students in a physical classroom with virtual students being displayed on large screens), constricted teachers within the "spaces," and resulted in disconnectedness with students, especially with those attending by video-conferencing. This is exactly what we have learned from the feedback of our instructors who have taught in Hyflex, so these authors have reinforced our own findings.

Abdelmalak, 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

Since I work in higher education, I was drawn to this article because it focuses on graduate students. In addition, it expands the definition of HyFlex to the way we use it, in that students choose "when and how they attend" class, even alternating from week-to-week. The authors discovered that, from the graduate student perspective, the HyFlex method is a preferred option, not only what it offers in flexibility in schedules (for life roles, school, work), but also how it influences them psychologically by giving them "motivation" and "a sense of control over their learning." The authors also point out the benefit of HyFlex in terms of accessibility in serving "all students."

Sowell, K., Saichaie, K., Bergman, J., & Applegate, E. (2019). High enrollment and HyFlex: The case for an alternative course model. *Journal on Excellence in College Teaching, 30*(2), 5-28. https://doi.org/10.1007/s10984-019-09303-z

The authors of this article address how HyFlex can be a solution for institutions that have high enrollments for classes with limited classroom space. While they explain how HyFlex meets this existing need, they also found that enrollment grew even higher. In fact, student registrations increased by 29%, thereby supporting financial goals as well. As much as administrators at my institution want to continually improve the student experience, we must also face our need to increase enrollment numbers, and this research implies that improving strategies to execute HyFlex will have such positive results. While this is a valuable take-away from this article, the authors' main purpose is to present what they found to be innovative instructional methods (both in-class and online), technological tools, and even student assessment strategies, by which to get there.

Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2019). A systematic literature review on synchronous hybrid learning: Gaps identified. *Learning Environments Research, 23*, 269-290.

This literature review will most likely serve as my most valuable resource into the HyFlex model. This is due to the fact that it extensively reviews other articles and research on hybrid learning – including HyFlex. Of course, as with nearly all scholarly material on the topic, the article references multiple times B. Beatty, considered the founder of the HyFlex method (see Beatty, 2019, above). Well beyond Beatty, the authors explore the literature of over forty scholars who have studied hybrid learning. Even more, they provide an expansive chart (pp. 275-280) that presents the results of their textual data analysis into the "categories of recurring benefits" noted by thirty-seven of these scholars. While the authors conclude that hybrid learning has been researched thus far with "cautious optimism," still they present many more benefits than challenges. In fact, even though one of their four review questions was "What are the main challenges of synchronous hybrid learning settings," I felt that focused study on the challenges was lacking in the article.

Mcmurtrie, B. (2020). The worst of both worlds: Hybrid courses, taught in person and online, are being touted as the best option for the fall. Why do they have so many critics? *Chronicle of Higher Education, 66*(34), 1-5.

While this is not peer-reviewed, nor technically 'scholarly', material, still I list this *Chronicle of Higher Education* article because it adds an important perspective on the implementation of hybrid learning in Fall 2020 in response to the COVID-related educational crisis. The author addresses many more concerns and drawbacks of hybrid learning than benefits. But the author's reporting on informal interviews and feedback from instructors provides valuable reflections on the hybrid options that were required by institutions due to the Coronavirus pandemic.

Takeaway

I found that there have been many journal articles written on HyFlex (especially, for some reason, in 2019). They provided approaches to executing the model, potential benefits, and andragogical perspectives. But my Takeaway is that there is a lack of data analysis on actual results. I have to agree with Leijon and Lundgren (2109) who concluded that it would be

beneficial to "investigate … students' levels of success." In other words, more inductive research studies to complement the deductive ones. It will be interesting to see what emerges in the upcoming years. Even more, there has been the distinct situation of higher ed implementing HyFlex (and other hybrid learning modes) in 2020 in response to the COVID-19-related educational crisis. This will no doubt lead to unique perspectives and data results.