HyFlex

Instructional models exist for instructors to understand how to match activities with course objectives and to help students get the most out of courses. With technology, there are many media to deliver content in ways to maximize the potential of each model. For instance, distance (or totally online courses) and blended (or Hybrid) approaches have made great gains as more instructors understand best practices. A relatively new approach, named HyFlex, has emerged to provide opportunities to meet learning outcomes in a more flexible approach, for instructors and students.

The term HyFlex (Hybrid-Flexible) refers to courses that “provide participation options for students, allowing them to choose between online and classroom-based learning on a weekly (or regular) basis. Essentially, students create their own blend of participation that fits their needs and desires” (Beatty, 2012). The HyFlex model began with Dr. Beatty developing two distinct course paths, online and face-to-face. He presented each face-to-face lecture once while he recorded it and then posted it online. Students in the face-to-face and online versions completed different activities, each optimized for each delivery method and learning objective. In essence, two distinct courses were created, with the instructor leading lecture once, and the students progressing at the same pace during the term. As the model developed, student moved toward deciding attendance mode by topic.

During 2011, Jackie Miller at Ohio State modified the HyFlex model to build community among the online and face-to-face students by making attendance choice a daily decision. Using technologies like an LMS (e.g., Carmen), web conferencing (e.g., Adobe Connect), and SMS polling (e.g., PollEverywhere), Dr. Miller presented lecture materials with students attending synchronously online and face-to-face, responding to polls and contributing to the backchannel in real-time, and progressing through the same set of asynchronous activities. During Autumn 2012, Jeanne Osborne conducted a subsequent pilot for a writing course using the same methods as Dr. Miller. In Autumn 2013, the Mathematics department will attempt a HyFlipped model incorporating a blend of HyFlex and flipped classroom models.

Significance

Higher Education is operating within a confluence of pressures. Students enter with assumptions and expectations of choice and technology use. Students desire flexibility to maintain jobs and internships to help afford college. Instructors work to adapt their content to meet today’s demands and educate students. Administrators seek ways to optimize instructional spaces and find ways to reduce costs. The HyFlex model has the potential to address the pressures from students, instructors, and administrators while maintaining or increasing important outcomes like student achievement, satisfaction, and preference; instructor satisfaction and preference; increased resource optimization; and decreased costs.
Relevance to Learning

HyFlex models present students with multiple paths through course content. At minimum, this approach helps those students needing additional review. It also offers a high degree of customization and control over their learning process. It is hypothesized that students who are encouraged to be more engaged or take the control/initiative over their learning helps enhance metacognitive skills.

For instance, in a previous research study at Ohio State, Dr. Miller (2012) found only 5% of students indicated a preference of attending a face-to-face lecture that did not incorporate technology. 95% of students preferred having options for how to use technology to support their learning. Meeting strong student preference is not the only benefit to introducing choice. For example, 95% of students found the course more interesting and perceived this instructional model increased their conceptual understanding of the material, with 70% indicating the technology choices increased their participation above what they expected at the start of the term (Miller, 2012). Increased motivation and persistence leading to significant learning contributions is found elsewhere, as well (Chyung, Moll, & Berg, 2010).

Moving forward, getting a better understanding of the approximate percentage of those who attend face-to-face any given day and free up some of the larger lecture spaces (and times) to those courses that require it. If, say, 33% of students attend online, a different instructional space could be used for an in-person class of 100 rather than 150. Further, it’s possible then that two instructors could effectively teach 300 students during two lectures, rather than the customary three instructors. In addition to saving on instructor time and cost, the institution can rearrange space to address the true number of students attending in person, freeing up some larger rooms for other courses.

Pros/Cons

HyFlex has potential drawbacks. For instance, colleges and departments need to have the appropriate culture or pathway for technology enhanced courses. Instructors need to have a high degree of comfortableness with technology and a willingness to react to uncertainty. Students need to have technical competency and, most importantly, a motivation to move through the course and a mature understanding about the environments in which they learn best.

This is all not to mention the university and student infrastructure to handle technology and options for the technology available through policies, license agreements, and hardware. Technology can be finicky and Murphy’s Law certainly applies. Those attending online could be caught without authentic lecture material should the live stream or recording become disrupted for any one of the numerous ways between the instructor station, processing servers, and student’s technology.

In sum, more work is necessary to know whether HyFlex consistently produces increased attendance, meets choices and flexibility, and reduces physical resources.
Future Trends

Increasing examples of OER (Open Education Resources), MOOCs (Massively Open Online Courses), and so on demonstrate a motivation by institutions to provide educational opportunities to the masses. This is a good step to changing culture and understanding the desire by learners to access credible information online. It also provides an opportunity to place resources, processes, and more to allow online education to occur.

It’s possible that HyFlex is a nice middle step for students, instructors, and administrators to move to more extended education opportunities.

Current financial pressures don’t seem to be abating with ever more institutions in financial distress and students graduating (or not) with greater levels of debt than ever before. Increased public subsidy certainly isn’t going to occur in lifetimes. Further, personalization and choice arguably is a given in most every aspect of today’s undergraduate life. Higher education will be no different and will only continue as technology gets better at automating customization and supporting individual learning.

Resources

- [http://itec.sfsu.edu/hyflex/hyflex_home.htm](http://itec.sfsu.edu/hyflex/hyflex_home.htm)
- [http://www.educause.edu/library/resources/7-things-you-should-know-about-hyflex-course-model](http://www.educause.edu/library/resources/7-things-you-should-know-about-hyflex-course-model)
- [http://drbrianbeatty.com/](http://drbrianbeatty.com/)
- [http://www.youtube.com/watch?v=fbKPD8g9ACY](http://www.youtube.com/watch?v=fbKPD8g9ACY)

References