Teaching a Hybrid-Flexible Course

The Faculty Experience in HyFlex

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In Hybrid-Flexible (HyFlex) classes, students are typically given full control over their decisions to participate online or in the classroom. This provides them with the ability to make participation choices based on convenience, learning progress, social interaction preferences, or other factors important to them at the time. Faculty, on the other hand, do not have choices about participation mode, since they have to provide both an online and a classroom experience supporting student learning. This bi-modal approach with student freedom to choose mode is an essential (and perhaps defining) character of a HyFlex design.

What characterizes the faculty experience in HyFlex courses? The specific answer to this question is highly context dependent and varies from person to person and organization to organization at multiple levels. Each implementation of HyFlex experiences its own set of faculty challenges and develops a unique set of solutions to these challenges. In this chapter, I'll describe four aspects of the faculty experience that are commonly raised as important challenges or opportunities that must be met for effective instruction over the long term. These four include 1) managing a multi-modal learning environment, 2) workload, 3) student-instructor interaction, and 4) assessing learning progression. You can read about other solution sets in the case reports available in Unit III.

Managing a Multi-Modal Learning Environment

In a HyFlex course, both fully online and fully classroom-based instruction is provided. In most institutions, it is a faculty responsibility and right to provide instruction in all formats required to support learning, so in a HyFlex environment, the faculty must be able to provide effective instruction in both classroom and online modes. If the course design includes both synchronous and asynchronous online modes, this may further complicate the faculty experience.

Faculty often have a preferred instructional mode, and it may be appropriate to assume that every experienced faculty member is equipped and resourced to provide instruction in that mode. In most cases, faculty have more experience teaching in the classroom environment than in teaching online, so there may not be much, if anything, that faculty need to change in the classroom to support HyFlex students who are showing up for class in the classroom environment. Many faculty have much less experience teaching online, so more effort may be required to design, develop and facilitate the online mode of instruction in the HyFlex class. Some faculty take on an additional challenge of serving students who participate synchronously and online, creating an environment with three participation modes: classroom, online asynchronous, and online synchronous.

Classroom Instruction

Classroom instruction should be implemented using effective face to face instructional approaches. Several things may change in a HyFlex environment, however. Since students are free to choose their participation mode, the instructor may not know which (or how many) students will show up in the classroom, which complicates planning activities. Our experience has shown relatively consistent participation patterns in single classes, so over time the instructor will be able to better predict student participation. Starting out a new class and planning activities before student participation patterns are established and observed requires a certain amount of agility and flexibility from the instructor. An instructor may need to change the number, size, or components of student groups, for example, if many more or less students show up in class than are expected.

One of the four guiding values/principles of HyFlex is "**Reusability:** Utilize **artifacts** from learning activities in each participation mode as "learning objects' for all students." (See Chapter 1.2 for a full description of fundamental HyFlex values and principles.) In the classroom, the instructor should plan to share all resources used in the classroom with online students. This is usually easy with a Learning Management System (LMS). Additionally, the instructor may want to record and archive the activities of the classroom for students to review later. This requires recording technology, informed consent from students to capture classroom interactions for later review by all students in a class, and skill in using the recording technology to capture and distribute archives. Either an instructor provides the technology and skill themselves, or they use installed technology (web cams, room cams and mics, etc.) or rely on external instructional supports (AV specialists, teaching assistants, etc.) like they would for any technology-supported classroom activity.

A continuous challenge for instructors is ensuring that students are engaged in a single learning community regardless of their participation mode. Efforts to build a learning community are likely to support the development of a learning community for all students regardless of their participation mode. (See Kim (2000) or Palloff & Pratt (1999) for helpful strategies for building successful online communities.) Regardless of instructional mode, three aspects of high quality teaching are relevant in each delivery mode, and are perhaps most critical in supporting student learning in the fully online asynchronous mode since there is no live faculty engagement to rapidly address emergent (and often individual) student learning support needs. These aspects are 1) providing relevant and meaningful content, 2) engaging students in memorable activities and learning experiences, and 3) assessing learning and adapting instruction to meet student needs; supporting student self-assessment when appropriate.

Online Asynchronous Instruction

Teaching fully online asynchronous students involves a set of tasks and skills that are generally well-understood and researched, with more than three decades of practice to draw upon. There are many excellent resources that describe effective online teaching and best practices of seasoned online instructors (Boettcher & Conrad, 2016; Dabbagh, Marra & Howland, 2018). In HyFlex classes, an instructor may be experienced and highly skilled in teaching online, or may be new to teaching online. In fact, some institutions may use HyFlex course designs as a way to build an online capacity and capability in a previously classroom focused curriculum and faculty. (Beatty, 2007)

Content: Instructional content is delivered via the class LMS, providing informational resources for students in all learning modes. For instruction to all students, best practice includes using multiple forms of representation for content, such as text, video, and audio. Some content may be generated by students themselves (i.e., discussion forum posts). This content should be captured and shared in the LMS for all students, regardless of participation mode.

Engagement: The defining characteristic of asynchronous instruction is the displacement in time between the instructor and the student. Oftentimes there is also geographical displacement, which may influence instructional practice as well. Effective engagement practice includes interaction opportunities for students with content, the instructor, and other students. The most common online learning activity in higher education seems to be the asynchronous discussion forum. There are many creative ways to design and facilitate engaging online discussions; most requiring nothing more than an interesting prompt, and intentional format (debate, roundtable, etc.) and active facilitation. (Bonk & Zhang, 2008; Wright, Szymanski Sunal, & Wilson, 2006) The major challenges for instructors are 1) choosing interesting (to students) discussion formats and topics, 2) managing time in facilitating online discussions

and 3) including elements of the asynchronous student activities in the learning experience of synchronous students as well. (See Chapter 2.2. Learning in a Hybrid-Flexible Course for more about connecting online and classroom students.)

Assessment: Assessing learning for asynchronous students is very similar to that for classroom students. Formally graded demonstrations of learning (reports, presentations, exams, quizzes, etc.) are usually exactly the same for all participation modes. (See Osterhoff, Conrad & Ely, 2008 and Conrad & Openo, 2018 for a thorough discussion on assessing learners online.) Informal assessment of learning differs in that the instructor must use the interaction technology (LMS discussions, for example) to determine the asynchronous students' learning state. To do this, the instructor must review everything posted online and should regularly check-in with online students to clarify questions, provide assessment opportunities (discussion forum exchanges, for example). Effective instructional practice in asynchronous discussion forums includes the instructor supporting students' self-assessment of learning, normally informally.

Online Synchronous Instruction

Teaching fully online synchronous students involves a set of tasks and skills that are largely similar to those used in classroom teaching, though they differ significantly in that they are completely mediated through a technology interface. Teaching synchronously online has been growing in popularity and acceptance since the advent of largely ubiquitous high bandwidth networks, easy to use web meeting and webinar software tools, and affordable synchronous classroom environments provided by academic institutions. As there are for asynchronous teaching, there are many excellent resources that describe effective online teaching and best practices of seasoned online synchronous instructors (Finkelstein, 2006; Bower, Kennedy, Dalgarno, Lee, & Kenney, 2014). In HyFlex classes, an instructor may be experienced and highly skilled in teaching synchronously online, or may be new to teaching online with live students. Many experienced and effective classroom instructors find it relatively easy to teach effectively in the online synchronous setting, if they have intuitive, reliable and accessible systems. In the case of an institution (or single faculty member) using HyFlex course designs as a way to build an online capacity and capability in a previously classroom focused curriculum, some find it easier to begin their online delivery with the synchronous online participation mode rather than asynchronous.

Content: Instructional content is often streamed live from the classroom using cameras and microphones. The class LMS is used to provide informational resources for students in all learning modes.

Engagement: Students normally share video and audio from their remote location with instructors and other students in the in-person class. Effective practice includes interaction opportunities for all students, often including polls (quick questions), interactive discussions, and group discussion. The major challenge for instructors is including online synchronous students in every classroom learning activity; expecting, supporting and rewarding fully engaged participation.

Assessment: Assessing learning for synchronous students may be identical to that for classroom students. Formally graded demonstrations of learning (reports, presentations, exams, quizzes, etc.) are usually exactly the same for all participation modes. Informal assessment of learning differs in that the instructor must have adequate technology to determine the synchronous students' learning state (confusion? clarity? distraction?) and should regularly check-in with online students to allow for quick and responsive assessment. This practice is essentially the same for all synchronous modes (classroom and online) but differs primarily in the requirement that assessing synchronous students is always mediated by technology, and often relies on very small video representations of students and student self-reports of learning state or progress.

Workload

There are several areas of faculty workload that may increase, to varying extent, due to the HyFlex course design and teaching both in-class and online students.

First, developing the course plan and materials itself will take longer than developing the same for a single mode class. If a faculty has experience developing for both modes of instruction already, there aren't many new skills that are needed. The one thing that is new for an experienced faculty such as this is designing ways to support developing a learning community for students who may only participate in one mode or the other, and who may never meet each other in person. This differs from the challenge in a fully online course because of the possibility that fully online students may be treated differently (less interaction, less relationship, less community "feel") than students who meet together in a classroom setting frequently or even just occasionally. Course planning should explicitly support facilitating an active and engaging learning community shared by all students regardless of participation mode. This planning takes time.

Once the course is developed and materials acquired and deployed to students, the faculty has to manage the delivery of instruction in multiple modes. Teaching in a traditional classroom isn't likely to be a problem for most faculty, since they probably have years of experience in that mode. Teaching the online students, however, may present significant workload challenges as faculty new to teaching online (in whichever online modes have been chosen) may need time to learn new skills and develop expertise using online instructional tools and pedagogy. When the synchronous online mode is available, the instructor will need to manage both the classroom students and the online students at the same time. This is no small challenge for someone starting out with HyFlex! The significance of this challenge itself may support the decision to start with just a few HyFlex sessions in a traditional class or in using just the asynchronous online mode paired with the in-class mode.

Faculty will also be challenged with workload changes associated with having to maintain out-of-class interactions with students who expect in-person support and engagement (often in faculty office hours) and students who require online personal support. Though many faculty live lives that combine online and on-ground modes quite a bit (commerce, meetings, entertainment, etc.), moving their student support and engagement experiences into a blended modality may challenge some, and may require learning new technologies to sufficiently support ongoing learning-related interaction. For some, this may be a significant workload increase. For all, this is likely to require a redistribution of engagement time throughout the working day and week.

Returning Value to Faculty

Time: Are there ways that your institution can provide more time to faculty, either to develop a HyFlex course or to teach one? Or both? Some institutions offer release time to faculty creating a new HyFlex course (this was my case: one course release for one term) or who offer additional teaching credit for those teaching a HyFlex class. For example, if a faculty receives "extra credit" for teaching a HyFlex class, it may be possible to "bank" these credits to be "cashed in" later. If an extra credit of one-fourth of regular (single-mode) credit is assigned, then after four HyFlex classes, a faculty may be entitled to one course release.

Money: Are there ways your institution can provide financial rewards (money) to faculty to compensate for additional workload? Some institutions may provide an additional stipend (direct payment) or travel/professional development funds for developing a new HyFlex course or for teaching a HyFlex class. Some may even provide more money to those teaching increased numbers of students in a HyFlex class if the enrollment capacity was increased due to the HyFlex format. Amounts vary considerably, as you may imagine. Local policies, practices, and expectations will be most powerful in setting appropriate amounts.

Professional Rewards: Some organizations provide other professional rewards to faculty, such as opportunities for professional growth and recognition. Nominating faculty for national innovative teaching awards, creating local appreciation awards for service to students, positively identifying HyFlex classes in the Class Schedule or program websites, calling out HyFlex faculty in accreditation or other important institution reports, and other approaches have all been used successfully to recognize faculty for the extra work they have put in to meet important goals supported by teaching students in HyFlex classes.

What might work in your case? What do your instructors value? How can you provide that value?

Student-Instructor Interaction

The HyFlex instructor has to manage interactions with students in all modes of instruction. It is never acceptable to abandon a set of students in a particular mode in which the instructor may have weak skills or may not enjoy interacting. Faculty should have effective engagement skills in the classroom, in the online asynchronous environment, and in the online synchronous environment if one is provided to students. Table 2.1.1 provides several examples of differing instructor-student engagement across the three common modes of HyFlex participation.

Professional development for faculty may be directed at any or all of these environments. Some institutions may implement quality assurance programs that require evidence of interaction skills or certification of completing appropriate professional development activities or programs. Most institutions seem to assume instructors are skilled at teacher-student interaction in the classroom environment and don't normally require certification, though professional development for face to face teaching is often available.

Many institutions do provide professional development for online teaching and certification for asynchronous and synchronous online courses. Programs such as Quality Learning and Teaching (QLT - see https://edtechbooks.org/-XVsr), and Quality Matters (see https://www.qualitymatters.org) are used more and more for hybrid as well as fully online courses. An effective approach at some institutions is to include HyFlex classes in these professional development and course certification programs. You do not necessarily need a custom-developed professional development or certification program for HyFlex courses; slight program modifications and acknowledgement of instructional characteristics specific to HyFlex courses may suffice.

Table 2.1.1

Examples of Student-Instructor Interaction in Varied Instructional Modes

	Classroom	Online Synchronous	Online Asynchronous
Content	Dynamic, interesting presentation of content	Instructor addresses online students similarly to in-class students	Instructor acknowledges online students in class recordings and in recorded messages to asynchronous students
Engagement	Meaningful discussions; collaborative activities involving students and instructor	Instructor engages online students during in-class discussion and group activities	Instructor presence in online discussions is obvious, frequent, and contributes to the conversation over time
Assessment	Ongoing informal assessment of learning during	Instructor intentionally injects opportunities for interaction to support	Feedback to students during instructional activities is timely,

content presentation and activities	informal assessment of learning during content presentation and activities	accurate, and significant (not abbreviated or trivial)

Assessing Learning Progression

Assessing student learning, in general, can be very much the same in all modes of HyFlex instruction. Faculty with experience teaching in the classroom will likely evaluate learning, and the progress of learning, much the same as they have in the past.

Learning progression is also referred to as "formative assessment" or "formative evaluation" in the education literature. "The goal of formative evaluation is the improvement of student motivation and learning." (McMillan, 2007, pg. 3) In the classroom, learning progression is often assessed informally, with physical and social cues being sent and read by both students and the instructor as content is presented and class activities are in progress. Instructors may interrupt a presentation for a quick quiz (or a "show of hands"), or to ask questions of selected students. (A very many effective practices exist; you have probably experienced dozens of them over the course of your education.) For a thorough description and discussion of various formative evaluation techniques used in the classroom, see Formative Classroom Assessment: Theory into Practice. (McMillan, 2007)

When working with online students, the challenge to instructors is translating the techniques of formative evaluation effective in the classroom into the online instructional environment – in many cases both synchronous and asynchronous. Synchronous online instructional formats often afford many of the same evaluation techniques as those used in the classroom. Spontaneous quizzing, reading facial cues, conducting quick polls, encouraging question and answer sessions, completing "one minute essays" are some of the practices used in the classroom that can work well with online synchronous students. Clearly, there may be additional challenges to the instructor since all of these interactions will now be mediated by technology, and that technology may be limited in its ability to convey meaning through small video windows, imperfect audio, or other challenges. But overall, many instructors find reasonable approaches supporting their assessment of learning progression with online synchronous students. (Coordinating instructor efforts for both in-class and synchronous students presents the same challenges as those mentioned above.)

It becomes much more difficult for instructors to conduct formative evaluation for asynchronous online learning, though it is far from impossible to do so effectively. For a thorough summary o some of the most common and effective online formative assessment practices, see Gikandi, Morrow, and Davis (2011). In their review of the literature available at the time, they found that "effective online formative assessment can foster a learner and assessment centered focus through formative feedback and enhanced learner engagement with valuable learning experiences." (2011, pg 2333) Practices such as the use of discussion forums, frequent quizzes, and requiring multiple performances of understanding represented in an e-portfolio system are noted as being particularly useful. One meta-practice that many HyFlex instructors use is to design activities supporting formative assessment for all students that meet the specific needs of online asynchronous students. Essentially this creates an online formative assessment approach applied to all students, no matter how they participate in class sessions.

Voices of the Faculty

Several HyFlex faculty from San Francisco State University have provided short video reports of their experience with HyFlex, in their specific context. Their short stories highlight meaningful aspects of their own HyFlex journey.

Jeff Brain: http://youtu.be/PTCS-kbczME (approximately 4 minutes)

Watch on YouTube

Patricia Donohue: http://youtu.be/B5FTHXA1Vbk (approximately 15 minutes)

Watch on YouTube

The Student Assistant Voice: Supporting Instructors in Using Hyflex

I asked a recent graduate of the SF State ITEC MA program to talk about her experience working with one of our faculty in creating a HyFlex version of his traditional classroom-delivered course. Here is what she said:

"If you want to learn more about Hyflex or get hands-on experience organizing a course in an LMS, a nice way to get started is to work with a professor who has used this approach before. I did this during the Fall 2010 semester, and learned a lot.

To begin, ask your advisor if any instructors are looking for support or if any classes might benefit from Hyflex adaptation. Not all instructors teach full-time, and not all are interested in learning iLearn (SF State's LMS, a Moodle derivative). Some experienced professors have solid instructional technique and innovative programs, but might not be skillful in using collaboration tools. Because our courses need to meet the needs of students who may be unable to attend classroom sessions, you can help an instructor shape their materials and lead the class in a manner that works for all learners.

Based on my one experience providing Hyflex support to a part-time instructor, here's how I'd suggest you proceed …

1. **SETUP:** Meet with the instructor at least two weeks before the semester begins (several months before would be even better). Review the course materials and discuss how the professor envisions the class. It's important, in this early stage, to have a solid course syllabus and access to most or all of the course content, unless that content will be driven by guest speakers. Determine if any materials need to be converted for online use, or if there are opportunities to improve the materials through changes in instructional media. See if you can help find the most timely online materials, or offer viewpoints that reflect current student expectations about the topics under discussion. Some instructors may worry about content ownership in loading their instructional materials into the LMS; I was glad mine didn't, but if this comes up, discuss it with your advisor.

2. **ASSIGNMENT FLOW:** Next, decide on all the small details of iLearn use. How will the professor present assignments? How will students deliver their work? How will reflection, peer exchanges, and feedback occur? In most cases, instructors will simply post files, and use the forum tool for assignments, but some may want to venture into quizzes and other functionality that iLearn easily supports. When students respond, will they type their responses in the iLearn editor or attach a file? When they attach file, which file formats can the instructor accept? Does the instructor know how to reply to a post in iLearn, or do they want to reply by commenting directly on printouts? These simple mechanics should be discussed to their smallest detail, because professors may have set expectations and students have iLearn usage preferences. It helps to go over this first with the professor, then in the first class meeting, and modify flow to meet class preferences.

3. **ONLINE DISCUSSION:** An instructor who hasn't presented in Hyflex will need to understand notification, discussion, and reflection in the LMS. You'll want to make sure they understand how to use the email digest, how to comment to the class, and to use email to reply to individual work. They should know in advance that there is no private communication in iLearn. They'll need to understand that when sending a message through iLearn, the list of recipients is omitted (for privacy), so they should begin their message by stating that the message is going to all students in the class.

4. **COLLABORATION AND RECORDING:** During classroom delivery, you'll need to help the instructor start Elluminate (the web conferencing application we use for synchronous training), begin the recording session, and monitor the chat window to give online students an opportunity to participate. If you're lucky, as we were, you'll find a generous and technically inclined student to drive the Elluminate deck, or decide on a rotation among students, so everyone gets hands-on experience with Elluminate. It's extremely helpful if the instructor stands in good reach of the mics, and if the mics are turned off during small group discussions. It would also be helpful to note start times of key events in the class, such as the start of the main presentation, and post those notes on iLearn for use with the Elluminate archive.

In summary, many of us are in Instructional Technology programs because we want to improve distance education. Signing up to be a TA and move a class to Hyflex is a way you can 'act locally, think globally' and help good instructors broaden their educational reach."   Catherine Mone – ITEC 2010

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Previously (2012 – 2020), Brian was Associate Vice President for Academic Affairs Operations at San Francisco State University (SFSU), overseeing the Academic Technology unit and coordinating the use of technology in the academic programs across the university. He worked closely with IT professionals and leaders in other units to coordinate overall information technology strategic management at SFSU. Prior to 2012, Brian was Associate Professor and Chair of the Instructional Technologies department in the Graduate College of Education at SFSU. He received his Ph.D. in Instructional Systems Technology from Indiana University Bloomington in 2002. Dr. Beatty also holds several CA single-subject teaching credentials, an M.A. in Instructional Technologies from SF State and a B.S. in Electrical Engineering from Marquette University. Dr. Beatty has more than 30 years of experience as a classroom teacher, trainer, and instructional designer at schools, businesses, and the US Navy.