Values and Principles of Hybrid-Flexible Course Design

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The Hybrid-Flexible (HyFlex) course design delivers a student-directed multi-modal learning experience. Students choose between attending and participating in class sessions in a traditional classroom (or lecture hall) setting or online environment. Online participation is available in synchronous or asynchronous mode; sometimes both and sometimes in only one online mode. When considering whether or not to offer HyFlex classes in a program or institution, it is helpful to understand the values and associated fundamental design principles that undergird the approach many have followed in more than a decade of implementation.

Four values have guided our HyFlex design effort since its beginning in 2006: learner choice, equivalency, reusability, and accessibility. (Beatty, 2007)

Fundamental Values in Hybrid-Flexible Design

- Learner Choice
- Equivalency
- Reusability
- Accessibility

The Instructional Design “Drivetrain”

Why specify fundamental values? Values about learning and instruction help instructors and instructional designers build from a solid and consistent foundation. These values help us develop learning and instructional goals, which then provide strategic direction for the selection of instructional strategies and specific activities to implement the strategies. (Reigeluth, 1983) For example, the value of “learner choice” leads to goals such as, “Students will choose to participate in XYZ learning activity in a classroom setting or in the online [virtual classroom] environment.” That learning goal might lead to an instructional strategy such as “Students are provided a full set of in-class activities and a full set of online activities to choose between for every class session.” At a more granular level, specific learning activities are developed to implement the strategy, such as a plan for interactive
collaborative group discussion in a classroom and a corresponding plan for an interactive online discussion exercise for online students. Comprehensive design guidance also includes specific contextual factors that are likely to support effective instruction.

The design “drivetrain” that results starts with values, which drive the instructional or learning goals, which drive the selection of overall instructional strategies, which are implemented by specific instructional activities, selected in conjunction with the consideration of contextual factors. (See Beatty, 2002 for an example of this design planning approach to developing guidance for social interaction online.)

Values --> Goals --> Instructional Strategies --> Activities

all within a specific context; with factors impacting success

The four HyFlex values have guided the development of the HyFlex approach at San Francisco State University (my academic home since 2003) and at many other institutions around the world, exemplified by those represented in the case reports found in Unit III of this volume. I find it more useful to designers to restate the values as universal design principles. Universal design principles should be followed in all implementations of a particular instructional design theory. (Reigeluth, 1983)

Universal Principles for HyFlex Course Design: Four Pillars

The HyFlex course design is built upon four fundamental values: Learner Choice, Equivalency, Reusability, and Accessibility, each with a corresponding guiding, or universal, principle for designers and instructors to follow. These four “pillars” provide a consistent and solid foundation for resulting courses and programs.

[The format for this list is Value: Principle to be followed]

1. **Learner Choice**: Provide meaningful alternative participation modes and enable students to choose between participation modes daily, weekly, or topically.
2. **Equivalency**: Provide learning activities in all participation modes which lead to equivalent learning outcomes.
3. **Reusability**: Utilize artifacts from learning activities in each participation mode as “learning objects’ for all students.
4. **Accessibility**: Equip students with technology skills and equitable access to all participation modes.

The Learner Choice Principle
Provide meaningful alternative participation modes and enable students to choose between participation modes daily, weekly, or topically.

The primary reason a HyFlex course design should be considered is to give students a choice in how they complete course activities in any given week (or topic). Without meaningful choice, there is no flexibility ... and therefore no HyFlex. Without flexibility all you have is a standard hybrid course. (Not a bad thing, perhaps, but also not HyFlex.) Choosing to implement this principle requires that an instructor value providing participation choice to students more than s/he values forcing everyone into the “best” way of learning a set of content.

**The Equivalency Principle**

Provide learning activities in all participation modes which lead to equivalent learning outcomes.

All alternative participation modes should lead to equivalent learning. Providing an alternative approach to students which leads to inferior learning “by design” is poor instructional practice and is probably unethical. Equivalency does not imply equality, however. An online learning experience (i.e., asynchronous discussion) may turn out to be much less socially interactive than a classroom based discussion activity. In each case, however, students should be challenged to reflect upon learning content, contribute their developing ideas to the discussion, and interact with the ideas of their peers. Providing equivalent learning experiences in various modes which lead to equivalent learning outcomes may be one of the greatest challenges in the HyFlex approach.

**The Reusability Principle**

Utilize artifacts from learning activities in each participation mode as “learning objects’ for all students.

Many class activities which take place in classrooms can be captured and represented in an online-delivered form for online students. Podcasts, video recordings, discussion transcripts or notes, presentation files and handouts, and other forms of representation of in-class activities can be very useful - both for online students and for classroom students wishing to review after the class session is finished. In a similar way, the activities completed by online
students, such as chats, asynchronous discussions, file posting and peer review, etc. can become meaningful learning supports for in-class students as well as provide useful review materials for online students. And indeed, artifacts from some learning activities, such as, glossary entries, bibliographic resource collections, and topical research papers, may become perpetual learning resources for all students in future courses as well. Many of the case reports in Unit III describe specific ways to reuse learning resources.

The Accessibility Principle

*Equip students with technology skills and equitable access to all participation modes.*

Clearly, alternative participation modes are not valid alternatives if students cannot effectively participate in class activities in one or more modes. If a student is not physically capable of attending class, then in-class participation is not an option for that student. If a student does not have convenient and reliable Internet access, then online participation may not be a realistic option for that student. Students need the technologies (hardware, software, networks) and skills in using technology in order to make legitimate choices about participation modes. It may be incumbent upon an instructor or academic program to provide resources and extra training to students (and instructors) so that flexible participation is a real option.

Another key aspect of accessibility is the need to make all course materials and activities accessible to and usable for all students. For example, audio or video recordings should include text transcripts or be close-captioned, web pages and learning management systems must be “screen reader friendly”, and all forms of online discussion should meet universal design guidelines for accessibility. (CAST.org, nd.) As more students with varied learning-mode abilities enter graduate programs and public, regulatory and legal pressures for universal design for accessibility increase, this aspect becomes increasingly important.

In my experience, this has also been challenging, and I don’t believe that I’ve been able to implement this principle fully in all cases. Furthermore, it may be that there will always be some inequity in access to alternative participation modes, much like some students learn better verbally (listening to instructions and explanations) and some learn better visually (watching others do or view visual explanation), and some learn better by doing. Of course, other students may never realistically be able to attend class in person if they are located in a distant place or unable to travel to campus. So perhaps this principle is the least likely to be fully implemented in all cases. Even when unattainable for all, full and equitable access is still an important goal to strive to achieve.

When you begin your own design efforts to implement HyFlex courses, if you follow these
four guiding principles, you are likely to implement the four core values and provide an effective learning opportunity for all students, no matter where they are located and no matter which path they choose through the course.

References


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Previously, Dr. Beatty 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 25 years’ experience as a classroom teacher, trainer, and instructional designer at schools, businesses, and the US Navy.

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