

Designing a Hybrid-Flexible Course

Creating an Effective Learning Environment for All Students

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Hybrid - combines both online and face-to-face teaching and learning activities

Flexible - students may choose whether or not to attend face-to-face sessions ... with no “learning deficit”

A Hybrid-Flexible (*HyFlex*) course design enables a flexible participation policy for students, whereby students may choose to attend face-to-face synchronous class sessions in-person (typically in a traditional classroom) or complete course learning activities online without physically attending class. Some HyFlex courses allow for further choice in the online delivery mode, allowing both synchronous and asynchronous participation.

In a HyFlex course, the instructor provides instructional structure, content, and activities to meet the needs of students participating both in class and online. Activities in each mode often overlap, reusing learning resources, activities, and assessments for all students when possible and practical, but in total, they are typically not the same activities for students in all participation modes. Activities in each mode must lead to be equivalent learning outcomes. No matter which participation format is chosen, teaching and learning activities should ideally:

- Present content effectively and professionally
- Engage learners with generative learning activities
- Use authentic assessment to evaluate student learning

The decision to adopt a HyFlex course design should consider the same factors used to decide whether or not to create a fully online course or a hybrid (or blended) course. Once the decision to deliver all or part of a course in the HyFlex format has been made, there are several important steps that should be completed during the design process (before developing the course) which should help instructors implement an effective HyFlex teaching and learning environment for all students in every participation mode. These steps are not all-inclusive to the course design process; good instructional design practice and a thorough systematic process should still be followed. The steps below are included here to emphasize the unique requirements and challenges of the HyFlex course design.

1. Assess the opportunities (benefits) and challenges (costs).
2. Analyze and confirm or modify expected student learning outcomes.
3. Plan student learning activities (content and interaction).
4. Prepare to assess learning outcomes.
5. Evaluate the return on expectations.

The rest of this chapter explains and provides several worksheets which will help you and your team to design an effective HyFlex course.

Step 1: Assess the Opportunities (Benefits) and Challenges (Costs)

Understanding the “why” of your HyFlex implementation is critical, connecting to many aspects of your effort – explaining your approach to faculty and students, gathering administrator support, and providing a baseline of expectations to compare performance against after implementation. If you don’t start with understanding the “why” question and its answer(s), you will likely end up in a situation where you are asking someone to expend effort or resources without a convincing argument for why they should do so. Chapter 1.2. Costs and Benefits for Hybrid-Flexible Courses and Programs provides more examples of benefits that may be realized and costs that must be supplied for your effort to be successful.

For example:

- Students may ask “Why do I have to choose how to participate? Can’t you just tell me what to do, where to be, and when to be there?”
- Faculty may ask, “Why do I have to teach my regular class on campus and also engage online students?” Or “Why should I offer students the choice of whether or not they attend in person or online?”
- Administrators may ask, “Why should we support additional faculty time for developing another version of an existing course?” or “Why should we change our scheduling approach to allow for students to enroll in overlapping HyFlex classes?”

Opportunities (Benefits)

Planning efforts will begin with one or more opportunities. Common opportunities include:

- Increasing overall course enrollment by offering additional schedule and location flexibility to serve more students with existing resources.
- Increasing individual class section (a single instance of a course) enrollment beyond the seat capacity of a physical classroom, considering appropriate faculty workload.
- Building faculty capability and capacity for offering online classes in a “safe” environment (i.e., allowing faculty to continue to teach in the classroom while learning to teach the same course online).
- Increasing enrollment through marketing an innovative participation format that demonstrates the institution adapts to its students’ changing needs and wants.

At the detail level, every institution or program will have its own unique set of opportunities, so this step should not be overlooked. Program sponsors (department chairs, deans, provosts, presidents) will all have their own expectations of value return, and only a thorough analysis at the front end of the design process will reveal these so the design can adequately address them and hopefully meet them over time. Unstated, unexplored or misunderstood expectations typically lead to serious problems later on, especially when those expectations are surfaced after the implementation as points used to challenge claims of success by designers and instructors.

Challenges (Costs)

The challenges (costs) of HyFlex implementations impact a variety of stakeholders as well.

- Designers (often the instructor) must design a course that supports effective learning in multiple modes. This may require instructional design support or additional instructor preparation time support.
- Classroom technology teams must be able to equip instructors to capture classroom activity well enough to support online learners; may also need to support engaged synchronous learners in a classroom delivery environment. This may require academic technology investment and support.
- Instructors must be able to teach effectively in multiple modes, and be able to handle the complexity of teaching students in multiple modes at the same time. This may require professional development resources.
- Administrative systems may have to accommodate flexible student scheduling. For example, if a student is enrolled in a classroom-based course and would like to enroll in a HyFlex course offered at the same time (intending to complete the course as an online student), the scheduling system must allow this possibility. This may require scheduling business process or system changes.

As with opportunities, every institution or program will have its own unique set of nuanced challenges, and all should be surfaced now, rather than later. Even if solutions are not readily available (or even fully understood), it is very important to acknowledge the issues (certain or potential) so work-arounds can be formulated and long-range planning for systemic changes can be initiated when required.

The worksheet below can assist you in identifying, discussing and assessing opportunities that add new value to your institution (or department/program/course), or solve difficult problems. In addition to consider the positive nature of HyFlex, your team must also assess the expected costs and plan to meet them at the start of the project, or agree on an approach to meet those costs over time.

Figure 1.4.1

Assess the Challenges and Opportunities Worksheet

1. Assess the Challenges (Costs) and Opportunities (Value)

Opportunities: Adding Value		Solving Problems	
<i>List the opportunity-related goals:</i>	<i>Explain how flexible delivery design would allow you to meet this goal.</i>	<i>List the problem-solving goals:</i>	<i>Explain how flexible delivery design would help meet this goal.</i>
Challenges: Additional Costs			
Faculty	Students	Technology/Resources	Administrative
<i>List the potential or actual costs to the faculty:</i>	<i>List the potential or actual costs to the students:</i>	<i>List the potential or actual costs associated with resources:</i>	<i>List the potential or actual administrative challenges:</i>
Comments:			

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Step 2: Analyze and Confirm or Modify Expected Student Learning Outcomes

Learning outcomes (goals) not only determine the selection of content, but also guide the selection of specific instructional methods and appropriate measures of instructional outcomes (effectiveness, efficiency, and/or appeal) (Reigeluth, 1999). Derived from fundamental values about learning, such as the formation of learning community, learning goals are specific statements about what the students (or other participants) will ultimately achieve. Goal statements are typically general in nature, for example: Students develop shared meaning of historical texts. Students learn mathematics concepts through dialogic learning processes.

What are your goals for student learning? Or, what are your student learning outcomes?

Can these outcomes be met effectively in all provided student participation modes?

In completing this step, your team should be able to list the student learning outcomes; oftentimes instructors start with their existing classroom-based instructional outcomes. With those identified, the follow-on task is to decide how well each of those outcomes can be met in the online delivery mode(s), and whether or not outcome revisions are needed. In some cases, an outcome that can be

effectively met in a classroom should be revised so that it can be met as effectively by students participating online asynchronously and/or synchronously (depending on the planned online mode(s)). For example, an outcome related to developing deep understanding of a concept through face-to-face small group discussions in a classroom may be over-prescribed for the online students. Online synchronous students may be able to meet the same learning outcome in the same small group-discussion manner (though in an online classroom environment), but asynchronous students may not be able to participate effectively in small group discussions (depending greatly on various context factors), so the outcome may need to be revised to remove the activity aspect (participation in a face-to-face small group discussion).

In general, I've found outcomes that include an activity statement to be much less appropriate for HyFlex courses than those focused more on actual student learning. Outcomes that include instructional aspects such as "participation in a face to face small group discussion" are both learning and instructional outcomes. If you are used to writing outcomes like this, you'll find HyFlex design may be more productive if you adapt your practice.

For support in writing effective student learning outcomes, see the resources provided by the National Institute for Learning Outcomes Assessment (<https://edtechbooks.org/-uAJa>) (NILOA, nd.); for a detailed discussion of learning outcomes assessment, see Kuh, Ikenberry, Jankowski, Cain, Ewell, Hutchings, & Kinzie, (2015).

Figure 1.4.2

Analyze and Confirm or Modify Expected Student Learning Outcomes Worksheet

2. Analyze and Confirm or Modify Expected Student Learning Outcomes**Program | Course | Session***indicate SLO level*

Student Learning Outcomes	Validation/Modification/Clarification for Online Participation		
<i>List the current student learning outcomes (or create new ones) for face to face participation:</i>	<i>Consider whether these outcomes can be met by students participating online rather than face to face.</i>		
	YES	NO	<i>Modifications/Clarifications needed:</i>
	YES	NO	<i>Modifications/Clarifications needed:</i>
	YES	NO	<i>Modifications/Clarifications needed:</i>
	YES	NO	<i>Modifications/Clarifications needed:</i>
	YES	NO	<i>Modifications/Clarifications needed:</i>
Comments:			

Step 3: Plan Student Learning Activities (Content and Interaction)

In order to plan student learning activities, select content and develop interaction paths, it is important to begin with validated learning objectives and associated instructional objectives. The high level goals established by the student learning outcomes are used to develop objectives, which are then used to identify content requirements and develop plans and resources for activity and interaction in support of student learning.

An **objective** is a description of a performance you want learners to be able to exhibit before you consider them competent. An objective describes an intended **result** of instruction, rather than the *process* of instruction itself. It is important to clarify and state your instructional objectives so that the instructional decisions you make are guided by a thorough plan. "If you don't know where you are going, it is difficult to select a suitable means for getting there." Objectives will help you assess the extent to which your students have achieved the intended learning objectives. Objectives may help you create effective assessment strategies. Many instructors share these objectives with their students. When this is done, students may be better able to measure their own progress toward learning goals. Well-written objectives clearly state what the learner is expected to be able to do, to

what level of quality, and under what circumstances the performance (or knowledge) will be undertaken.

In a HyFlex course, *learning* objectives should be the same for all students; specific *instructional* objectives may vary to fit participation mode.

For each major learning goal:

1. What are the specific details about what the student must know? (content)
2. What (specifically) should the student be able to do? (tasks and skills)

At this stage and in conjunction with planning activities, you should identify content resources for each topic, and for each set of students. In many cases, the exact same resources will work for both sets of students (in-class and online). In some cases, additional content, or alternative content delivery methods must be used for online students.

Learning goals and instructional objectives, whether stated or not, form an important basis for choosing instructional activities. An important part of your task is to choose (or create) specific instructional activities that will help students meet instructional objectives and achieve learning goals. Many of these may rely upon social interaction among the participants, either in the classroom or in an online learning environment.

Instructional methods are simply the answer to the question, "What does the educator 'do' to facilitate student learning?"

Examples of instructional methods include:

- Students work in small groups to complete a joint project that requires communication and file sharing among group members.
- Format course materials and discussion posts so they can be easily downloaded and read off-line.
- Include students from other locations, especially other countries, to engage in dialog about course content.

For each major instructional objective, describe the instructional activities which you will use to help students learn and meet the instructional objective. *Note:* In the HyFlex course, some activities may include both types of student participants. These "overlapping" activities should be identified explicitly because they may provide additional learning opportunities for students.

For each week or course topic, identify additional supports (resources, social interactivity, technology, etc.) which must be gathered or prepared in order to conduct the teaching and learning session.

To summarize, for each outcome/goal or major objective:

- What activities are required in each mode?
- What additional resources are required in each mode?
- How will activities and resources be facilitated and/or provided to students in each mode?

Figure 1.4.3

Plan Student Learning Activities (Content and Interaction)

HyFlex Delivery Design Worksheet Template

3. Plan Student Learning Activities (Content and Interaction) **Program | Course | Session**
indicate activity level

Instructional Goal/Objective 1	In-class Activity	In-class Resources	Online Activity	Online Resources
<i>State the goal/objective</i>	<i>Describe the activity</i>	<i>List required resources</i>	<i>Describe the activity</i>	<i>List required resources</i>
Instructional Goal/Objective 2	In-class Activity	In-class Resources	Online Activity	Online Resources
<i>State the goal/objective</i>	<i>Describe the activity</i>	<i>List required resources</i>	<i>Describe the activity</i>	<i>List required resources</i>
Comments:				

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Step 4: Prepare to Assess Learning Outcomes

Assessing student learning is a critical component of all complete instructional designs. Instructors with experience teaching in any delivery mode will be familiar with a variety of assessment techniques and tools, and are likely to be effective in using them to assess learning in their primary instructional delivery mode. The major challenges for learning assessment in a HyFlex course are to 1) develop assessment skills using techniques and tools effective in alternative modes (online synchronous and asynchronous, most commonly), and 2) coordinate assessment practices to avoid challenges associated with assessing learning at different times, places and perhaps with different methods for students participating in different modes.

Instructors adept at assessing learning the classroom will likely continue to use the same assessment approaches for classroom students as they would in a single-mode classroom-based class. How will assessment of the same learning outcome be carried out with online students? Will slight revisions (timing, format, etc.) be sufficient? Will new approaches be needed?

Many common assessment techniques, such as knowledge-focused tests and quizzes, can be used in all modes of instruction. Timing differences among participation modes might require some revision to alleviate concerns about, and mitigate the likelihood of, student cheating. Using randomized questions from large banks of questions is one approach that may be appropriate. Using test questions that require unique answers from students, such as, asking essay questions requiring individual reflection, connection to personal experience, or analyzing information in some other unique way may be needed. Assessing learning through project reports, individual or group presentations (delivered live or recorded and shared online), and other forms of authentic assessment are often appropriate in all modes of instruction with very little variance needed.

To summarize, for each learning outcome:

- What—exactly—will be assessed?
- How will this assessment be conducted for students in each participation mode?
- What additional issues associated with participation mode (timing, sharing, etc.) may have to be solved or at least considered for this context?

For a through discussion of assessing student learning, see Suskie (2018).

Figure 1.4.4

Assess Learning Outcomes Worksheet

4. Assess Learning Outcomes**Program | Course | Session***indicate assessment level*

Learning Outcome 1	In-class (F2F) Assessment	Online Assessment
<i>State the learning outcome that will be assessed; not all learning outcomes may be directly assessed.</i>	<i>Describe the assessment plan for in-class students</i>	<i>Describe the assessment plan for online students</i>
Learning Outcome 2	In-class (F2F) Assessment	Online Assessment
<i>State the learning outcome</i>	<i>Describe the assessment plan for in-class students</i>	<i>Describe the assessment plan for online students</i>
Comments:		

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Step 5: Evaluate the Return on Expectations

A rare occurrence in higher education (in my experience, at least) is for an instructor or design team to plan for and carry out a formal “return on expectations” (ROE) evaluation for an innovative course or program delivery design. (For a description of ROE, see Kirkpatrick Partners’ explanation at <https://edtechbooks.org/-skYu>.) Most evaluations rely on anecdotal or “messy” data that usually tell an incomplete story and are limited in their ability to support effective ROE analysis. Since the HyFlex course design has been selected to meet specific and important institutional/departmental/program or course-level goals, it makes sense that an organization would want to compare performance with expectations to decide if the effort is returning the value anticipated, or if changes are needed, or even if the effort has failed and should be halted. (All three of these outcomes are quite possible.)

If you’ve done a thorough and accurate job at Step 1 of the recommended HyFlex design process, you should have a reliable set of expected returns (value) statements that you need to plan metrics, analysis and evaluation criteria for now – before you start developing the course materials. If you find you can’t plan for effective measurement of any of the expected values, you may need to consider whether or not that value statement is appropriate; it may need to be refined to focus on measurable results. You may also identify requirements for new methods to gather supporting data in order to complete the analysis. For example, a HyFlex course design may need to include student satisfaction

surveys apart from the institution’s formal student evaluation of teaching effectiveness survey. It is best to identify these needs now, and plan to develop data gathering and measurement instruments as part of the course development process.

Using the expected opportunity (value) statements from Step 1, identify the measure (data) you’ll need, the analysis process required, and the evaluation criteria you or your team will use to determine how well that value has been met.

Once the HyFlex implementation has run long enough to generate the required data, then carry out the plan you developed and summarize the results. The governing mechanism overseeing the HyFlex program will then be equipped to make decisions about program success, potential revision or possible cessation.

For a thorough discussion of educational program evaluation, see the U.S. Department of Education report “Education Matters” by Giancola (2014).

Figure 1.4.5

Assess Return on Expectations Worksheet

HyFlex Delivery Design Worksheet Template			
5. Assess Return on Expectations (consider both short- and long-term)			
Expected Return (Value Expectation)	Measure	Analysis	Evaluation
Comments:			
<i>Compare the anticipated value return to the additional costs (actual) - what adjustments are needed?</i>			

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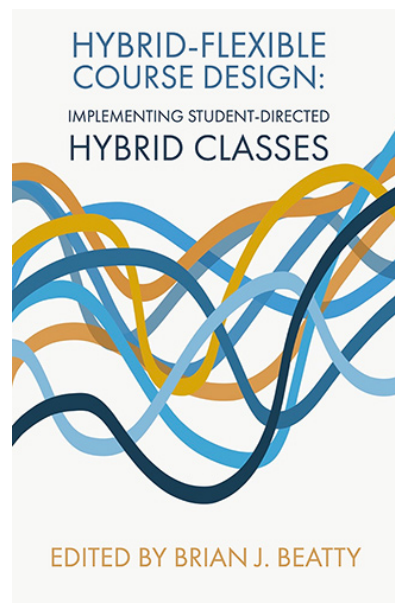
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