

The HyFlex course design is built upon four fundamental values: Learner Choice, Equivalency, Reusability, and Accessibility, each with a corresponding guiding principle for designers and instructors to follow. These four “pillars” provide a consistent and solid foundation for resulting courses and programs. As you draft your design concept and start building your course plan, keep these principles in mind.

1. **Learner Choice:** *Provide meaningful alternative participation modes and enable students to choose between participation modes weekly (or topically).*
2. **Equivalency:** *Provide equivalent learning activities in all participation modes.*
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 access to all participation modes.*

As you design your course, you’ll find that the content and activities you plan for each mode often overlap, allowing you to reuse learning resources, activities, and assessments for all students when possible and practical. In some cases, perhaps most, the specific activities are not the same activities for students in all participation modes, but activities in each mode must lead to 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 worksheets provide a framework for thinking about and writing down specific ideas, concerns and plans to guide your design and development efforts.

1. **Assess the opportunities (value) and challenges (costs).** Compare the expected value with the anticipated costs. Is this approach worth it?
2. **Confirm or modify expected student learning outcomes.** Are your current learning outcomes (or learning objectives at a more detailed level) able to be achieved in all participation modes? What might have to be changed?
3. **Plan student learning activities** (focus on content). Do you have sufficient instructional content for all learning modes? How can it be used across learning modes?
4. **Plan to assess student learning outcomes.** Will your assessment strategy (and format) work well for all learning modes? What differences do you expect? Can the potential impact of these differences be mitigated?
5. **Develop student engagement strategies.** Consider how to connect students across participation modes; consider faculty and student workflow changes that may be required.
6. **Plan for implementation.** Consider technical, student, faculty, and administrative factors.
7. **Evaluate the return on expectations.** If you have the opportunity, plan for the evaluation of your approach – how will you decide whether or not your strategic objectives are being met?

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:			

2. Student Learning Outcome Analysis

Program | Course | Session

Student Learning Outcomes	Validation/Modification/Clarification for Online Participation		
<p>List the current course- or session-level student learning outcomes (or create new ones) for face to face participation. Note: Learning outcomes (what is learned) are different than process outcomes (how something is learned).</p>	<p>Consider whether these outcomes can be met by students participating online rather than face to face. You may need to consider sync and async online.</p>		
	YES	NO	Modifications/Clarifications needed for online (sync/async):
	YES	NO	Modifications/Clarifications needed for online (sync/async):
	YES	NO	Modifications/Clarifications needed for online (sync/async):
	YES	NO	Modifications/Clarifications needed for online (sync/async):
	YES	NO	Modifications/Clarifications needed for online (sync/async):
Comments:			

EXAMPLE Student Learning Outcome Analysis (mixed levels)

Student Learning Outcomes	Validation/Modification/Clarification for Online Participation		
<p><i>List the current course- or session-level student learning outcomes (or create new ones) for face to face participation.</i> <i>Note: Learning outcomes (what is learned) are different than process outcomes (how something is learned).</i></p>	<p><i>Consider whether these outcomes can be met by students participating online rather than face to face. You may need to consider sync and async online. Clarifications often focus on methods of demonstrating the achievement of outcomes.</i></p>		
<p>Apply knowledge of the writing process to a peer editing session in which they provide at multiple peers with valid feedback. (lesson level)</p>	YES	NO	<p>Modifications/Clarifications needed for online (sync/async):</p>
<p>Use tables, graphs, charts and diagrams to explain concepts of supply and demand for a given market or product. (lesson level)</p>	YES	NO	<p>Modifications/Clarifications needed for online (sync/async):</p>
<p>Students will be able to defend the actions of a civil rights leader in a formal class debate. (lesson level)</p>	YES	NO	<p>Modifications/Clarifications needed for online (sync/async):</p>
<p>Analyze the homeostatic mechanisms maintaining the human body. (course or lesson level)</p>	YES	NO	<p>Modifications/Clarifications needed for online (sync/async):</p>
<p>Demonstrate the ability to apply basic research methods in psychology, including research design, data analysis, and interpretation. (program or course level)</p>	YES	NO	<p>Modifications/Clarifications needed for online (sync/async):</p>
			<p><i>No modifications required, though demonstration of achievement must be technology-supported for online participation.</i></p>
<p>Comments:</p>			

3. Instructional Content Analysis

Program | Course | Session

Instructional Goal/Objective 1	<i>In-class Activity</i>	<i>In-class Resources</i>	<i>Online Resources</i>	<i>Action Needed</i>
<i>State the goal/objective</i>	<i>Describe the content required to support learning.</i>	<i>List required materials for in-class participation.</i>	<i>Describe differences in materials needed to support online learning (if any).</i>	<i>List action steps needed to acquire materials.</i>
Instructional Goal/Objective 2	<i>In-class Activity</i>	<i>In-class Resources</i>	<i>Online Resources</i>	<i>Action Needed</i>
<i>State the goal/objective</i>	<i>Describe the content required to support learning.</i>	<i>List required materials for in-class participation.</i>	<i>Describe differences in materials needed to support online learning (if any).</i>	<i>List action steps needed to acquire materials.</i>
Comments:				

EXAMPLE Instructional Content Analysis

Session-level Analysis

Instructional Goal/Objective 1	In-class Activity	In-class Resources	Online Resources	Action Needed
State the goal/objective	Describe the content required to support learning.	List required materials for in-class participation.	Describe differences in materials needed to support online learning (if any).	List action steps needed to acquire materials.
Given a usability test plan, qualified participants, and appropriate test environment, students will conduct a usability test for a specific digital product.	Instructions on how to conduct a usability test	Test environment (table, chairs, technology) Data gathering tools	Digital versions of assigned course materials (normally this is not a change) Remote testing platform (this is a substantial change)	Prepare course materials to include learning about and preparing for remote testing environments as well as face to face environments. Provide student access to remote testing platform.
	Usability Test Plan (assigned course materials)	Usability Test Plan (document)	No difference as long as test plan and associated documents (informed consent, data gathering) is digital document	Digitize all testing documents; provide for digital signatures on required forms (consent)
Instructional Goal/Objective 2	In-class Activity	In-class Resources	Online Resources	Action Needed
State the goal/objective (intro chemistry lab activity)	Describe the content required to support learning.	List required materials for in-class participation.	Describe differences in materials needed to support online learning (if any).	List action steps needed to acquire materials.
Apply basic chemistry principles to understand the process of electrolysis; [possible extension] understand how electrolysis is used in the processing of copper ores.	Explanation of electrolysis (text) Lab-based demonstration Student group lab	Electrolysis explanation (text, visual demonstration) Lab instructions (text) Electrolysis lab equipment and materials	Explanations and instructions must be digitized. Video demonstrations required. Electrolysis Lab simulation required. (example: https://chemdemos.uoregon.edu/demos/Electrolysis-Computer-Simulation-New-HTML5-Version#) ("at-home" version may be available: https://melscience.com/US-en/articles/electrolysis-experiment/)	Identify and provide access to remote experiment simulation. and/or Identify and provide access to "at-home" experiment materials and instruction.
	Description of the use of electrolysis in copper ore processing	Text explanation Video explanation and demonstration	No difference – digital versions in LMS	Identify text and video; ensure accessibility and permission to use
Comments:				

4. Assessment Approach Analysis

Program | Course | Session

Learning Outcome 1	<i>In-class (F2F) Assessment</i>	<i>Online Assessment</i>
<p><i>State the learning outcome that will be assessed.</i></p> <p><i>Note: Not all learning outcomes may be directly assessed, but all major ones should be. Learning outcomes (what is learned) are different than process outcomes (how something is learned).</i></p>	<p><i>Describe the assessment plan for in-class students.</i></p>	<p><i>Describe the assessment plan for online students. You may need to plan alternative assessments for both synchronous and asynchronous students.</i></p>
Learning Outcome 2	<i>In-class (F2F) Assessment</i>	<i>Online Assessment</i>
<p><i>State the learning outcome.</i></p>	<p><i>Describe the assessment plan for in-class students.</i></p>	<p><i>Describe the assessment plan for online students. You may need to plan alternative assessments for both synchronous and asynchronous students.</i></p>
Comments:		

EXAMPLE Assessment Approach Analysis

Learning Outcome 1	In-class (F2F) Assessment	Online Assessment
<p>State the learning outcome that will be assessed.</p> <p><i>Note: Not all learning outcomes may be directly assessed, but all major ones should be. Learning outcomes (what is learned) are different than process outcomes (how something is learned).</i></p>	<p>Describe the assessment plan for in-class students.</p>	<p>Describe the assessment plan for online students. You may need to plan alternative assessments for both synchronous and asynchronous students.</p>
Critique the domestic and foreign policy of the United States since the mid 19th century.	Participation in multiple live class discussions; informal (formative) evaluation	Synchronous: Participation in multiple live class discussions; informal (formative) evaluation Asynchronous: Participation in multiple discussion forums; informal (formative) evaluation
	Multiple short topical writing assignments (assigned homework; formal, low-stakes evaluation; submitted online)	Same assessment for all students: Multiple short topical writing assignments (assigned homework; formal, low-stakes evaluation; submitted online)
	Comprehensive essay synthesizing domestic and foreign policy since the mid-19 th century. (formal high-stakes evaluation; submitted online)	Same assessment for all students: Comprehensive essay synthesizing domestic and foreign policy since the mid-19 th century. (formal, high-stakes, submitted online)
Learning Outcome 2	In-class (F2F) Assessment	Online Assessment
<p>State the learning outcome.</p>	<p>Describe the assessment plan for in-class students.</p>	<p>Describe the assessment plan for online students. You may need to plan alternative assessments for both synchronous and asynchronous students.</p>
Use basic techniques of integration to find particular or general antiderivatives.	Complete in-class practice activities; immediate faculty and peer feedback; participation grade	Synchronous students: Complete in-class practice activities remotely; immediate faculty and peer feedback; participation grade. Async NONE? Forum?
	Solve a variety of integration problems outside of class environment (assigned homework); use of textbook and other expert resources as needed	Same for all online students. Support for submitting practice problem solutions digitally. (Consider integrated ebook/homework package for all students.)
	Solve integration problems individually in a timed, classroom test environment. (assessment of solution process and result)	Online test; may be timed; may be proctored (with additional cost). Consider online test environment for all students.
Comments:		

5. Student Engagement Plan

Program | Course | Session

Engagement Strategy	In-class	Online Synchronous	Online Asynchronous

Workflow adjustment:

What workflow adjustments may be needed by faculty and students to engage meaningful as planned? What are the major challenges to successful engagement for faculty and students?

EXAMPLE Student Engagement Plan

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Engagement Strategy	In-class	Online Synchronous	Online Asynchronous
<i>Content-focused Whole Class Discussion</i>	<i>Interactive presentation with discussion</i>	<i>Zoom session – shared screen – chat and audio used to engage online students. Needs facilitation (in-class student assistance?)</i>	<i>Participation in associated discussion forum. Recorded session from class assigned for review; summary of in-class discussion posted to forum.</i>
<i>Small group discussion/practice activities</i>	<i>Small group discussion with associated activity assignment</i>	<i>Zoom session – either integrate sync students with in-class groups (requires in-call students to also be in Zoom session) or create all-sync students in Zoom breakouts. Digital activity guides; forum for submitting completed assignments with discussion summary.</i>	<i>Students work in assigned groups or individually to complete assigned activity. Activity resources in LMS. Completed assignment posted in discussion forum with peer feedback.</i>
<i>Group project work (It may be easier to manage this type of engagement outside of scheduled class time – essentially treating all students as asynchronous.)</i>	<i>Groups may meet if class time reserved. Alternative: all group meetings occur outside of class time – managed by student groups. Class time may be used for general updates and discussion.</i>	<i>If class time reserved for group meetings, synchronous students meet with their present group members – (in-class members would need to be in Zoom session too). Group members not present would have to receive updates and engage with peers outside of scheduled class time.</i>	<i>If a student group is all asynchronous, then they would meet and complete project tasks and requirements managed by themselves. If group members are in mixed mode, asynchronous students would need to receive updates and engage with “synchronous” peers outside of scheduled class time.</i>
<i>Weekly Student Reflection No interaction required, but all students see all posts.</i>	<i>Use LMS discussion forum to post weekly reflections. Some class time might be reserved for this. (faculty summary comments)</i>	<i>Use LMS discussion forum to post weekly reflections. Some class time might be reserved for this.</i>	<i>Use LMS discussion forum to post weekly reflections.</i>

Workflow adjustment:

What workflow adjustments may be needed by faculty and students to engage meaningful as planned? What are the major challenges to successful engagement for faculty and students?

Faculty need experience in using synchronous and asynchronous tools for discussion. Expect approximately 30 mins, three times a week facilitation. If asynchronous discussions are assigned to all students, those participating in the classroom will have to reserve some time outside of class for interaction in the discussions. Some students may need guidance in managing this task. Expect a minimum of one hour per discussion per week.

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6. Implementation Planning

Program | Course | Session

Technical Factor	Classroom Solution	Online Synchronous Solution	Online Asynchronous Solution
<i>Which factors should be considered to help ensure success in each mode?</i>	<i>What solution is needed for the classroom?</i>	<i>What solution is needed for the synchronous environment?</i>	<i>What solution is needed for the asynchronous environment?</i>

Challenges: New Resources Needed for Implementation

Faculty	Students	Technology	Administrative
<i>List the new resources needed to support faculty:</i>	<i>List the new resources needed to support students:</i>	<i>List the new resources needed to support technology-mediated delivery:</i>	<i>List the new or revised resources needed to support the administrative aspects of HyFlex:</i>

Comments:

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EXAMPLE Implementation Planning

Technical Factor	Classroom Solution	Online Synchronous Solution	Online Asynchronous Solution
<i>Which factors should be considered to help ensure success in each mode?</i>	<i>What solution is needed for the classroom?</i>	<i>What solution is needed for the synchronous environment?</i>	<i>What solution is needed for the asynchronous environment?</i>
AV in classroom to capture audio	Instructor and student group mics – mixed into workstation for Zoom audio channel.	Students need audio and video capability on device; headset preferred	Students need device to watch video (with audio)
AV in classroom to capture room video	External camera to capture room view: external wall mount available?	Students should use device or external camera. Encourage (require?) use of video.	None
[fill in the name] software for engagement or interaction (explain)	Instructor has access to software (cloud? License?) and knows how to use it.	Students have access to software and know how to use it.	Students have access to software and know how to use it.

Challenges: New Resources Needed for Implementation

Faculty	Students	Technology	Administrative
<i>List the new resources needed to support faculty:</i>	<i>List the new resources needed to support students:</i>	<i>List the new resources needed to support technology-mediated delivery:</i>	<i>List the new or revised resources needed to support the administrative aspects of HyFlex:</i>
AV systems to support capturing audio and video – need training on how to use effectively; basic troubleshooting	Information about what to expect in various HyFlex modes. (website? FAQ? Open forum?)	Simple (one-button?) and scalable solutions for AV capture. How many rooms can be equipped?	Resources (\$\$\$, staff, time) needed to install and support AV. Training plan for faculty. (student guides?)
Support for learning and sharing best practices. (format?)	If seating in rooms limited; reservation system	Seat reservation system (could be simple)	Policy and training regarding seating capacity and managing limited seats
Ready-made LMS templates for several common types of online class sessions (modules)	Guidance for choosing when to participate online or in classroom (when a choice is available)	Engagement/interaction software or systems that faculty request	Process for reviewing new software/system requests (security, privacy, accessibility, cost, support)

Comments:

General note – the more a course design changes to provide effective learning online, the more additional support may be needed. Some classes need little if any additional implementation support; some may need substantial support. Design process should be completed within the context of existing support resources, but those resources may need to change to support new design needs (design and support influence each other).

7. Assess Return on Expectations (consider both short- and long-term)

Expected Return (Value Expectation)	Measurement (Data)	Planned Analysis	Evaluation (Value Returned?)

Comments:

Compare the anticipated value return to the additional costs (actual) - what adjustments are needed?