

How to Use the HyFlex Method to Teach Online and In Person at the Same Time

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> Contact NORD September 9, 2021



Brief Bio...

- Faculty (and former Chair) Instructional Technologies (College of Ed)
- AVP Academic Affairs Operations (8yrs)
- E-Learning Design and Development
- Train-the-Trainer
- Classroom teacher
- Technical training (USN)



OER author: <u>https://edtechbooks.org/hyflex/</u>





Agenda

- What's the Problem?
- Supporting a Student-Directed Hybrid: HyFlex
- The HyFlex Experience
- Designing for HyFlex
- Engagement and Assessment
- Aligning Systems and Support
- Questions?





The Problem

There is a **need for more access to classes** for students who are not able to attend in person on campus.

"Our solution to declining enrollment is to turn our degree program into an online program."

"We can't afford to offer both an online and face-to-face section of this course when neither is full."

"30% of our local students are absent in any given day, and they say it's because of work or family issues."



2021-2022?

"Only 50% of our students want to come back to classes on campus."

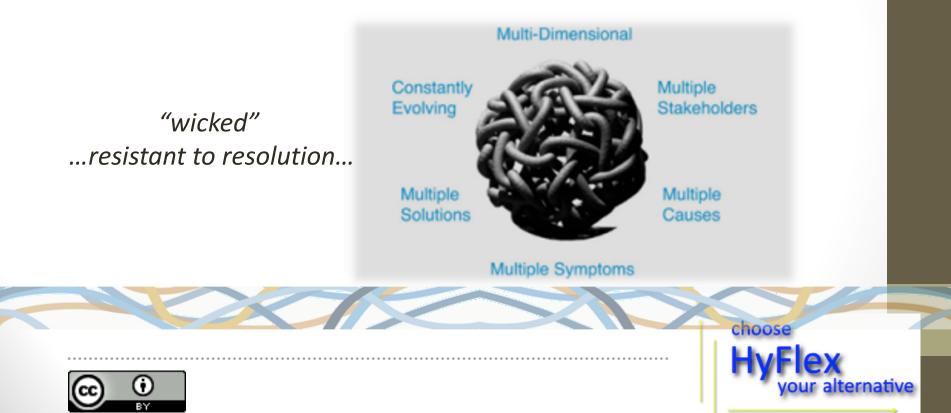
"Our classrooms can only accommodate 50% (or less) of the class enrollment."

We need online access and we also want the classroom experience.



One of Education's most "wicked" problems

- Providing equitable access to high quality instruction for those who need and want it.
- And... getting "there" from where we are now.



Our Past: Single-mode Classes

Which is best? | Face to face | Online Synchronous | Online Asynchronous

Face to face	Online Sync	Online Async
Socially interactive; supports	Can be socially interactive	Access is more ubiquitous
relationships	All have experience (now)	Long history of success
"Natural" formative assessment,	May create a record for later	Can support more reflective
better communication	review	learning
Common, expected		Creates a record for review

General statements (not always true in every case)

Not everyone has access	Not everyone has access	Not everyone has access
Group-paced (too slow and too	Technology requirements:	Technology requirements:
fast, little student agency)	hardware, software, network,	hardware, software, network,
Expensive (location, staffing)	bandwidth	bandwidth
Public health concerns	Requires time and location	Not interactive, leading to
		equity issues



Can we predict or dictate to students which mode would be best for them?

Can we combine online and classroom students in the same class section?





Our solution? HyFlex

<u>Hybrid + Flexible = HyFlex</u>

- Hybrid a mix of face to face, asynchronous, and synchronous online activities
- Flexible learners can choose their method of participation ... per session, topic, or activity







This gives students the freedom to study when and where they want to based on their own needs, desires, and preferences. HyFlex classes combine elements of both online and classroom-based learning – they take hybrid courses to a new level of flexibility.



Course material is offered in traditional and online formats.

Students can choose to take the class online, in the classroom, or both.





Students can choose how they attend courses weekly, which can resolve many scheduling conflicts.

More than just "HyFlex"

Multi-Access Learning (2009) Mode-Neutral (2008) Multi-Options (2014) Converged Learning (2012) Flexible Hybrid (2014) Peirce Fit[®] (2014) FlexLearning (2012) Blendflex (2016) Comodal (2016) Flexibly Accessible Learning Environment (FALE) (2018) Provides multiple options with student control over participation mode Provides multiple options but (perhaps) no student control over participation mode Synchronous Learning in Distributed Environments (SLIDE) (2011) Remote Live Participation (RLP) (2018) gxLearning (2011) Blendsync (2011)

For more about these, visit <u>https://edtechbooks.org/hyflex/book_intro</u>





Definition



In a **Hybrid Flexible (HyFlex) Class, students can** choose to attend class either in an assigned face-to-face environment or in an online environment (synchronous, asynchronous, bichronous).

Latest revision to SFSU Academic Senate Policy S19-264 https://senate.sfsu.edu/policy/online-education-policy-1





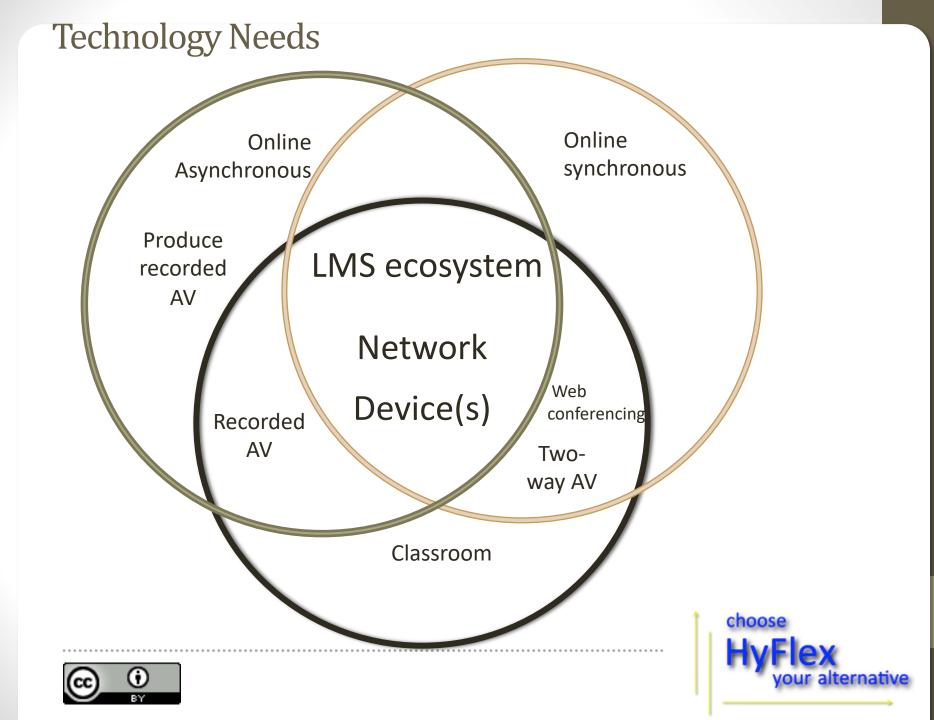
HyFlex Values and Principles

- Learner Choice: *HyFlex courses must have fully developed participation alternatives: classroom (face to face) and online (distance).*
- Equivalence: Alternative paths in a HyFlex course must lead to equivalent learning outcomes.
- Reuse: Instructional materials and student-generated artifacts from learning activities in each participation mode become learning resources for all students.
- Accessibility: Alternative participation modes in HyFlex courses must be accessible to all students.



The HyFlex Experience

. The line is



https://na.panasonic.com/us /panasonic-professional-ptzcameras

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PTZ20X-011



https://www.shure.com/en-US/products/accessories/mxwncs8 123 Going Up! gcoetech @ :

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Simple Technology Solutions



HuddleCamHD \$200USD https://www.amazon.com/Streami ng-External-Microphone-Learning-Compatible/dp/B08HLH5M6V/ \$50USD





https://www.amazon.com/Speakerphone-Microphone-Conference-Omnidirectional-Touch-Sensor/dp/B07WD52LXJ/ \$50USD More complex technology is sometimes used in special situations. KU Leuven (Belgium) <u>https://edtechbooks.org/hyflex/hyflex_MTP_KULeuven</u>











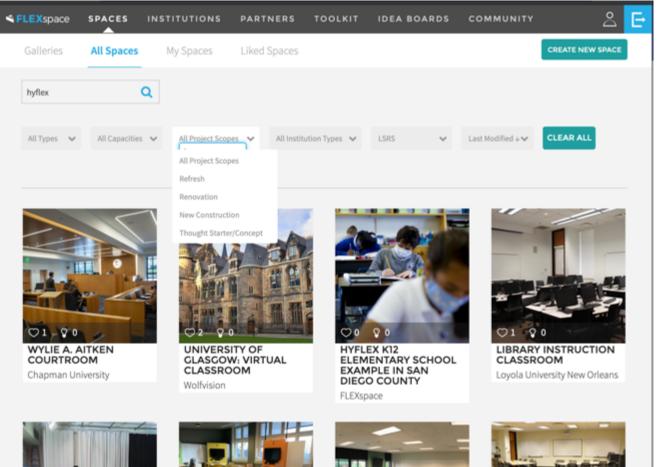
 Institutions sharing their space designs, technology setups, and more. Free account for educators.

https://flexspace.org/

"The Flexible Learning Environments eXchange is a place where we can openly **exchange** ideas about learning spaces (technology, facilities, pedagogy), especially helpful during the time of social distancing and dynamic hybrid/flexible modalities as many campuses are making plans for facilities projects."







With a free account, you can search the database for specific space characteristics.

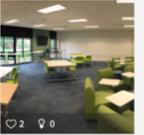


FACULTY MEDIA CENTER Oregon State University

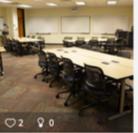


HYBRID HIGH TECH ACTIVE LEARNING CLASSROOM USBO

Utrecht University



THOM 104 ILS Concordia University-Nebraska



ROOM 0285 Ohio State University Columbus





Explain your approach to your stakeholders.

Coronavirus (COVID-19): Information and Resources



On Campus
Online Learning
Intensive Courses
Peirce Fit

Questions?

Speak with Admissions.

Choose From Online or on Campus Week to Week

For more than 150 years, Peirce College has served working adult learners, so we know that earning your degree means juggling a lot of responsibilities. We also know that when the demands on your time change at a moment's notice you don't just want choices and flexibility – you need them. That's why we created Peirce Fit.

Peirce Fit is a life-friendly way to earn a degree where you choose from week to week to attend class on campus or online. So if you prefer the convenience of online classes but occasionally want a traditional classroom experience, you can do that. Or if you enjoy anon campus environment but something comes up, you always have the flexibility to study online.

With Peirce Fit, you get the freedom to switch back and forth throughout the course as your schedule and needs change. Each week your professors are prepared to adapt their teaching approach to the number of students attending class here at our Philadelphia, PA campus. That means you always get the personalized and focused instruction Peirce is known for, whether you're on campus, at home or anywhere else with an internet connection.

Peirce Fit is unique to Peirce College and is available for students in all of our certificate, graduate and undergraduate degree programs. No matter what program you're in at Peirce, you'll be able to make the call every single week whether you want to come to class or go online. No



Why Peirce Fit?

Explain your approach to your stakeholders.



ShenFlex

https://www.su.edu/

Academics

ShenFlex

Areas of Study

Pre-Health Program

iMLearning

First Year Seminar - Going Global

Center for Islam in the Contemporary World (CICW)

Barzinji Project

International Programs

General Education

Academic Resources & Centers

What Is ShenFlex?

henFlex is what Shenandoah University is calling the plan that allows learning to occur both inperson and online, simultaneously, if needed. If it is necessary for a student or an instructor to learn or teach remotely, they can easily do so. Through ShenFlex, learning will occur, whenever, wherever, and however it needs to, as it meets the needs of students and instructors.



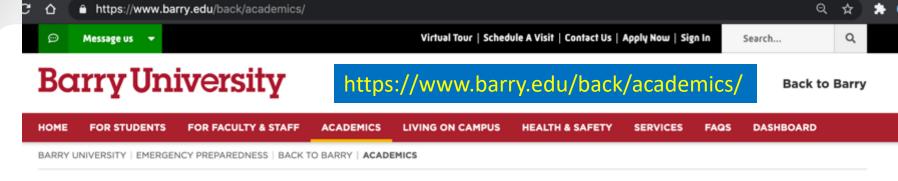
The ShenFlex model is adapted from the HyFlex (Hybrid-Flexible) course design developed in the mid-2000s to allow students to switch back and forth between in-person and virtual formats.

ShenFlex is designed to have controlled face-to-face components.

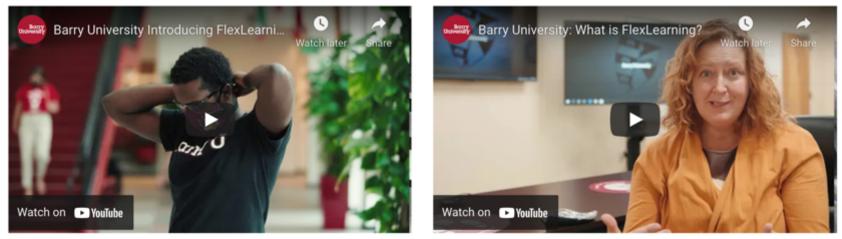
Courses integrate online and face-to-face learning communities where students sometimes meet in a physical space / classroom while also learning through online resources and activities. ShenFlex courses have significant face-toface components, but also allow for students and faculty with medical or other demonstrated need to participate online. ShenFlex allows us to maintain significant face-to-face experiences for most students and faculty while adapting to space limitations, individual needs, and other constraints related to COVID-19.

Four Principles of ShenFlex

1. Alternatives: Providing meaningful alternative participation modes for students and enabling faculty to



ACADEMICS



FlexLearning Model

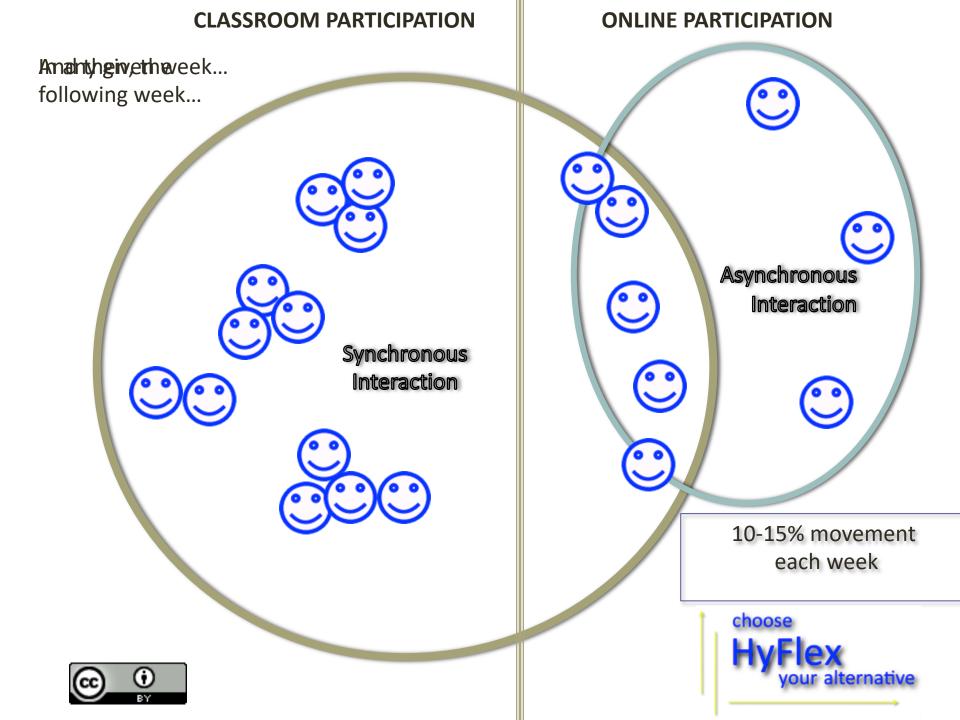
In response to COVID-19, our academic planning task force has reimagined course delivery to align with physical distancing practices while maintaining our academic standards and meeting or exceeding accreditation requirements. Many courses will include highly flexible models of instruction that allow for physical distancing within classrooms and remote participation by students and faculty in alignment with health and safety guidance.

Students and faculty who are not comfortable attending in-person have the option to remain fully remote for Spring 2021. Our goal is to offer most classes in a flexible platform that allows students to be in-person, remote, or a combination of the two. Any student wishing to take all their courses from a remote location should <u>contact the appropriate staff/faculty member associated with their College or School</u> for a schedule review and adjustment, if necessary.

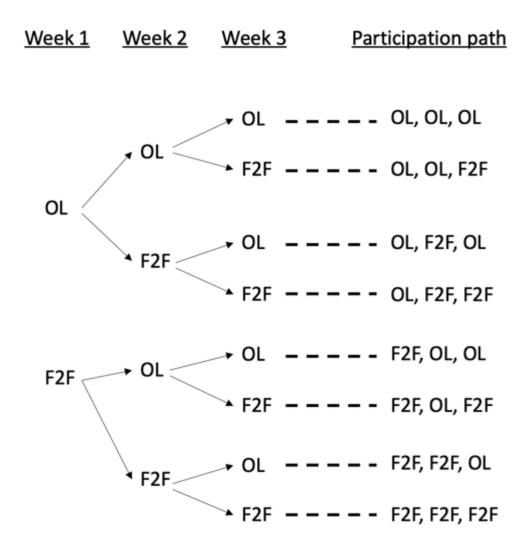
Students are welcome to exercise this option. However, in some cases, remaining remote may impact degree progression. Therefore, it is

Explain your approach to your stakeholders.

HyFlex Experience: Student



Each Student May Choose a Unique Participation Path



How many different course-length paths are available for **two alternatives**?

8 weeks: 2⁸ = 256 15 weeks: 2¹⁵= 32,768

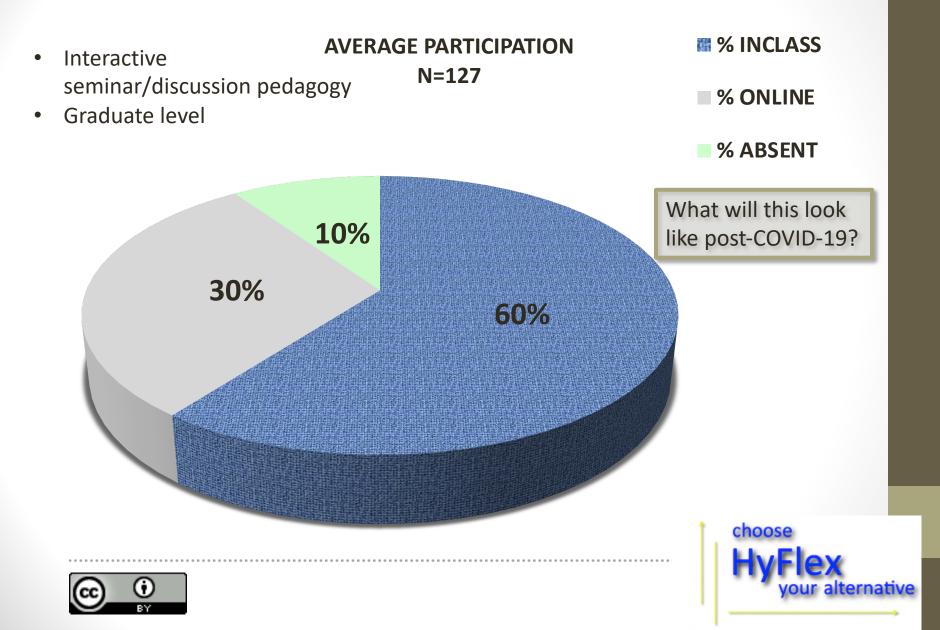
How many different course-length paths are available for **three alternatives** (choice of two online options)?

8 weeks: 3⁸ = 6,561 15 weeks: 3¹⁵= 14,348,907

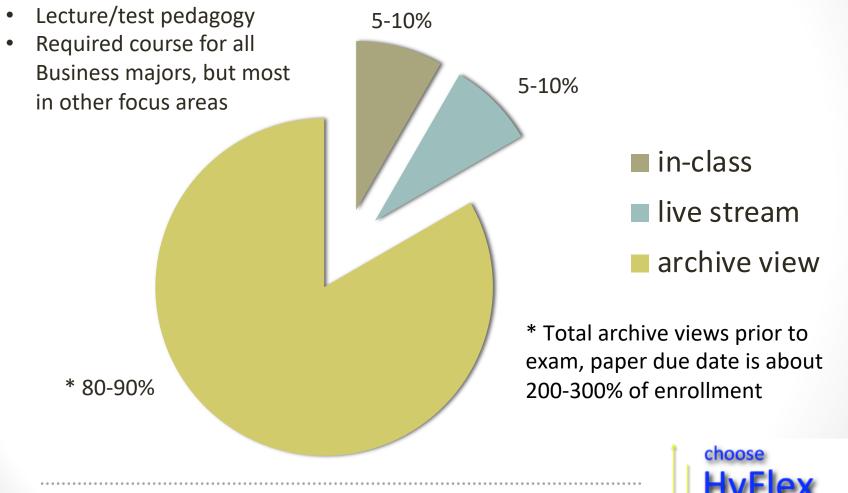
> choose HyFlex your alternative



Overall Average Participation by Mode



Participation in Large Lecture Section



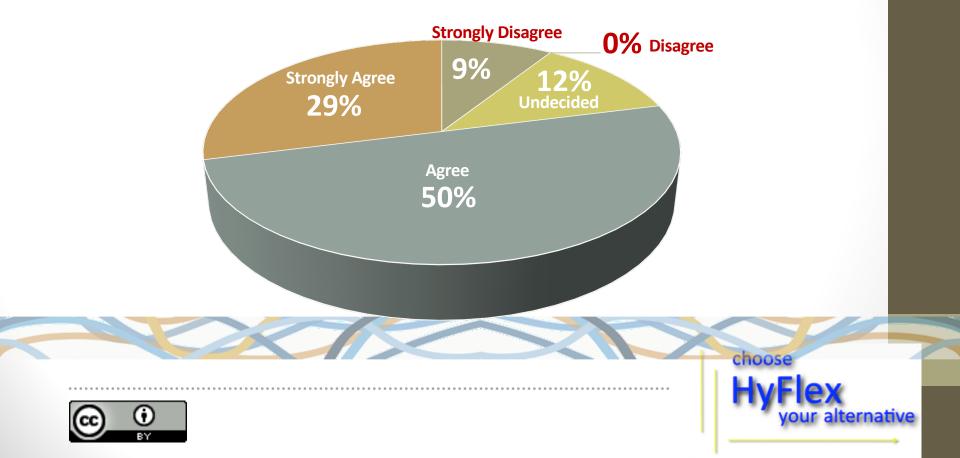


Learning Satisfaction?

"I learned as much as I expected."

79% agree or strongly agree 9% disagree or strongly disagree

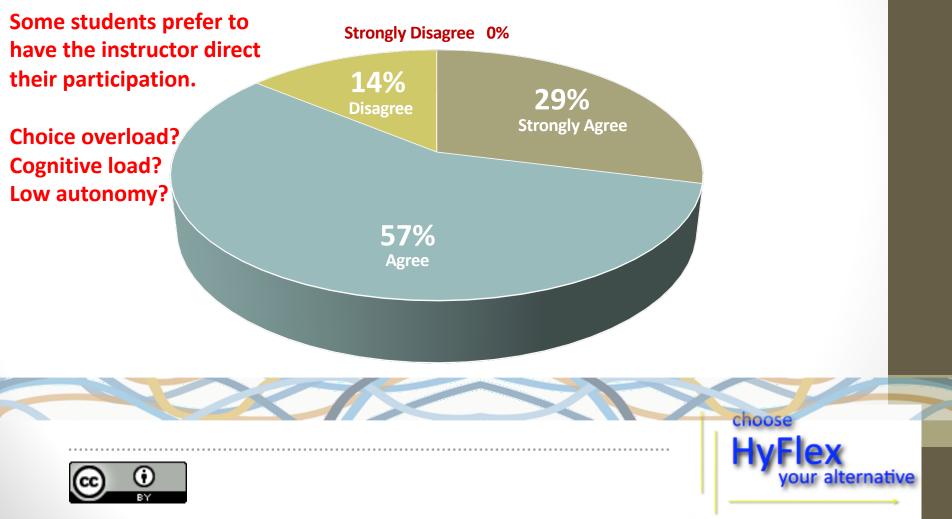
"I Learned as much as I expected."



Who should choose the blend?

"I prefer to choose the blend."

86% agree or strongly agree14% disagree or strongly disagree



Students Value

- Choose when to attend class in-person, and when to attend online
- Use additional learning resources available from all modes for review at any time (richer learning environment)
- Learn how to learn online without full commitment to only online
- Well-designed options available when in-class attendance isn't possible or convenient (improved access to learning)





What do students say?

Visit and listen to students' perspectives: <u>https://edtechbooks.org/hyflex/student_experience</u>

Nate Kaufman: <u>http://youtu.be/h60x7Miy9fk</u> Gustavo Campos: <u>http://youtu.be/0zddgiLVt5Y</u> Jess Kaufmann: <u>http://youtu.be/jVIzWRXBDyY</u> Joel Compton: <u>http://youtu.be/6ExBNhNuTPc</u>







HyFlex Experience: Faculty

Faculty Value

- No path for "absent" students no excused absences. If students can't attend in-person, they are expected to attend as an online student.
- Opportunity for deeper learning with more learning resources available
- Engagement with students between regular class sessions
- Support lower enrolled classes with additional access to students
- Built in backup when in-class instruction is not possible





Where do faculty want to go?

- Assumed starting point: Classroom teaching effective (experienced)
 - Experience teaching fully online is helpful
 - Where are the gaps in skills, abilities and resources?
 - Experience teaching hybrid is helpful
 - What forms? Flipped? Co-modal?
- Most common goal "transitioning excellent face to face teaching to an online and hybrid environment"
 - Also frequent: Combining existing high quality face to face and online classes
- Implementation goal?
 - Trying out HyFlex in a few class sessions (small scale)
 - Full HyFlex development and deployment

What do faculty say?

Visit

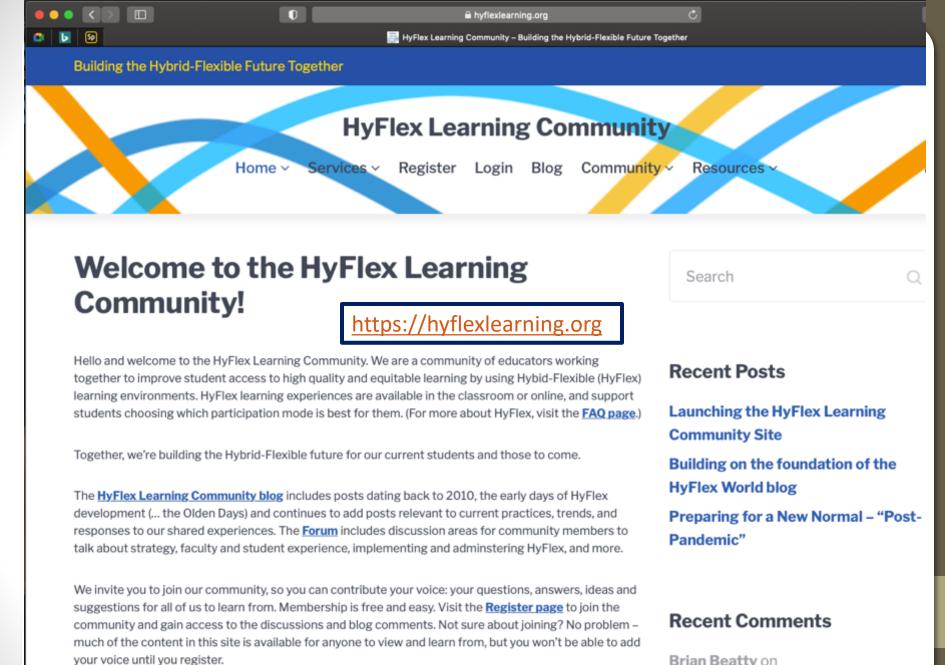
https://edtechbooks.org/hyflex/tea ching_hyflex to listen to several faculty share a few insights about their own HyFlex teaching experience.

Jeff Brain: http://youtu.be/PTCS-kbczME

Patricia Donohue: http://youtu.be/B5FTHXA1Vbk







If you're interested in more substantial help learning about or implementing your own HyFlex course(s) or

program visit the Services page to learn more about what we can offer you, or fill out the Contact form

Brian Beatty on

Preparing for a New Normal – "Post-Pandemic"

Manage Faculty Workload

The change in faculty workload:

- 1) developing the additional online course (materials, activities) to accompany the classroom course, and
- 2) facilitating engaged online participation throughout the course. Four common ways this is managed:
- Changes in workflow: Faculty spend more time teaching HyFlex and less on other tasks.
- Additional stipend (pay) for faculty who design, develop and teach a HyFlex course. Commonly this is PD (workshop) with stipend.
- Course release for faculty who design, develop and teach a HyFlex course perhaps for the first term.
- Instructional design support to build, assigned teaching assistants (TAs) to help manage the workload of teaching both classroom and online versions of the course.
- Doubling up teaching assignments (prep one, teach two)

Designing Alternative Paths: Classroom and Online





What is your design strategy?





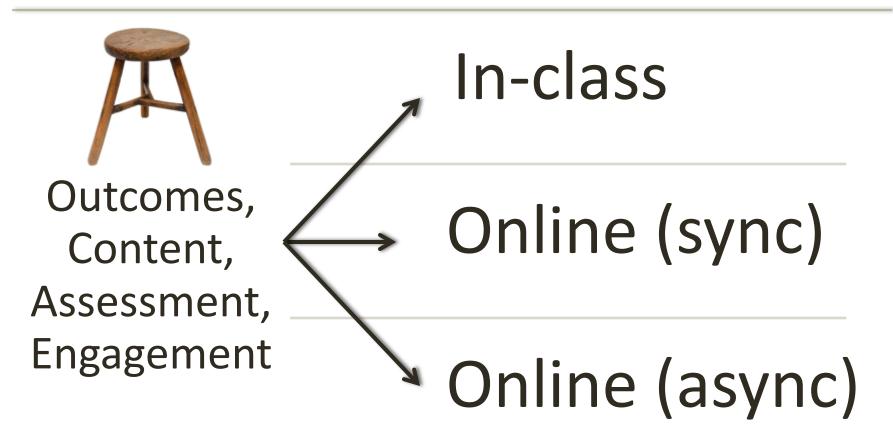
Choose a Strategic Approach

- Assumption: Starting with effective face to face
- Choose which online modes you will support
 - Asynchronous?
 - Synchronous?
- Recommendation: **Design and build once, use in all modes**.
 - If you develop for the asynchronous environment first, you can use those materials (content, activities, assessment) to support students participating in other modes as well.
 - For an alternative view, see the video explaining a "Zoomflex" design strategy which recommends designing for the synchronous environment first. (What assumptions does this imply?) <u>https://www.youtube.com/watch?v=C7VScPdhMvY</u>





Design the Alternatives



https://edtechbooks.org/hyflex/hyflex_design





Review Sample Course

Graduate Seminar Course (enrollment up to 25)

PDF version: (LMS links not active) https://sfsu.box.com/s/mcc97kh74hxkk3o9hmj5xovmydnd5ik8

Course Syllabus: <u>https://sfsu.box.com/s/mpp7zrdbi9e92rxbinzkdp3gi5rot8ql</u>





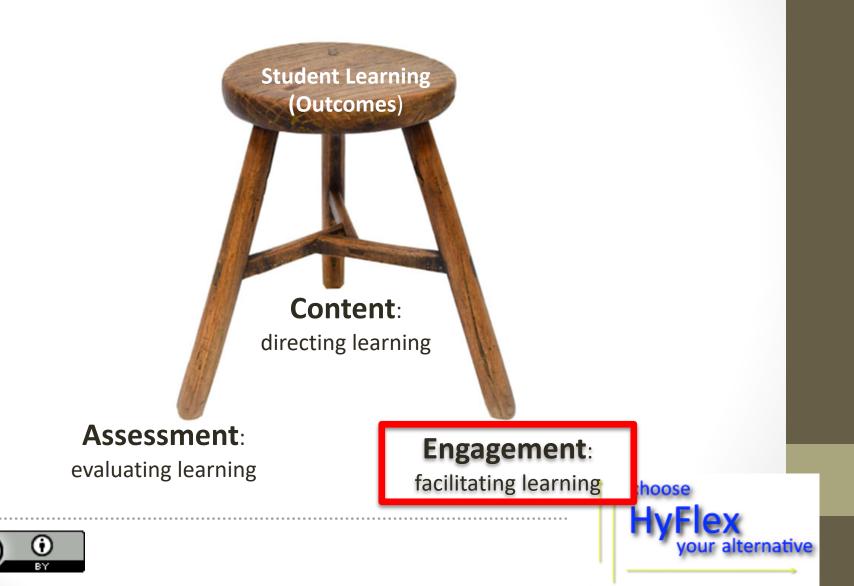


Engaging Students in HyFlex Classes



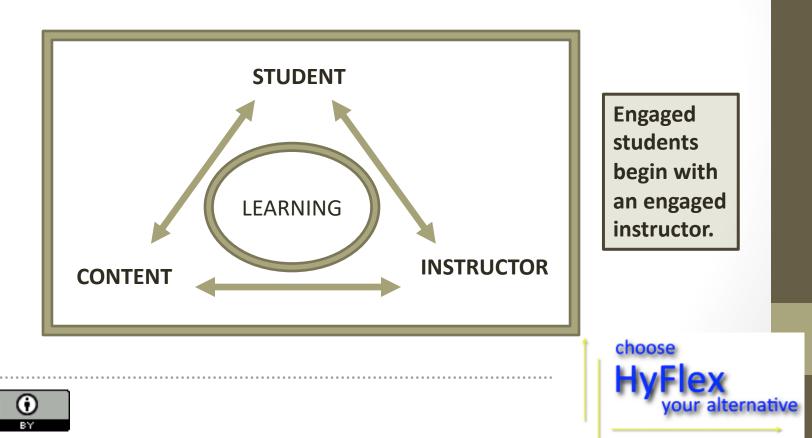


Three-phased Instruction



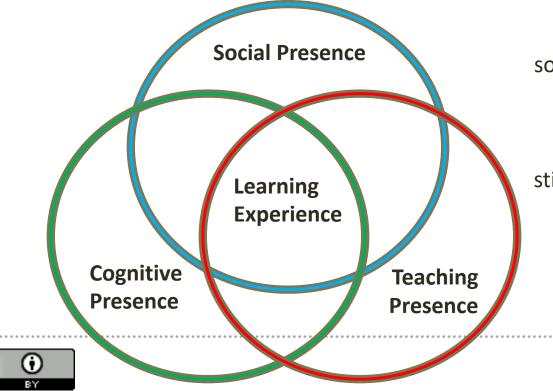
Student Engagement/Interaction

- How do students interact/engage with content?
- How do students interact/engage with each other?
- How do students interact/engage with the instructor?



Who is Present?

- Social presence: communication, relationship
- Cognitive presence: construct and confirm understanding
- Instructor/teaching presence: instructional design, facilitation, direct instruction



Community of Inquiry: build a solid foundation of social presence and teaching presence to stimulate cognitive presence in a course.

> choose HyFlex your alternative

Connections among Students

- 1. Weekly reflection posts online, open for all to read formative assessment for the instructor
- 2. Encourage participation mode "churn"
- 3. Form small group discussions with in-class and online sync students when practical
- 4. Use online forums/shared docs to "capture" the reportouts from in-class discussion activities
- 5. Require peer feedback on draft assignments and presentations.
- 6. Subscribe all students to all discussion forums; encourage or require participation of all students

cnoos



Classroom Engagement

- What worked well in the past may still work well, unless social distancing requirements interfere (masks, distance, immobility)
 - High dialogue (verbal exchanges)
 - Low structure (variety of activity options)

Engaged students begin with an engaged instructor.

- Students must interact with content, the instructor and each other (student-content, student-instructor, and studentstudent)
 - Interactive lectures
 - Small group activity and discussion
 - Be creative use variety: simple games, role-plays, debates

choose HyFlex your alternative



Interactive Ideas for Hybrid and in-class

Active Learning in Hybrid and Physically Distanced Classrooms, blog post by Derek Bruff

https://cft.vanderbilt.edu/2020/06/active-learning-in-hybrid-and-sociallydistanced-classrooms/

Class-wide Discussion

Live Polling

Backchannel

Collaborative Notetaking

Groupwork?

Written Work

Hybrid Pair Work

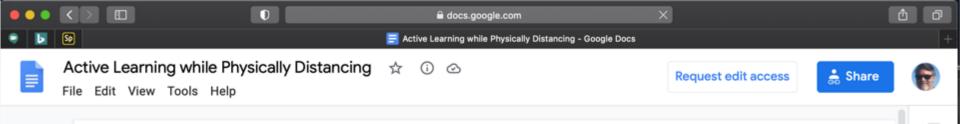
Jigsaw

Fishbowl

Physical Movement?







LSU Louisiana State University

Contributions and feedback are welcomed! Please submit suggestions here.

Active Learning while Physical Distancing

We know you are looking for some way to make your teaching engaging. The chart below outlines some common active learning strategies and corresponding approaches appropriate for online teaching in both synchronous and asynchronous approaches.

Goal	F2F Active Learning Activity	Online equivalent- Synchronous	Online-Asynchronous	Physical Distanced Classroom
Encourage active engagement	Think-pair-share	Use breakout meeting rooms in online video conferencing platforms to simulate small group discussions.	Pose an equivalent question to the asynchronous students, either in video or text, and ask the students to respond in a small group discussion forum. The group reports can be shared to the larger class discussion forum.	Set up small groups of 3-5 students. Pose a question. Could also use a zoom room or google doc to help with communication. Could send pairs out of class for easier socially distanced discussi elsewhere on campus with set return time, have discussion outside of class time and report during class or outside of class. When sharing with class, conside it practice in projecting voices so classmates hear.

https://docs.google.com/document/d/15ZtTu2pmQRU_eC3gMccVhVwDR57PD s4uxIMB7Bs1os8/edit

Online Synchronous Engagement

- What works well in the classroom may work well in the synchronous mode, when the technology requirements are met (audio-video, network).
- Students must interact with content, the instructor and each other (student-content, student-instructor, and student-student).

 Treat students as if they were in the physical classroom: expect interaction, set expectations for audio and video, provide opportunities for them to present to class.

• Use the interactive tools available in the platform: polls, whiteboard, etc. (Zoom:

https://zoom.us/docs/doc/Tips%20and%20Tricks%20for%20T

eachers%20Educating%20on%20Zoom.pdf)



For Blended Synchronous environments, see the handbook and case studies at <u>https://blendsync.org</u>



students

begin with

an engaged

instructor.

Facilitating Discussions

Resources:

 Facilitating Discussions in-class and online (DePaul University)
<u>https://resources.depaul.edu/teaching-</u> <u>commons/teaching-guides/instructional-</u> <u>methods/Pages/discussions.aspx</u>





Asynchronous Engagement

Key principle: Engaged students begin with an engaged instructor!

- **Students must interact** with content, the instructor and each other (student-content, student-instructor, and student-student)
- The instructor MUST dedicate time to interact with asynchronous students **several times a week**.
- Student-student interaction around content is very helpful to learning, **if students choose to participate**.





Engaging Online Students

Resources:

- Adding some TEC-VARIETY: <u>https://tec-variety.com/</u> See Chapters 10 Interactivity and 11 Engagement
- Managing Large Online Classes -<u>https://und.edu/academics/ttada/_files/_docs/session-</u> <u>documents/resource-roundup-managing-large-courses.pdf</u>
- Guidance from the Rochester Polytechnic Institute: <u>https://www.rit.edu/academicaffairs/tls/course-</u> <u>design/teaching-elements/student-to-student</u>
- For Blended Synchronous environments, see the handbook and case studies at <u>https://blendsync.org</u>





https://tec-variety.com/

ADDING SOME TEC-VARIETY 100+ Activities for Motivating and Retaining Learners Online

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Free Book:

<u>Adding Some TEC-VARIETY:</u> 100+ Activities for Motivating and Retaining Learners Online

Free Book Chapters:

PREFACE TO TEC-VARIETY (Includes Endorsements, Dedication, Contents, About the Authors, Preface, and Index)

CHAPTER ONE - INTRODUCING TEC-VARIETY

CHAPTER TWO - ONLINE LEARNING ATTRITION AND RETENTION

CHAPTER THREE - ONLINE MOTIVATION FROM FOUR PERSPECTIVES

CHAPTER FOUR - PRINCIPLE #1 TONE/CLIMATE (Includes Psychological Safety, Comfort, and Sense of Belonging)

CHAPTER FIVE - PRINCIPLE #2 ENCOURAGEMENT (Includes Feedback, Responsiveness, Praise, and Supports)

CHAPTER SIX - PRINCIPLE #3 CURIOSITY (Includes Surprise, Intrigue, and Unknowns)

CHAPTER SEVEN - PRINCIPLE #4 VARIETY (Includes Novelty, Fun, and Fantasy)

CHAPTER EIGHT - PRINCIPLE #5 AUTONOMY (Includes Choice, Control, Flexibility, and Opportunities)

CHAPTER NINE - PRINCIPLE #6 RELEVANCE (Includes Meaningful, Authentic, and Interesting)

CHAPTER TEN - PRINCIPLE #7 INTERACTIVITY (Includes Collaborative, Team-Based, and Community)

CHAPTER ELEVEN - PRINCIPLE #8 ENGAGEMENT (Includes Effort, Involvement, and Investment)

CHAPTER TWELVE - PRINCIPLE #9 TENSION (includes Challenge, Dissonance, and Controversy)

CHAPTER THIRTEEN - PRINCIPLE #10 YIELDING PRODUCTS (Includes Goal Driven, Purposeful Vision, and Ownership)

CHAPTER FOURTEEN - SUPPORTING AND MOTIVATING INSTRUCTORS

CHAPTER FIFTEEN - RECAPPING TEC-VARIETY

WEB LINKS, EXAMPLES, AND RESOURCES

REFERENCES



☆

Download Book Paperback (Amazon) Free Chinese Version Kindle Version (Amazon)



Assessing Learning in HyFlex Courses





Assessing Learning

- Be consistent! Students in all modes should have essentially the same testing environments, and this usually means all are taking online quizzes, tests and exams.
- Is proctoring needed for quizzes, tests, and high-stakes exams? If yes, how will it be implemented?
 - Students required to come to campus for tests
 - Still may require some accommodations
 - Local test centers?
 - Online exam without proctoring?
- Consider a shift to low-stakes (non-proctored) quizzes tests and exams supplemented (or replaced) by authentic assessments: performances that provide evidence for learning and understanding.





Proctoring Online Exams

- For classroom/synchronous online students, proctoring in person or through Zoom likely works as well as before.
- Lockdown browser *limits* the use of internet resources during the exam.
- High stakes testing may require more invasive remote proctoring; recording computer screen, webcam and audio.

What modifications are needed for each mode?



Dr. Brian Beatty





ProctorU proctors at work

Online Exam Proctoring Catches Cheaters, Raises Concerns

https://www.insidehighered.com/digital-learning/article/2017/05/10/online-exam-proctoring-catches-cheaters-raises-concerns





Is Online Proctoring Needed?

- Is the value worth the cost?
- Is classroom testing treated the same as online testing?
- Will this impact students' test performance?
- Do faculty have time to investigate potential cheating?
- Will the institution support faculty decisions regarding cheating allegations?





Authentic Assessment

- Beyond exams and quizzes: projects, presentations, reports
 - Documents, presentations can be delivered in class or online with little difference (use the LMS)
 - Use of rubric for consistent evaluation
 - Are group assessments appropriate?

<u>https://citl.indiana.edu/teaching-resources/assessing-</u> <u>student-learning/authentic-assessment/index.html</u>

May be used to replace some or all exam assessment. Students could build a portfolio of work.





Aligning Systems and Support

MUL



Institutions Value

- Enroll more students (increase access)
- Graduate more students... and faster (increase efficiency)
- Support working (busy) students (schedule control)
- Support busy faculty (travel-related schedule control)
- Reduce demand on facilities (do more with same/less space)
- Reduce impact on environment (reduce commuting)
- Leverage the power of hybrid environments (more learning opportunity)
- Develop online teaching and learning expertise with built-in "comfort" of face to face environment as a backup
- Allow students freedom to choose how they participate (partial support for student-directed learning)
- Build institutional online capacity step-by-step (teaching and learning)
- Facilitate faculty development
- Create new, customized models of instruction using emerging communications technologies to support teaching and learning



Planning for Resilience

"dynamic stability" – be prepared to adapt, flex, change as needed to meet the current situation while keeping the institution "on course" for the long term.

Major administrative decisions include:

- deciding to launch HyFlex for an institution,
- enabling student schedule flexibility,
- managing workload agreements, and
- aligning support for students and faculty

For much more, visit <u>https://edtechbooks.org/hyflex/admin_factors</u> (administrative supports) and <u>https://edtechbooks.org/hyflex/adoption</u> (supporting adoption processes)





Align Student Support

- Typical supports for fully online students
 - Administrative processes and forms
 - Technical support resources (network, hardware, software)
 - Online technical help (24/7?)
 - Advising and tutoring services

Additional decisionmaking support for students:

> "Should I participate online or in the classroom?"



Consider restricting flexibility as needed: -International students -Students not experiencing online learning success -Classroom seat availability



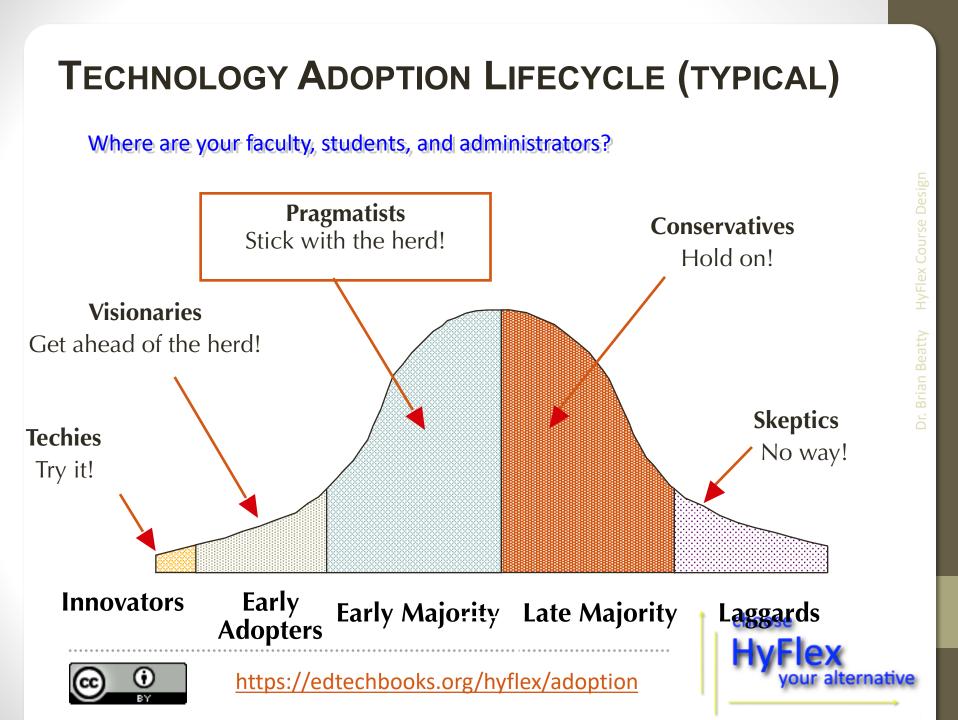


Align Faculty Support

- Learning how to teach effectively online (assumption: Faculty know how to teach effectively in the classroom) – Professional Development!
- Instructional design assistance to design an effective and interactive HyFlex course
 - Requires instructional design expertise and staffing
- In-class supports depends on technology complexity, faculty technical ability, and scale of class – TA's, even volunteer student TA's from the class can help
- Re-ordering daily and weekly workflow to include engagements with online students: changes are required!



alternative



Time for questions...

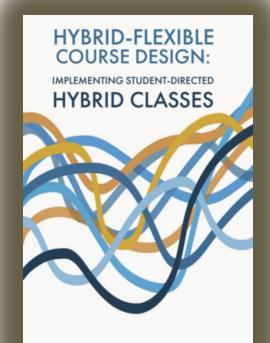




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