Hybrid-Flexible (HyFlex) Instruction
Supporting Student Success in Challenging Times and Beyond

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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: [https://edtechbooks.org/hyflex/](https://edtechbooks.org/hyflex/)
Agenda

• Supporting Students in Multiple Modes: HyFlex
• The HyFlex Experience
• Designing for HyFlex
• Engagement and Assessment
• Aligning Systems and Support
• Questions?
What is HyFlex?

HyFlex classes combine elements of both online and classroom-based learning—they take hybrid courses to a new level of flexibility.

This gives students the freedom to study when and where they want to based on their own needs, desires, and preferences.

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

Course material is offered in traditional and online formats.

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

Sources: TechPulseHE.wordpress.com | Educause.edu
Policy 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](https://senate.sfsu.edu/policy/online-education-policy-1)
HyFlex Key Principles

- Alternatives
- Equivalence
- Reuse
- Accessible
Alternatives

HyFlex courses must have fully developed participation alternatives: classroom (face to face) and online (distance).

• Classroom participation is a common starting point.

• Online participation may include synchronous (same time) and asynchronous (time independent).

• Determine how much flexibility students need to adequately participate; most situations require some level of time independence in addition to location independence, requiring an asynchronous online alternative.
Equivalence

*Alternative paths in a HyFlex course must lead to equivalent learning outcomes.*

• Various participation modes may present content, engage students and assess learning with different media and activities, but all students should be able to achieve the same learning outcomes.

• Outcomes based on process (e.g., participating in discussions, demonstrating learning) should fit the participation mode rather than being forced into the same form for all.

*Learning outcomes should not change | Process outcomes may differ*
Reuse

Instructional materials and student-generated artifacts from learning activities in each participation mode become learning resources for all students.

- Instructional materials: build once and use in all modes as appropriate

- Student activity: capture in-class activity for online student use and vice-versa. Audio | Video | Text | Documents

- Supports establishing a learning community (shared experience)

The LMS can be an excellent resource for capturing, curating and sharing resources for all modes.
Accessible

Alternative participation modes in HyFlex courses must be accessible to all students.

• Legal requirements for accessibility (Section 508 of ADA, local regulations, policies, and practices) for all media and activities; common focus on support for audio and visual channels

• Meaningful accessibility includes access to network, technology, and skills needed to participate in online modes.

Alternative participation modes are valid alternatives only if students can effectively participate in the mode they choose.
More than just “HyFlex”

Mode-Neutral (2008)
Multi-Access Learning (2009)
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 https://edtechbooks.org/hyflex/book_intro
The HyFlex Experience
And then, the following week...

In any given week...

10-15% movement each week
Overall Average Participation by Mode

- Interactive seminar/discussion pedagogy
- Graduate level

AVERAGE PARTICIPATION
N=127

- 60% INCLASS
- 30% ONLINE
- 10% ABSENT

choose HyFlex your alternative
Participation in Large Lecture Section

- Lecture/test pedagogy
- Required course for all Business majors, but most in other focus areas

* Total archive views prior to exam, paper due date is about 200-300% of enrollment

* 80-90%

5-10%

• in-class
• live stream
• archive view

choose HyFlex your alternative
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 agree
14% disagree or strongly disagree

Some students prefer to have the instructor direct their participation.

Choice overload? Cognitive load? Low autonomy?
Technology Needs

- All modes
  - Learning Management System and related technologies
  - Access to network and devices

- Classroom mode
  - Audio and video stream from class

- Online synchronous mode
  - Audio and video stream from class
  - Student audio and video stream to class
  - Web conferencing application

- Online asynchronous mode
  - Recording audio and video for presentations, videos
Simple Technology Solutions

HuddleCamHD
$200USD

$50USD

$50USD
More complex technology is sometimes used in special situations.
KU Leuven (Belgium) [https://edtechbooks.org/hyflex/hyflex_MTP_KULeuven](https://edtechbooks.org/hyflex/hyflex_MTP_KULeuven)
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.
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 an on-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 more worries about fitting your education into your life. It’s time to fit your life into your education.
What Is ShenFlex?

ShenFlex is what Shenandoah University is calling the plan that allows learning to occur both in-person 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-to-face 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
Student Factors in HyFlex
Students Value (benefits)

• 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: 
https://edtechbooks.org/hyflex/student_experience

Nate Kaufman:  
http://youtu.be/h60x7Miy9fk  
Gustavo Campos:  
http://youtu.be/0zddgiLVt5Y  
Jess Kaufmann:  
http://youtu.be/jVlzWRXBDyY  
Joel Compton:  
http://youtu.be/6ExBNhNuTPc
Faculty Factors in HyFlex
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 (when managed well)
• Support lower enrolled classes with additional access to students (up to section capacity)
• Built in backup when in-class instruction is not possible (professional travel, campus closure, etc.)
Where are faculty starting?

- Assumed: Classroom teaching effective (experienced)
  - Is this a good assumption?
  - Do you need to verify?
  - How can you support improvement where necessary?
- Experience teaching fully online
  - Synchronous and/or asynchronous?
  - How effective have students learned?
  - Where are the gaps in skills, abilities and resources?
- Experience teaching hybrid
  - What forms? Flipped? Co-modal?
  - Basic understanding of HyFlex principles?
Where do faculty want to go?

• Transitioning excellent face to face teaching to an online environment?
• Combining existing high quality face to face and online classes?
• Trying out HyFlex in a few class sessions?
• Full HyFlex development and deployment?
What do faculty say?

Visit [https://edtechbooks.org/hyflex/teaching_hyflex](https://edtechbooks.org/hyflex/teaching_hyflex) to listen to several faculty share a few insights about their own HyFlex teaching experience.

Jeff Brain:

Patricia Donohue:
[http://youtu.be/B5FTHXA1Vbk](http://youtu.be/B5FTHXA1Vbk)
Manage Faculty Workload

The major increase in faculty workload is usually developing the additional online course (materials, activities) to accompany the classroom course. There is often increased workload associated with facilitating engaged online participation throughout the course. Four common ways this is managed:

- **Additional stipend (pay)** for faculty who design, develop and teach a HyFlex course.
- **Course release** for faculty who design, develop and teach a HyFlex course.
- **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 (prepare one, teach two)**
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?
- Design for the online mode, knowing the design will also support F2F
  - I recommend designing for the asynchronous environment first, then using 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?)
    https://www.youtube.com/watch?v=C7VScPdhMvY
Steps to HyFlex

Communication to Stakeholders

Strategic Decision

Implementation

Content

Evaluation

Engagement

Assessment

https://edtechbooks.org/hyflex/hyflex_design
Design Alternatives

Outcomes, Content, Assessment, Engagement

- In-class
- Online (sync)
- Online (async)

choose HyFlex your alternative
Review Sample Course

Graduate Seminar Course (enrollment up to 25)

PDF version: https://sfsu.box.com/s/qz2kfhhu0xokl2pgzfd6vbtpmw3p025t
Engaging Students in HyFlex Classes
Three-phased Instruction

Student Learning (Outcomes)

Content: directing learning

Assessment: evaluating learning

Engagement: facilitating learning
Student Engagement/Interaction

• How do students interact with content? (Is this engaging for them?)
• How do students interact with each other to support learning? (Is this engaging for them?)
• How do students interact with the instructor? (Is this engaging for them?)
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.
Connections among Students

1. Weekly reflection posts – online, open, forum
2. Encourage participation mode “churn”
3. Form small group discussions with in-class and online sync students
4. Use online forums to “capture” the report-outs from in-class discussion activities
5. Require peer feedback on draft assignments
6. Subscribe all students to all discussion forums; encourage participation of all students
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)

• **Students must interact** with *content*, the *instructor* and *each other* (student-content, student-instructor, and student-student)
  - Interactive lectures
  - Small group activity and discussion
  - Be creative - use variety: simple games, role-plays, debates
Interactive Ideas for Hybrid and in-class

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


<table>
<thead>
<tr>
<th>Class-wide Discussion</th>
<th>Written Work</th>
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</thead>
<tbody>
<tr>
<td>Live Polling</td>
<td>Hybrid Pair Work</td>
</tr>
<tr>
<td>Backchannel</td>
<td>Jigsaw</td>
</tr>
<tr>
<td>Collaborative Notetaking</td>
<td>Fishbowl</td>
</tr>
<tr>
<td>Groupwork?</td>
<td>Physical Movement?</td>
</tr>
</tbody>
</table>
# Active Learning while Physically Distancing

**Contributions and feedback are welcomed! Please submit suggestions [here](https://docs.google.com/document/d/15ZtTu2pmQRU_eC3gMccVhVwDR57PDs4uxlMB7Bs1os8/edit).**

## 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.

<table>
<thead>
<tr>
<th>Goal</th>
<th>F2F Active Learning Activity</th>
<th>Online equivalent-Synchronous</th>
<th>Online-Asynchronous</th>
<th>Physical Distanced Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage active engagement</td>
<td>Think-pair-share</td>
<td>Use breakout meeting rooms in online video conferencing platforms to simulate small group discussions.</td>
<td>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.</td>
<td>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 discussion 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, consider it practice in projecting voices so classmates hear.</td>
</tr>
</tbody>
</table>

https://docs.google.com/document/d/15ZtTu2pmQRU_eC3gMccVhVwDR57PDs4uxlMB7Bs1os8/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%20Teachers%20Educating%20on%20Zoom.pdf)
Facilitating Discussions

Resources:

• Facilitating Discussions in-class and online (DePaul University)
  https://resources.depaul.edu/teaching-commons/teaching-guides/instructional-methods/Pages/discussions.aspx
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: https://tec-variety.com/ See Chapters 10 Interactivity and 11 Engagement

• Managing Large Online Classes - https://und.edu/academics/ttada/_files/_docs/session-documents/resource-roundup-managing-large-courses.pdf

• Guidance from the Rochester Polytechnic Institute: https://www.rit.edu/academicaffairs/tls/course-design/teaching-elements/student-to-student
Adding Some TEC-VARIETY 100+ Activities for Motivating and Retaining Learners Online

Free Adding Some TEC-VARIETY Book Stuff

Free Book:

Adding Some TEC-VARIETY: 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 ATTRACTION 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?*
ProctorU proctors at work

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?

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

May be used to replace some or all exam assessment.

Students could build a portfolio of work.
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 https://edtechbooks.org/hyflex/admin_factors (administrative supports) and https://edtechbooks.org/hyflex/adoptions (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 decision-making 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)
• 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
• Re-ordering daily and weekly workflow to include engagements with online students: changes are required!
TECHNOLOGY ADOPTION LIFECYCLE (TYPICAL)

Where are your faculty, students, and administrators?

- **Visionaries**
  - Get ahead of the herd!

- **Techies**
  - Try it!

- **Innovators**
  - Try it!

- **Early Adopters**
  - Pragmatists
    - Stick with the herd!

- **Early Majority**
  - Conservatives
    - Hold on!

- **Late Majority**
  - Skeptics
    - No way!

- **Laggards**

Choose **HyFlex** your alternative

https://edtechbooks.org/hyflex/adoption
The way forward is NOT a return to before

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

<table>
<thead>
<tr>
<th>Face to face</th>
<th>Online Sync</th>
<th>Online Async</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socially interactive; supports relationships</td>
<td>Can be socially interactive</td>
<td>Access is more ubiquitous</td>
</tr>
<tr>
<td>“Natural” formative assessment, better communication</td>
<td>All have experience (now)</td>
<td>Long history of success</td>
</tr>
<tr>
<td>Common, expected</td>
<td>May create a record for later review</td>
<td>Can support more reflective learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creates a record for review</td>
</tr>
</tbody>
</table>

General statements (not always true in every case)

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

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https://edtechbooks.org/hyflex