Assessing Faculty Experiences Teaching a Flipped Courses

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Today's Learning Objectives:

- Recognize Unique Elements of a Flipped Course
- Identify Trends in Faculty Approaches to Delivering a Flipped Course
- Evaluate Faculty Experiences with Teaching a Flipped Course
- Formulate Plans for Supporting and Assessing Innovative Teaching

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Session Outline

- What is a Flipped Course?
- What's Happening on Your Campus?
    - Fast Facts – Quick Poll
    - What brings you here?
    - What local assessments are occurring around this topic?
- Share Our Experiences Designing Survey Items
- Findings by Course Characteristics
- Group Exercise Reviewing Qualitative Responses
- Discuss Assessment and Planning Recommendations

Your Campuses

- What brings you here?
- What local assessments are occurring around this topic?
- Fast Facts – Quick Poll

Flipped Courses

- Active, collaborative & situated learning
- Swap in-class & at-home assignments
- Leverages technology

"A flipped course swaps traditional in-class learning with typical out-of-class learning. For instance, new information is delivered online prior to attending class while activities related to processing and applying the information are completed during class." (FSSE, n.d.)

FSSE Overview

Faculty Survey of Student Engagement 2018

- Measures faculty perceptions of, values for, and involvement in effective educational practices
- Any instructional staff who have taught at least one undergraduate course at a four-year institution
- In 2018, over 13,000 faculty responded from 114 colleges and universities
- Append beta item sets

Inspiration

"The first (complete) year with the flipped schedule allowed my students to ask SO MANY more questions than ever before. I was able to work on higher level questions with the students."

--PHS AP Chemistry Teacher, Mr. Craig

Flipped Teaching Item Set

1. **In your selected undergraduate course, do you have regularly scheduled class meetings?** Yes; No, this course is asynchronous or self-directed.

2. **In your selected undergraduate course, how often do you require students to complete the following activities prior to attending class?** Very Often, Often, Sometimes, Never

    a) View an online lecture or demonstration that you created
    b) View an online video or tutorial created by other source (Kahn Academy, colleague, etc.)
    c) Listen to audio content that you created
    d) Listen to audio content from other sources
    e) Post to a class discussion forum after viewing or listening to online lecture materials
    f) Complete a short quiz or problem set after viewing or listening online lecture materials

Key Characteristics

Flipped Teaching Item Set

A *flipped* course swaps traditional in-class learning with typical out-of-class learning. For instance, new information is delivered online prior to attending class while activities related to processing and applying the information are completed during class.

3. **About how much does your selected undergraduate course fit this description of a *flipped course*?**
    Response options: Very much, Quite a bit, Some, Very Little

Definition & Fit

4. **About how many of the total number of undergraduate courses that you have taught or are scheduled to teach during this current school year fit this description of a flipped course?**
    Response options: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or more courses

Level of Experience

Flipped Teaching Item Set

5. **To what extent did the following reason(s) prompted you to teach a flipped course?** Very little, Some, Quite a bit, Very much

a. Awarded a teaching grant that supported innovative curriculum (re)design
b. Influenced by my institution, department, and/or faculty peers
c. Believed it would improve students' retention of factual or procedural knowledge
d. Believed it would improve students' metacognitive skills
e. Wanted to address student feedback from a previous course that I taught
f. Needed to redesign the course due to the volume of course content
g. Need to redesign the course due to the high student-to-instructor ratio
h. Other, please specify: *Open-ended comment*

Motivation to Flip

Flipped Teaching Item Set

6. What challenges did you experience in teaching a flipped course?

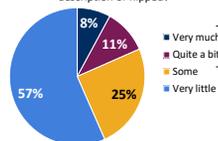7. What benefits did you experience in teaching a flipped course?

8. What is the general feedback you have received from students who participate in your flipped courses?

Qualitative Responses

Results Overview

1353 faculty from 18 institutions

How much does your course fit the description of flipped?

- 8% Very much
- 11% Quite a bit
- 25% Some
- 57% Very little

Around 1 in 5 faculty (n = 229) teach a course that's substantially flipped

Relationships to Good Educational Practice

Effect Size for Flipped Course ($p < .001$)	
Higher-Order Learning	+ + + +
Reflective & Integrative Learning	+ + +
Learning Strategies	+ + +
Quantitative Reasoning	+ + +
Collaborative Learning	+ + +
Discussions with Diverse Others	+ +
Student-Faculty Interaction	+ +
Effective Teaching Practices	+ + + +
Course Goals	+ + + + +

Who Tends to Flip?

More Often Traditional	More Likely to Flip
	Business fields
	Health Professions fields
	Full-time Lecturers/Instructors
White faculty	Asian faculty
	Black or African American faculty
Classroom instruction on campus	
	Distance education
	Hybrid class instruction and distance education

Relationship with Time

Effect Size for a Flipped Course ($p < .01$)	
Preparing class sessions	+ +
Teaching class sessions	
Grading assignments and exams	+ + +
Meeting with students outside of class	+ +
Course administration	+ + + +
Working to improve your teaching	+ + +

Analysis of Qualitative Responses

5.) To what extent did the following reason(s) prompt you to teach a flipped course?

6.) What challenges did you experience in teaching a flipped course?

7.) What benefits did you experience in teaching a flipped course?

8.) What is the general feedback you have received from students who participate in your flipped courses?

Group Activity: Please take 10-15 minutes to view the handout. What themes emerge from each question?

Emerging Themes

5.) **Motivation:** Pedagogical style that improves student outcomes, Increased accessibility to course material, Supports the structure of the class

6.) **Challenges:** Students not preparing for class, Students uncomfortable/dissatisfied with the flipped model, Preparation time

7.) **Benefits:** Increased engagement through application, Higher levels of student learning/comprehension, Progress more quickly through course material

8.) **Feedback:** Too much work placed on the student, Students prefer traditional style (lecture), Students value active learning class sessions, Students appreciate the accessibility of course materials

Let's Dream

Thinking about all that we've discussed, what would support for more flipped courses look like? How could we navigate the challenges and areas with lower use of flipped pedagogies?

- Getting the students to buy in, setting student expectations to get them on board
- Large chunks of to time to prepare
- Access to resources to get familiar with the technology, help with making videos, help with making the flipped activities
- Support from above, incentives, time, rewards for flipping
- Protection from negative course evaluations, or less emphasis on course evaluations on P&T
- Students are given the time that they need to prepare and take part in the out-of-class videos/learning/etc.
- Norming the workload of flipped courses to not overburden students or faculty, be mindful of the other courses and things
- Buy in from our colleagues so we can share resources, videos, activities, etc. More sharing of feedback, a repository of teaching materials and resources

Keep Dreaming

What could we do to bolster the positives and strengthen already existing flipped courses?

- Repository of resources, colleagues within a department or even a larger community of people sharing resources
- Some companies provide flipped-in-a-box courses with the resources, activities, etc. pre-planned, but it would great if they were flexible
- Faculty learning communities dedicated to flipped courses, possibly run through teaching and learning centers for interdisciplinary work
- Let the students be part of the flipping, preparing things outside of class for others

Final thoughts and questions?

Thanks for joining us!

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