Student-Centered Learning Strategies in a Flipped Course

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THE FLIPPED CLASSROOM

Turning Traditional Education on Its Head

Many educators are experimenting with the idea of a flipped classroom model. So what is it and why is everyone talking about it?

WHAT IS THE FLIPPED CLASSROOM?

The flipped classroom inverts traditional teaching methods, delivering instruction online outside of class and moving “homework” into the classroom.

THE INVERSION

The Traditional Classroom
Teacher’s Role: Sage on the Stage

Lecture Today
Homework

The Flipped Classroom
Teacher’s Role: Guide on the Side

Activity Today
What Is a Flipped Class?

A learning environment combining outside-of-class learning of content, such as by watching videos of lectures, and engaging in participatory learning activities during class time.
Flipped VS Traditional

**Flipped**
- Teacher instructs lesson at home (video / podcast / book / website)
- Students work in class.
  - Deeper understanding of concepts, applications, and connections to content are made.
  - Students receive support as needed.

**Traditional**
- Teacher instructs
- Students take notes
- Students follow guided instruction
- Teacher gives assessment
- Students have homework
Allows for introducing new, active learning strategies

More dynamic and interactive classes because students work together rather than sitting passively and listening (or not)

Facilitates moving from a teacher-centered to a student-centered learning environment

When flipping a class, begin with answering “what do my students need to DO to achieve the learning outcome”
Research on Flipping a Class


Overall student learning outcome:
Students will learn to describe, analyze, and apply economic and financial factors associated with issues, laws, constraints, and operations in intercollegiate athletics and professional sports.
Sport Finance and Economics, based on feedback from undergraduate sport management students, is the most challenging of the required courses in the major. Many students struggle to learn, understand, and apply the breadth and depth of the financial and economic principles comprising the foundation of the business of intercollegiate athletics and professional sports.
Provide each assigned reading on Blackboard
Read 29 assigned (daily) readings, mostly from scholarly journals, prior to class
Listen to a mini-lecture per topic of 6 to 27 minutes that provided information not presented in class
Complete matching SoftChalk review lessons
<table>
<thead>
<tr>
<th>Topic</th>
<th>Focus of Online Lecture</th>
<th>SoftChalk Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercollegiate Athletics</td>
<td>Amateurism</td>
<td>3 Self-Checks</td>
</tr>
<tr>
<td>Intercollegiate Athletics</td>
<td>Revenues and expenses</td>
<td>Did You Know Activity</td>
</tr>
<tr>
<td>Intercollegiate Athletics</td>
<td>Arms race</td>
<td>Crossword Puzzle</td>
</tr>
<tr>
<td>Monopolies</td>
<td>Monopoly, monopsony, and cartels</td>
<td>2 Self Checks</td>
</tr>
<tr>
<td>Antitrust</td>
<td>Antitrust lawsuits</td>
<td>8 Self Checks</td>
</tr>
<tr>
<td>Ownership</td>
<td>Ownership structures</td>
<td>Sorting Activity</td>
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<tr>
<td>Competitive Balance</td>
<td>Competitive balance</td>
<td>Self Check</td>
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<tr>
<td>Market Power</td>
<td>Market power</td>
<td>Crossword Puzzle</td>
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<tr>
<td>Media Power</td>
<td>Media power</td>
<td>Test Yourself</td>
</tr>
<tr>
<td>Labor-Management Issues</td>
<td>League-player issues</td>
<td>4 Self Checks</td>
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<tr>
<td>Labor-Management Issues</td>
<td>Sports agents</td>
<td>Quiz Group</td>
</tr>
<tr>
<td>Major League Baseball</td>
<td>Reserve clause and free agency; Antitrust</td>
<td>3 Self-Checks</td>
</tr>
<tr>
<td>Major League Baseball</td>
<td>Final salary arbitration</td>
<td>exemption</td>
</tr>
<tr>
<td>Major League Baseball</td>
<td>Revenue sharing</td>
<td>Flash Card Activity</td>
</tr>
<tr>
<td>National Football League</td>
<td>Lawsuits and free agency</td>
<td>2 Self Checks</td>
</tr>
<tr>
<td>National Football League</td>
<td>Revenue sharing</td>
<td>Flash Card Activity</td>
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<tr>
<td>National Football League</td>
<td>Collective bargaining agreement</td>
<td>Quiz Group</td>
</tr>
<tr>
<td>National Basketball Association</td>
<td>Draft and uncertainty of outcome</td>
<td>Sorting Activity</td>
</tr>
<tr>
<td>National Basketball Association</td>
<td>Collective bargaining agreement</td>
<td>3 Self-Checks</td>
</tr>
<tr>
<td>Tickets</td>
<td>Ticket pricing</td>
<td>Self Check</td>
</tr>
<tr>
<td>Sponsorships</td>
<td>Sponsorship</td>
<td>2 Self Checks</td>
</tr>
<tr>
<td>Economic Impact Studies</td>
<td>Economic impact studies</td>
<td>Comprehension Question</td>
</tr>
<tr>
<td>Financing Stadiums and Arenas</td>
<td>Benefits of public subsidies</td>
<td>3 Self-Checks</td>
</tr>
<tr>
<td>Financing Stadiums and Arenas</td>
<td>Realities of public subsidies</td>
<td>Self Check</td>
</tr>
</tbody>
</table>
Jeopardy review games
Minute papers
Pairs
Poll Everywhere
Review questions/checks for understanding
Small groups
Video clips

The Conceptual Design for the Student-Centered Learning Activities
Assessing Student Perceptions

Five-question, instructor-designed survey

Required Student Survey of Teaching with objective and open-ended questions

Online (Qualtrics) end-of-course survey asking about mini-lectures and SoftChalk review lessons
# Student Feedback

How did the mini-lectures positively impact your learning in Sport Finance and Economics?

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often</td>
<td>72%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>28%</td>
</tr>
<tr>
<td>Not at all</td>
<td>0%</td>
</tr>
</tbody>
</table>

Measured using end-of-course survey.
### Student Responses: To What Extent Did Each In-Class Active Learning Activity Positively Impact your Learning

<table>
<thead>
<tr>
<th>Activity</th>
<th>0: Not at all</th>
<th>1: Sometimes</th>
<th>2: Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeopardy review games</td>
<td>0%</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>Minute papers</td>
<td>10%</td>
<td>42%</td>
<td>48%</td>
</tr>
<tr>
<td>Pairs</td>
<td>6%</td>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>Poll Everywhere</td>
<td>7%</td>
<td>37%</td>
<td>57%</td>
</tr>
<tr>
<td>Review questions/checks for understanding</td>
<td>0%</td>
<td>13%</td>
<td>87%</td>
</tr>
<tr>
<td>Small groups</td>
<td>6%</td>
<td>55%</td>
<td>39%</td>
</tr>
<tr>
<td>Video clips</td>
<td>3%</td>
<td>45%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Measured through instructor-designed survey.
### Student Responses: To What Extent Was Each In-Class Active Learning Activity Enjoyable

<table>
<thead>
<tr>
<th>Active Learning Activity</th>
<th>0: Not at all</th>
<th>1: Sometimes</th>
<th>2: Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeopardy review games</td>
<td>3%</td>
<td>39%</td>
<td>58%</td>
</tr>
<tr>
<td>Minute papers</td>
<td>13%</td>
<td>52%</td>
<td>35%</td>
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<tr>
<td>Pairs</td>
<td>13%</td>
<td>48%</td>
<td>39%</td>
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<td>Poll Everywhere</td>
<td>6%</td>
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<tr>
<td>Review questions/checks for understanding</td>
<td>10%</td>
<td>42%</td>
<td>48%</td>
</tr>
<tr>
<td>Small groups</td>
<td>19%</td>
<td>48%</td>
<td>32%</td>
</tr>
<tr>
<td>Video clips</td>
<td>6%</td>
<td>35%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Measured through instructor-designed survey
Research on Active Instructional Strategies


Figure 1. Breakdown of Instructor Activity during Class Time

- Posing questions: 26%
- Lecturing: 25%
- Video: 2%
- Moving through the classroom: 4%
- Poll Everywhere: 10%
- Poll Everywhere: 1%
- Answering student question: 20%
- Administration: 7%
- One on one discussions with students: 5%
Figure 2. Breakdown of Student Activity during Class Time
Mini-lectures viewed via Blackboard were used as starting points for class discussions.

Students engaged in a variety of participatory learning activities during class time.

Mini-lectures could be watched if missed class and used to help study for tests.
Instructor-Perceived Benefits of Student-Centered Learning Activities

- Students participated more actively and were more engaged.
- The variety of learning strategies responded to the needs of students' different learning styles.
- Students perceived the learning activities positively impacted their learning as well as were more enjoyable.
On the instructor-designed survey, an overwhelming majority of students rated (80% or higher) review questions/checks for understanding and Jeopardy review games as often positively impacting their learning.

Students chose review questions/checks for understanding and Jeopardy review games as the most helpful.

Students enjoyed Jeopardy review games and videos (58% most often).
Review questions/checks for understanding (most helpful)

- “helped understand better”
- “answered a lot of the questions I had”
- “helped prepare for the test”
- “gave an idea of how questions will be asked on tests”
- “good study guide and encouraged me to write down answers”
- “good overview of material in a section”
- “opportunity to ask questions”

Jeopardy review games (most helpful)

- “gave me opportunity to look back and fully absorb the information”
- “a competitive way to learn is best for me”
- “keeps you involved”

Open-ended comments from students describing learning activities
Jeopardy-style review games (enjoyment preferences)
- “got to test knowledge before the test”
- “made me think and tested how much I really knew”
- “I love games”
- “fun and engaging”
- “helped test what I knew regarding the class”

Poll Everywhere (enjoyment preferences)
- “fun and interactive”
- “entertaining”
- “something different from the normal”

Video clips (enjoyment preferences)
- “related material with visual learning”
- “helped broaden understanding”
“online mini-lectures were a great substitute to additional learning”

“being active in class through learning process”

(Instructor) “makes class interesting” and “interactive and fun”

“engaged the class with meaningful discussions that will be very relevant as we begin our careers very shortly”

“engaged all students”

“like usual class it is very involved and hands on”

“made the class engaging; forced participation which helped me learn”

“keeps audience engaged very well”

“very interactive & was not just a boring lecture with a teacher just going over slides”
Flipping this class facilitated the scaffolding of pairs, small groups, Jeopardy review games, review questions/checks for understanding, Poll Everywhere, minute papers, and video clips, all perceived by students as helpful to their learning and enjoyable.

Relearning How to Teach: Flipped Approach and Student-Centering Learning
Students viewed and listened to lectures prior to class and read readings thus came to class prepared to engage with classmates and the content.

During class, students answered questions individually, in pairs, small groups, as a review, and in response to polls, and viewed real-world examples in video clips.

Relearning How to Learn: Flipped Approach and Student-Centering Learning
Flip a class and facilitate student-centered learning

- Screen recording and video editing software like Camtasia, the free app VoiceThread, and screencast services like TechSmith
- Blackboard Collaborate
- Teaching Learning and Professional Development Center workshops and sessions
- Flipped Learning Network
  http://flippedlearning.org/site/default.aspx?PageID=1
Thanks for attending this session!