Student Usage And Perceptions Of The Value Of Recorded Lectures In A Traditional Face-To-Face (F2F) Class

Thomas L. Davies, University of South Dakota, USA
Vonda K. Cotton, University of South Dakota, USA
Leon Korte, University of South Dakota, USA

Presentation by Tyler W Thomas
Introduction

- F2F classes still have a number of shortcomings, including a lack of flexibility and the inability to accommodate multiple Learning styles as well as different skill levels of students
  - Not all students learn in the same way
  - Students might also struggle with the pace of a lecture-based course where it is necessary to understand difficult content as well as take detailed notes, especially in large classes
Introduction

• In large courses, students often:
  – retain less information,
  – are not as motivated to learn
  – may not develop as extensive higher-order thinking skills as those in smaller, more interactive classes
Technology in the classroom

- Today, technology is more commonplace in classrooms
- Generation X and millennial students often
  - Expect technology in the classroom
  - May be more knowledgeable of technology than the professor
Technology in the classroom

- Acceptance by faculty has remained stagnant and may be declining
- Whether or not the instructor uses it depends on
  - Instructor's attitude
  - Professional characteristics
  - Perception of value
  - Institutional rewards
  - Classroom infrastructure
  - Institutional info technology resources
Technology in the classroom

- According to the American council on education, technology can aid in
  - exploration and integration of information
  - facilitate high-level thinking and engagement
Technology in the classroom

- Some terms: two types of “classes”
  - Face to face
  - Distance
    - Originally mail-order
    - Now “Online”
- Also two other types
  - Mixed Classes
    - Online meetings are used in place of face to face meetings
  - Adjunct Classes
    - Online resources are supplemental components
  - Often the line gets blurry and “hybrid” is used
Distance Online Classes

- “Distance” Online classes are growing
  - Typically asynchronous
  - Students choose when to access material
    - More flexibility
      - Valued by adult leaners
  - Online students value this more than interaction with instructor or classmates
  - Maybe even over their own learning style
  - Can lead to greater motivation to excel
  - Learning can be more active
Distance Online Classes

• Some disadvantages
  – High drop out rates
  – Lack of student accountability
  – Only works for select learning styles

• Performance results mixed
  – Fail to improve student learning over f2f
  – No difference for procedural knowledge or student satisfaction
Hybrid Classes

- Hybrid Classes
  - Combine features of f2f and online
  - Often students can access info, concepts, and procedures outside of class
  - Some students are shy
    • Easier for them to ask questions online
  - Some faculty have reported that hybrid courses help them accomplish learning objectives more than online or f2f classes
  - May help various learning needs of students due to multiple learning opportunities
Hybrid Classes-Challenges

- Hybrid Classes
  - Require students to have some technological ability
  - May cause students to underestimate value of class
  - May cause students to underestimate value of online materials
  - May only access materials that require less time
  - Students should be viewed as individuals, as each may utilize online resources differently
Methodology

• Professor teaching two f2f classes
  - Senior level federal income tax course
  - Mid-Sized Midwest university
  - One course, two classes
    • One on main campus
    • Other on satellite campus
  - Main campus met 3 times per week throughout semester
  - Satellite met once per week for longer
  - Main campus had 43 students
  - Satellite had 25 students
Methodology

- Provided students with 11 hours of recorded lecture as part of course materials
- Professor did not use recordings or slides during class
  - No powerpoint slides....wow, thats old!
- Online material covers most content in course
- Generally two or three recordings for each chapter
- Students expected to come to class prepared
Methodology

- Students offered no points for
  - Completing homework
  - Viewing lectures
  - Class participation
- At end of semester, students offered a survey for bonus points (2 percent of total for course)
  - Could also write a brief memo on a deferred tax topic
  - Nobody did the alternative
  - 88% of main campus students completed the questionnaire
  - All satellite campus students completed the questionnaire
  - 62% female
  - 38% male
  - 59% traditional
  - 41% nontraditional
  - 36% anticipated an A
  - 41% anticipated a B
  - 21% anticipated a C
  - Only 1 student anticipated a grade lower than a C
Results

- 68% of students indicated course was more difficult than other courses they were taking
- 32% indicated somewhat more difficult
- Nobody said less difficult
- 51% said course was more work than others
- 36% said somewhat more work
- 13% said about the same amount of work
## Results-Student Usage

### Main Points
- Many students expecting good grades did not use content but many did.
- More nontraditional students did not use content than traditional.
- Females used online content a little more than males.
- Very few viewed about half of the lectures.
- Also, almost all students who did not use the content said that they “chose to study other material.”

### Table 1. Student Usage of Available Recorded Lectures

<table>
<thead>
<tr>
<th>Panel A: How Many Recorded Lectures Did Students View</th>
<th>None</th>
<th>Approximately 25%</th>
<th>Approximately 50%</th>
<th>Approximately 75%</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td>12</td>
<td>5</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Gender Distribution of Student Viewing Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel C: Student Age Distribution of Student Viewing Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Nontraditional</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>Traditional</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel D: Expected Course Grade Distribution Viewing Report</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>
Results-View Timing

Table 2. Timing of Student Viewings (Multiple responses allowed)

<table>
<thead>
<tr>
<th></th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewed the recordings right before the chapter was covered</td>
<td>22</td>
</tr>
<tr>
<td>Viewed the recordings right before the final exam</td>
<td>22</td>
</tr>
<tr>
<td>Viewed the recording right after the chapter was covered in class</td>
<td>14</td>
</tr>
<tr>
<td>Viewed the recordings after missing a class</td>
<td>14</td>
</tr>
</tbody>
</table>

Main Points:
Mostly used before chapter and right before final exam
Also, of both of these categories, 86% said it was for a general review, only 14% said it was for a specific topic
# Results - Perception

## Table 3. Student Perception of Value of Recorded Lectures

### Panel A: Student Opinions of Value in Understanding Material

<table>
<thead>
<tr>
<th>A Lot of Help</th>
<th>Some Help</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>23</td>
<td>2</td>
</tr>
</tbody>
</table>

### Panel B: Student Opinions of Impact of Recorded Lectures on Their Studying Efficiency

<table>
<thead>
<tr>
<th>Much More Efficient</th>
<th>Somewhat More Efficient</th>
<th>Somewhat Less Efficient</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>28</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

### Panel C: Student Opinions of Impact on Amount of Time Spent Studying for the Final Exam

<table>
<thead>
<tr>
<th>Spent Much More Time</th>
<th>Spent Somewhat More Time</th>
<th>Spent Somewhat Less Time</th>
<th>Spent Much Less Time</th>
<th>Had No Effect on Amount of Time Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>15</td>
<td>15</td>
<td>1</td>
<td>26</td>
</tr>
</tbody>
</table>

### Panel D: Student Perceptions of Impact of Recorded Lectures on Final Exam Performance

<table>
<thead>
<tr>
<th>Would Help A Lot</th>
<th>Would Help Some</th>
<th>Would Not Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>27</td>
<td>2</td>
</tr>
</tbody>
</table>

**Main Points:**

Recordings were perceived as having value
But also note that they were only the 5th most common way of studying for the final
Results-Preparedness

Table 4. Student Usage of Available Recorded Lectures by Level of Preparedness

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Approximately 25%</th>
<th>Approximately 50%</th>
<th>Approximately 75%</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Usually</td>
<td>13</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Seldom</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Main Points:
In general, recordings did not keep most students from coming to class at least somewhat prepared

A lot of students who usually came to class prepared did not use the videos. However, a large quantity of this group did use the videos
Results-Satisfaction

• Students reported that the recordings caused the students to rate both the course and instructor the same or higher than they would have otherwise
  – 41% said they would rate it higher
  – 62% said no impact
  – None said they would rate lower
  – 90% said use of recordings should be continued
Conclusion

- Recordings and slides were made available
  - No requirement to use them
  - Info was supplemental
- Students used as a general review before a chapter was covered and before the final
- In general, a higher percentage of traditional students, and students with better grade point averages used them
- Most students said it helped them learn the material and made studying more efficient
- Availability of material did not cause them to miss more class
Discussion

- Undergraduates may have different mindset than PhD students
  - May not care about material
  - May not care to excel, “D's get degrees”
  - May have responded favorably due to homework being optional and ungraded
- Would results have been different if material was not supplemental?
- If viewing was required?
Discussion

- If you are offered an apple, but are not hungry, and asked whether you like being given the apple, what would your response be?
- What if you were not hungry but told you MUST eat the apple?
- Could this effect have biased the results?
Discussion

• Could the time differences in the two classes (once a week vs 3 times per week) influenced the results?

• If most class time is devoted to answering questions about unassigned homework, how do you motivate students who did not do the homework?

• Instructor time is valuable
  – What if they made a study guide for the final and didn't use recordings? What if they did? What would students say?
  – Which scenario would they like best?
    • All f2f
    • Supplemental recordings, no study guide
    • Supplemental recordings, study guide
  – Would the study guide be liked better, the same, or less than the recordings?

• How many students may have wasted time on the supplemental materials, thinking they directly applied to the final?
  – Remember, a large percentage used them to study for the final