

## Flipped Classroom Evaluation Survey

Zappe, S. E., Leicht, R. M., Messner, J., Litzinger, T., & Lee, H. W. (2009). " Flipping" the classroom to explore active learning in a large undergraduate course. In ASEE Annual Conference and Exposition, Conference Proceedings.

### 35 Items

#### 5 Dimensions

##### *Items:*

##### *Effectiveness of video content:*

1. The iTunesU videos were effective for introducing new concepts
2. The iTunesU videos were effective for showing examples
3. The iTunesU videos were enjoyable to watch .
4. The iTunesU videos were used too often at one time.
5. The resolution of the videos was appropriate for theoretical concepts.
6. The resolution of the videos was appropriate for showing examples.
7. The iTunesU videos should continue to be used to deliver theory based course material.
8. The iTunesU videos should continue to be used to deliver examples and solutions.
9. The iTunesU videos should be used to deliver supplemental course material, such as content from guest speakers.

##### *Preclass delivery - Videos & Reading:*

10. The textbook is a useful reference for class.
11. The iTunesU videos are a useful reference for class.
12. The iTunesU videos were easier to watch than reading the textbook.
13. The textbook serves as a better introduction to the course material than the iTunesU videos.
14. The iTunesU videos serve as a more effective delivery of the material than the textbook.
15. It is quicker to watch a 30 minute video than read a chapter of the textbook.
16. I would rather read the textbook than watch the iTunesU videos.
17. Watching the videos lets me sit back and absorb the material as it is presented.
18. Reading the textbook makes me feel more involved in the material as I learn it.

##### *Online Quizzes:*

19. The online quizzes were beneficial for my understanding of the course material.
20. I would have watched the iTunesU videos if we were not required to take quizzes on the material.
21. I would have read the textbook readings if we were not required to take quizzes on the material.
22. I think there were too many quizzes.

23. I think the quiz content should have focused on the iTunesU video content.
24. I think the quiz content should have focused on the textbook content.
25. I think the quiz content should be split evenly between the textbook and iTunesU video content.

*In class delivery of material:*

26. The recent introductions and reviews of videos at the start of class have helped me transition to the class exercises.
27. The introductions should go into more detail of the video content.
28. The introductions should be briefer and just highlight the key items from the videos.
29. The in class examples are more beneficial than the examples on the iTunesU videos.
30. I understand the in class exercises better when we go through an example at the start of class.
31. I would rather have the class exercises handed in as assignments than take the quizzes online.

*Use of practicum time:*

32. The use of practicum for group projects is a good use of practicum time.
33. The use of practicum for group projects is worth having to watch the iTunesU videos outside of class.
34. Having the instructor and TA available while we work on projects during practicum is helpful to our understanding of how to perform on the project.
35. Having the TA and instructor available is more important at the beginning of the project to help us get started.

Cronbach's  $\alpha = na$

5-Point Likert Scale (Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5))