

## Student Perceptions of the Use of Instructor-Made Videos in Online and Face-to-Face Classes

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### Abstract

The rise in online education, coupled with research suggesting the influence of instructor-learner interaction and frequency of student engagement with course materials on academic outcomes, highlight the need for innovative ways to keep the online learner connected to the course. This article describes results from a study conducted to examine students' perceptions about the use of instructor-made videos that provided explanations of course assignments, syllabus requirements, discussed weekly topics, reviewed for exams, and answered student questions in video format in both a 100% online course and in several face-to-face courses. Student perceptions of this instructional strategy were overwhelmingly positive, with all of the students surveyed expressing satisfaction with this method of instructor-learner interaction. Open-ended answers revealed that students felt more connected to the instructor when able to view instructor-made videos. Descriptive results are provided for both the 100% online course and the face-to-face courses on variables related to frequency of viewing videos, purpose of videos viewed, and perceptions about the videos in regard to their experience with the course. Recommendations are also provided for online instructors interested in employing this teaching technique.

**Keywords:** teacher-learner interaction, distance education, pedagogy, hybrid education, computers and education

### Introduction

Online education is a fast growing segment of higher education in the United States. According to Allen and Seaman (2006), almost 3.2 million students in higher education participated in online courses as part of their undergraduate or graduate careers in the fall of 2005 (17% of all students in higher education), reflecting a consistent increase in the number of online students from year to year. With the increased prevalence of distance education programs, it becomes vital to understand the most effective methods for teaching graduate and undergraduate students online, as well as how to best use technology to enhance face-to-face and hybrid classes. This is especially important for those "non-traditional" students who attend school while continuing to honor other work and family commitments. With many students attending institutions of higher education while continuing to work part or full-time, providing flexibility while keeping the visual aspects of the course alive is vital. Studies examining the effectiveness of different methods for teaching adult learners confirm this, providing findings that technological modes of instruction seem to be preferred by students (e.g., Evans, 2008).

In 2004, Finlay, Desmet, and Evans set out to explore student satisfaction, learning, and participation in a sample of students in both online and face-to-face sections of the same course. Through survey data, focus groups, and individual interviews, these authors found that students seem to learn just as well in online courses as they do in face-to-face courses, a finding supported by other literature (see also Neuhauser, 2002; Reisetter, Lapointe, & Korcuska, 2007). Additionally, the findings suggest the importance of innovative teaching techniques to students' overall satisfaction and learning in online environments. These authors state,

The more innovative instructors are in their teaching, the more they interact with students, allow students a measure of autonomy in the classroom, or create a classroom setting in which students know what they have to do to succeed, the more satisfied students will be, the better they will learn, and the more readily they will participate in class. (p. 175)

While others have examined how students perform in online classes compared with those in face-to-face classes, Braun (2008) explored students' reasons for enrolling in online courses in the first place. Through a survey of 90 students enrolled in online or hybrid courses, Braun found that the most prevalent reasons offered by graduate students in a teacher education program for enrolling in online courses related to financial reasons (81%), flexibility (80%), and the ability to complete course assignments, readings, and other requirements from home (74%). Braun's findings also revealed that 52% of the respondents indicated that they felt they engaged in less interaction with their instructor in an online class versus a face-to-face course (20% indicated much less interaction and 32.2% indicated slightly less interaction). In fact, Braun's results also indicated that when asked what type of course the respondents preferred to take, only 20% indicated a 100% online course as a preference compared with 77.8% who indicated a hybrid course (one that mixes online instruction with traditional classroom elements like face-to-face meetings) would be most preferred. Interestingly, a third of those that indicated increased likelihood to choose to take an online course again, or to recommend one to a friend, reported feeling more or slightly more interaction with their instructor, suggesting that the level of perceived interaction may be influential to the overall satisfaction with the online experience.

Other research also supports the importance of a feeling of community with the instructor and peers. Reisetter, Lapointe, and Korcuska (2007) used a mixed methods approach to examine the learning experiences of online students as opposed to those enrolled in a face-to-face course. Face-to-face respondents in this study identified instructor interaction and interaction with peers as important to their learning outcomes, citing instructor facial expressions and personal interactions as influential. The online learners in Reisetter et al.'s study agreed that interaction with the instructor and peers was important, but cited different types of interactions with the instructor than those reported by face-to-face students, such as instructor feedback on assignments and chat room discussions. The online students in Reisetter et al.'s study acknowledged the limitations of this form of interaction, however.

In regard to peers specifically, Shen, Nuankheio, Huang, Amelung, & Laffey (2008) used social network analysis to investigate students' perceptions of their learning community. These authors found that increased interaction with each other was related to students' perceptions of a sense of community in their online course. Interestingly, other research has found that the number of times students log into the course and visit each page ("hits") are positively associated with better outcomes on course assessments (Ramos & Yudko, 2008), suggesting that instructors should construct their online courses to encourage frequent visits to the course management system. Based on these findings about the importance of interaction in online courses to students' feelings about the course and their academic outcomes, this study seeks to investigate students' perceptions of the use of instructor-made video clips to enhance an online graduate level research methods course taught completely online, as well as the perceptions of students in two undergraduate child development classes and one graduate level theory building class who had video test reviews and assignment explanations available through the course management system as part of their face-to-face coursework. In the 100% online course, the instructor created videos of herself discussing weekly topics, course assignments, the syllabus, offering test reviews, answering video Q & A forum questions, and offering a general introduction to herself and the course using the iMovie application and webcam already installed on her computer. In the face-to-face courses, the instructor-made videos were used to review for exams and to offer explanations of certain course assignments to supplement face-to-face class discussions. These 5-10 minute videos featuring the instructor were uploaded to YouTube and then embedded into the course shells for students to access. Specifically, this study seeks to examine:

1. What are students' perceptions of the use of instructor-made video clips to answer questions and introduce weekly topics in a graduate level research methods course?
2. What are students' perceptions of the use of instructor-made video clips to review for exams and clarify assignments in three undergraduate child development classes and one doctoral level theory building class?

## Methodology

### *Participants*

Participants were students enrolled in three undergraduate and two graduate level courses taught by the principal investigator at a moderately sized public state university in a suburb of a large metropolitan area in the southern United States. Participants were recruited through an email solicitation approved by the university's Institutional Review Board (IRB) and sent out through the course management system (Blackboard) directing them to the URL for the online survey. One hundred and fifteen students were sent this email (33 graduate students; 82 undergraduates), with twelve undergraduate students and fifteen graduate students completing the survey, for a response rate of 23%. While this response rate is low, due to the exploratory nature of the inquiry, analyses were still computed and reported here. All respondents were female, ranging in age from 20 years to 63 years of age ( $m=30$  years). Sixty-seven percent of the respondents identified themselves as white, 11% identified themselves as black or African-American, 7% identified themselves as Hispanic/Latina, 7% identified themselves as Asian, and 7% identified themselves as "Other," stating a mix of white and Hispanic ethnicity. Almost 30% of the respondents were not currently employed for pay at the time of the study, 37% were employed part-time (less than 30 hours per week), and 33% were employed full-time (30 or more hours per week). Nine (9) of the students were enrolled in a 100% online graduate level research methods class that used instructor-made videos for introductions to the course, the syllabus, individual assignments required for the course, video Q & A sessions, and weekly course topics. The remaining 18 were enrolled in a face-to-face class that used instructor-made videos for test reviews and assignment overviews.

### *Measures*

A questionnaire developed by the author was used to gain demographic information about each respondent, as well as their level of agreement on a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree) with statements related to the use of instructor-made videos in the class in which they were enrolled. Sample questions include, "The instructor-made videos made the class feel more interactive" and "The instructor-made videos enriched course materials." Respondents also answered questions related to whether they viewed the videos, how often they viewed them, and the purpose of the videos that they watched. Finally, respondents answered open-ended questions related to the things that they liked best and least about the instructor-made videos as well as content they wished the instructor-made videos had included more of.

## Results

### *Viewing Frequency*

*100% online students.* When asked if they watched the instructor-made videos, 100% of the respondents in the 100% online course indicated that they had viewed the instructor made videos provided in their class, with 67% of the respondents indicating that they had watched the videos more than once. One hundred percent (100%) of the online students indicated that they watched the instructor-made videos every time a new one was posted. Seventy-eight percent (78%) indicated that they watched each video 1 to 3 times.

*Face-to-face students.* When asked if they watched the instructor-made videos, 100% of the respondents in the face to face courses indicated that they had viewed the instructor made videos provided in their class, with 94% of the respondents indicating that they had watched the videos every time a new one was posted. Seventy-eight percent (78%) of the face-to-face respondents indicated that they watched the instructor-made videos more than once, with 78% indicating that they watched each video 1 to 3 times. Six percent (6%) indicated watching the videos 4-6 times. Please see Table 1 for a detailed breakdown of viewing frequency for the online and face-to-face students.

### *Purpose of Videos Viewed*

*100% online students.* When asked to give information on the purpose of the instructor-made videos viewed, 44.4% of the respondents indicated that they viewed these videos to review for exams, 100% indicated that they viewed videos offering topic introductions, 100% indicated that they viewed video Q &

A's (Question and Answer), 55.6% indicated that they viewed videos offering syllabus explanations, and 100% of respondents indicated that they viewed the videos for explanations of course requirements.

*Face-to-face students.* When asked to give information on the purpose of the instructor-made videos viewed, 83.3% of the respondents indicated that they viewed these videos to review for exams, and 16.7% of respondents indicated that they viewed the videos for explanations of course requirements. One face-to-face student also indicated viewing the videos for Video Q & A, which was not offered in those courses. This student may have confused a video Q & A for an explanation of course assignments, but it is not possible to know for sure. This finding should be interpreted with caution. Please see Table 1 for a detailed breakdown of these viewing purposes by students in online and face-to-face courses.

Table 1. *Frequencies of Viewing Frequency and Purpose of Instructor-Made Videos for Online and Face-to-Face Students (n = 27)*

Viewing Frequency and Purpose of Instructor Made Videos	Online <i>n</i> = 9	Face-to-Face <i>n</i> = 18 (3 grad, 15 undergrad)
Did you watch the instructor made videos?	100%	100%
Did you watch the videos whenever a new one was posted?	100%	94.4%
Did you watch the videos only when you had a question about an assignment?	0%	5.6%
Did you watch the instructor made videos more than once?	66.7%	77.8%
If you watched the videos more than once, did you watch the instructor made videos 1-3 times?	77.8%	77.8%
If you watched the videos more than once, did you watch the instructor made videos 4-6 times?	0%	5.6%
Purpose: Review for exams	44.4%	83.3%
Purpose: Topic Introductions*	100%	0%*
Purpose: Video Q & A*	100%	5.6%*
Purpose: Syllabus Explanation*	55.6%	0%
Purpose: Explanation of Course Assignments	100%	16.7%

\* Only offered in 100% online, graduate course

#### *Attitudes about Instructor-Made Videos*

*100% online students.* When asked how they felt about the instructor-made videos, 100% of the students surveyed indicated some level of agreement with the statement, "The instructor-made videos helped me understand the material better." (Please see Table 2 for range and means of scores for entire sample and Table 3 for a detailed breakdown of frequency responses for online and face-to-face students). When asked about their level of agreement with the statement, "The instructor-made videos made me feel like I knew the instructor better" 100% indicated some level of agreement. Seventy-eight percent (77.8%) of students surveyed indicated some level of agreement with the statement, "The instructor-made videos helped me do better on the assignments/exams." and when asked if they felt the videos made the class more interactive, 100% indicated some level of agreement with that statement. One hundred percent of the respondents indicated some level of agreement with the statement, "I think I learned better because I could view the instructor-made videos" and 88.8% felt that the videos enriched course materials. Finally, while only 22.2% indicated agreement that they preferred learning through the instructor-made videos more than through an in-class lecture, 44.4% of the respondents indicated agreement with the desire for the instructor to use more instructor-made videos in the class. None of the respondents felt that the instructor-made videos were too long, nor did any of the online respondents agree with the statement that the instructor-made videos were a waste of time.

Table 2. *Ratings on Attitudes about Instructor-Made Videos for Entire Sample (n=27) and By Class Format*

Item	N	Min	Max	Mean	Std. Dev.
The instructor-made videos helped me understand the material better	27	4	4	4.6	.50
Online	9	4	5	4.8	.44
Face-to-Face	18	4	5	4.5	.51
The instructor-made videos were a waste of time.	27	1	2	1.2	.40
Online	9	1	2	1.2	.44
Face-to-Face	18	1	2	1.2	.38
The instructor-made videos made me feel like I knew the instructor better.	26	3	5	4.5	.71
Online	9	4	5	4.7	.50
Face-to-Face	17	3	5	4.4	.79
The instructor-made videos helped me do better on assignments/exams	27	2	5	4.3	.76
Online	9	2	5	4.0	.87
Face-to-Face	18	3	5	4.4	.70
The instructor-made videos made the class feel more interactive	27	2	5	4.2	.89
Online	9	4	5	4.8	.44
Face-to-Face	18	2	5	3.9	.94
I think I learned better because I could view the instructor-made videos	27	2	5	4.2	.92
Online	9	4	5	4.7	.50
Face-to-Face	18	2	5	3.9	.94
The instructor-made videos were too long	27	1	3	1.7	.68
Online	9	1	2	1.3	.50
Face-to-Face	18	1	3	1.8	.71
The instructor-made videos enriched the course materials	27	2	5	4.0	.98
Online	9	2	5	4.2	.97
Face-to-Face	18	2	5	3.9	1.0
I prefer learning through the instructor-made videos more than through an in-class lecture	27	1	5	2.7	1.1
Online	9	1	4	2.8	.97
Face-to-Face	18	1	5	2.7	1.2
I wish the instructor had used more instructor-made videos	27	2	5	3.6	.84
Online	9	2	5	3.4	.88
Face-to-Face	18	2	5	3.7	.83

Scale: 1=Strongly Disagree, 2=Disagree, 3=No Opinion, 4=Agree, 5=Strongly Agree

Table 3. *Frequencies of Ratings on Attitudes about Instructor-Made Videos for Online and Face-to-Face Students (n = 27)*

Attitudes about Instructor Made Videos	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
The instructor-made videos helped me understand the material better					
Online	0%	0%	0%	22.2%	77.8%
Face-to-Face	0%	0%	0%	50.0%	50.0%
The instructor-made videos were a waste of time.					
Online	77.8%	22.2%	0%	0%	0%
Face-to-Face	83.3%	16.7%	0%	0%	0%
The instructor-made videos made me feel like I knew the instructor better.*					
Online	0%	0%	0%	33.3%	66.7%
Face-to-Face	0%	0%	16.7%	27.8%	50.0%
The instructor-made videos helped me do better on assignments/exams					
Online	0%	11.1%	0%	66.7%	22.2%
Face-to-Face	0%	0%	11.1%	38.9%	50.0%
The instructor-made videos made the class feel more interactive					
Online	0%	0%	0%	22.2%	77.8%
Face-to-Face	0%	11.1%	11.1%	50.0%	27.8%
I think I learned better because I could view the instructor-made videos					
Online	0%	0%	0%	33.3%	66.7%
Face-to-Face	0%	11.1%	16.7%	38.9%	33.3%
The instructor-made videos were too long					
Online	66.7%	33.3%	0%	0%	0%
Face-to-Face	33.3%	50.0%	16.7%	0%	0%
The instructor-made videos enriched the course materials					
Online	0%	11.1%	0%	44.4%	44.4%
Face-to-Face	0%	11.1%	16.7%	38.9%	33.3%
I prefer learning through the instructor-made videos more than through an in-class lecture					
Online					
Face-to-Face	11.1% 5.6%	22.2% 55.6%	44.4% 22.2%	22.2% 16.7%	0% 0%
I wish the instructor had used more instructor-made videos					
Online	0%	11.1%	44.4%	33.3%	11.1%
Face-to-Face	0%	5.6%	33.3%	44.4%	16.7%

\*missing data for one person (5.6%)

*Face-to-face students.* When asked how they felt about the instructor-made videos, 100% of the students surveyed indicated some level of agreement with the statement, "The instructor-made videos helped me understand the material better." When asked about their level of agreement with the statement, "The

instructor-made videos made me feel like I knew the instructor better” 77.8% indicated some level of agreement. Eighty-nine percent (88.9%) of students surveyed indicated some level of agreement with the statement, “The instructor-made videos helped me do better on the assignments/exams.” and when asked if they felt the videos made the class more interactive, 77.8% indicated some level of agreement with that statement. Seventy-two (72.2%) percent of the respondents indicated some level of agreement with the statement, “I think I learned better because I could view the instructor-made videos” and 72.2% felt that the videos enriched course materials. Finally, while only 16.7% indicated agreement that they preferred learning through the instructor-made videos more than through an in-class lecture, 61.1% of the respondents indicated agreement with the desire for the instructor to use more instructor-made videos in the class. None of the respondents felt that the instructor-made videos were too long, nor did any of the face-to-face respondents agree with the statement that the instructor-made videos were a waste of time.

*Open ended responses from both class formats.* When asked open-ended questions about their attitudes about the instructor-made videos, comments were overwhelmingly positive. Students responded to the open-ended question regarding which types of videos they felt were most helpful with comments like, “Review for exams. I could watch multiple times and make sure I wasn’t missing any information,” and “All of them! I looked forward to getting insight on the weekly topic and especially in the detail of the assignments.” Another student comment stated, “Topic introductions, explanation of course components, and review for exams because watching the videos gives us more insight into what the instructor expects and allows us to see/hear more in depth explanations and examples than what is available in print.”

In regard to the video test reviews used in the undergraduate classes specifically, student comments included statements like, “I really enjoyed the online videos. In my class we used them for the review for the test. I thought it helped out a lot and I noticed that I did better on the test,” and “The test reviews were a great tool to focus my studying. It was great to have the review on video at home so that we could have more time in class to cover and apply the material.” Other comments included, “It was a great study guide and much clearer than a written review,” and “I did a better job on the tests.”

In the 100% online graduate level research methods class, comments about the explanations of the syllabus, course assignments, weekly topics, and course components included, “It absolutely enhances the learning process and gives greater depth to the expectations of the course materials,” and “The videos truly helped me to understand the difficult subject matter.” Other comments from 100% online students included, “I felt like she was focusing on me,” and “Putting a face and voice definitely adds a human component,” and “I am spoiled now! I think all online classes should have instructor-made videos.” Students seemed to feel that the videos provided a more human element to their online instruction as evidenced by statements like, “I felt like I got to at least know who my professor was and a small window into their personality,” and “I felt like I was in a face to face class lecture”, and “As a student I was more willing to ask questions when I had a feeling that I ‘knew’ the instructor through the video.”

When commenting on what they liked best about the instructor-made videos, students made comments such as, “I could watch over and over again to fully comprehend the material,” “They made me feel like the instructor cared about me. She took extra time out of her schedule to ensure that we got the information necessary to complete the assignment,” “How personable it was. I felt like she was literally right in front of me and if possible I could ask questions,” and “The interactive element... seeing the instructor made me feel involved.” Other comments included, “Feeling as if there was a connection with the instructor and the class,” and “I really felt Dr. Rose cared about what her students were learning...she actually took the time to make weekly videos. Not only that, but she was willing to create additional videos as needed. Although I did not watch all the videos multiple times, there were some videos that I watched again...I liked that I could take notes, pause, and rewind videos. You can’t do that in a face-to-face lecture.”

When given the opportunity to make additional comments about the instructor-made videos in general, students made statements such as, “I was very pleased to see these videos in this course, the first online class I have taken that used them. I would like to see all of my professors, at least in an introduction video. I felt more comfortable e-mailing or writing on the DB [discussion board] when I thought my professor was open to more interaction. Some courses lack the element of interaction and they are not only boring, I don’t think I learn as much,” and “For the distance learner who might not have the chance to visit the TWU campus, instructor-made videos not only help introduce course materials but add the personal and interactive component. Just as students introduce and tell a bit about themselves to each other and the instructor, the videos, for me help make the instructor more approachable. Keep it up.”

## Discussion

The results of this study suggest that personalizing the course delivery of both online and face-to-face classes in the course management system is viewed positively by students. An overwhelming majority of the students surveyed for this study indicated positive attitudes about the use of instructor-made videos in college-level classes. These findings suggest that the use of instructor-made videos in both online and face-to-face classes may be beneficial, but especially so in 100% online classes. While a majority of students surveyed disagreed with the statement that they prefer learning through video over traditional, face-to-face classes concurring with Braun's (2008) findings, for those enrolled in 100% online courses the face-to-face element of an instructor-made video seems to enhance the student experience and lead them to feel more connected to the instructor. These findings are especially important in light of Braun's (2008) and Reisetter, Lapointe, and Korcuska's (2007) findings regarding students' feelings about the importance of instructor-student interaction.

These students also reported feeling as if they learned better with this modification. Since the study reported here focused solely on student perceptions of this technological tool for enhancement of course delivery, it is beyond the scope of this study to report actual differences in learning outcomes between students with access to instructor-made videos and those without. Therefore, it would be fruitful as an avenue for future research to examine if any differences in actual (not just perceived) learning outcomes emerge between students with access to instructor-made videos as a course enhancement and those without this addition.

Another avenue for future research opens in regard to the influence of instructor-made videos on class participation in 100% online courses. Having a new video posted weekly may have encouraged more frequent visits to the course shell, a phenomenon found by Ramos and Yudko (2008) to be predictive of better outcomes on course assessments. This warrants further investigation to determine if more frequent "hits" are related to regular and consistent use of instructor-made videos in 100% online courses.

While this study was limited in its small sample size, volunteer sample, and low response rate, its findings may be informative for instructors in online courses. Through use of technology already available on the instructor's laptop computer, the instructor was able to add an element of human interaction to a 100% online course, as well as enrich the face-to-face courses she instructed. A laptop with a webcam, movie making software, and an internet connection were all that was needed to facilitate this innovative addition to traditional course delivery (please see Appendix A for recommendations for online educators); an effort which resulted in increased perceptions of interactivity in both types of courses.

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### Appendix A

Recommendations for faculty and instructors interested in incorporating instructor-made videos into their own online or face-to-face courses.

- Check your computer or laptop for an already installed webcam. If you have one, odds are that the computer also contains the software necessary to create movies using the webcam. Mac users can look for iMovie and Windows users can look for Windows Movie Maker to see if they have the software necessary for creating movies on their computer.
  - If you don't already have a webcam installed, check with local merchants regarding the cost and feasibility of installing an external webcam to your current system.
  - Once your webcam is operational, familiarize yourself with the movie making software available on your system. Mac users will typically find the iMovie movie making software installed on their system as part of the operating system package. Windows users will typically find Windows Movie Maker installed on their computer as part of the operating system package. Both of these packages allow for video creation, editing, background music, and other "bells and whistles" to be used in creating the final product. This author used iMovie to create and edit the videos for these courses.
  - Experiment with your webcam and movie making software until you get a finished product that you are happy with. Certain software programs will allow you to create a video that can be uploaded directly to your course management system as a file. If that is not possible due to file sizes or other limitations, you can use online video sharing websites such as YouTube or TeacherTube to upload your videos and embed in your course shells.
  - Consider adding captioning or text transcripts of the videos to allow maximization of their usefulness by students with varying abilities in the online environment (auditory impairments, visual learners, etc.).
  - Avoid using time specific terminology, stories, or information (like dates, etc.) if you would like to re-use the videos from semester to semester. Making them versatile in this manner allows the instructor to use the videos he or she creates over and over again, maximizing the benefit of the time the instructor invested in their creation.
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