



THE VALUE OF STUDENT CREATED VIDEOS IN THE COLLEGE CLASSROOM – AN EXPLORATORY STUDY IN MARKETING AND ACCOUNTING

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This paper investigates the perceived value of college student created videos as a tool for enhancing the student learning experience. Two different business courses are examined: one of the courses is an undergraduate accounting course and the other is an undergraduate marketing course, both in a school of business in a comprehensive state university in the northeast. In the marketing course, students are required to create videos as part of their grade assessment; in the accounting class, creating videos is an optional extra credit assignment. Qualitative research was conducted by asking students to write brief responses describing their experience with creating videos. Descriptive statistics were gathered in an effort to assess student satisfaction and appreciation for the video creation experience. The results of the research suggest that students appreciate the video experience; they find it relevant and entertaining. They also report that it helps reinforce concepts they have been exposed to in class.

Keywords: Student created videos, Student generated videos, Active learning.

Introduction

The research literature is ample regarding the value of incorporating digital videos in the classroom. For the most part, academics discuss the use of professionally made videos as supplements to lectures, providing students with realistic situations, images and discussion from industry practitioners, adding an experiential flavor to the classroom instruction. There are also examples in the research literature of instructors creating digital material to supplement class content through podcasts, vodcasts and short digital videos. Much less discussed is the use of college student, created videos as an active learning assignment. This paper assists in mitigating this deficiency by investigating the use of college student, created videos in the classroom, and by evaluating the relevancy and student perceived satisfaction of the activity.

Some class assignments are expected to produce a higher level of mastery of particular subject content. In-class presentations are one such assignment. Student created videos require even more preparation than a typical in-class presentation. Not only is it necessary for the student to synthesize various sources on the subject content, the student must also write it down as a script, read it, recite it and then create a video, sometimes requiring multiple “takes” and subsequent editing. Each of these steps repeatedly exposes and reinforces the subject content for the students.

From a social media perspective, student created videos place students on display, and as such, one would expect that the student would make a greater effort to master the subject content so as to avoid

embarrassing themselves and looking foolish in front of their peers and anyone else with the ability to view the video using social media such as YouTube. Whatever the reason, one would expect that the process of creating course content videos will produce a richer understanding of the subject matter for students. A second and important consequence to be expected of student created video is that while students are actively engaged in the activity, they are actively learning, as compared to passively sitting in a traditional lecture, and will, thus, enjoy the project, providing a greater degree of satisfaction with the course, subject content, the professor, and fellow students.

Hofer and Swan (2005) note that research literature on the subject of student created videos is limited and should be explored at a college level. There are, however, examples of the potential benefit in the education research literature and internationally. Ryan (2002) describes a high level of student motivation, Hoffenberg and Handler (2001) comment on motivation and student enjoyment, Kearney and Schuck (2003) describe how videos support authentic learning, Schuck and Kearney (2004) add that videos encourage student engagement and New (2006) and Parker (2002) report how videos support student creativity. Burn *et al.* (2001) explain how student videos accommodate students with different learning styles and abilities.

Most of the findings regarding the benefits of student created videos are the opinions of educators and students primarily at the secondary or elementary school level while not tested and measured at the college level (Hofer & Swan, 2005). Also, although we have found research papers pertinent to arts and sciences curriculum, we have not found research on this subject specific to college level business courses. This paper contributes to the research literature by investigating two subject areas in the undergraduate business curriculum, it compares student projects that are both required and voluntary and it analyzes data from a survey designed to test student evaluations.

In this paper we discuss how student created videos fit with educational theory. Additionally, we describe two video projects used in two different business school courses, we present qualitative assessments of the projects and quantitative descriptions and we conclude with recommendations for utilizing student videos as a pedagogical technique.

Literature Review

Changes in technology are rapidly changing our culture. Unfortunately, pedagogy in the American classroom is not keeping pace and neither secondary school teachers nor college instructors are keeping up-to-date with technology in the classroom and the consequences it has on learning. Whereas mature citizens, including college instructors, might complain about and struggle with the need to rapidly adapt to new technologies and massive information, students today seem to adapt and thrive in this rapidly moving, multi-media, multi-sensory stimulated world (Frاند, 2000; Pew, 2002; Tapscott, 1998). Students of the twenty-first century, termed Millennials and Generation Y's, are frequently described as multi-taskers, having short attention spans for any one project, comfortable switching from one project to another, and expecting and enjoying constant digital stimulation and gratification (Hofer & Swan, 2005). These students are expecting a different learning experience from what has traditionally been applied in the American classroom for the past 100 years. Whereas prior generations of students were content with taking notes as the instructor lectured on subject matter, the expectations of students today are for a more active and engaging experience, an experience that utilizes their unique learning skills and styles.

Resnick (2007) of Massachusetts Institute of Technology's Media Laboratory (MIT Media Lab) describes our society as rapidly transforming into a creative society, one in which the skilled and expert workers of the past century are replaced by creative workers adept at problem solving. Additionally, today's workers must be proficient at adaptation and improvisation. In direct response to this situation, the MIT Media Lab developed a small programmable device called a "cricket" which allows users to creatively integrate a variety of forms of digital media seamlessly. While the "cricket" was developed to help people develop creative mindsets, its very existence demonstrates the need for people, more

specifically students, to be creative thinkers and proficient in creating digital media. College instructors need to be mindful of this change.

New pedagogy should be developed from the integration of educational theory, current technology, and an understanding of the aptitudes and interests of the learner. Skiba (2007) supports the value of utilizing student created videos and developing pedagogy surrounding the digital expertise of twenty-first century students. Referring to these students as ‘digital natives’, Skiba explains that these students have grown up in a multi-media world and are the “Net Generation” suggesting that universities transform into ‘YouNeTversities’, implying that university classrooms utilize YouTube like social media. Students are comfortable digitally interacting through social media such as Facebook, Twitter, LinkedIn etc. which involves sharing photos, video, music, and text. Making classroom subject content appropriate to students’ communication styles would require instructors to communicate with a similar set of tools. Many educators have supported the notion that asking students to create their own content, in any form, is a valuable learning experience.

Requiring students to create video projects to explore subject content plays to their expertise, familiarity, and interests. Furthermore, the current generation of students has grown up in a video game and YouTube environment and are expecting more than lectures and Power Point slides in their educational experience. Imagine a university that integrates idea creation and idea sharing of YouTube into a digital format. Whether the academic world embraces this format or not is yet to be seen, but society is shifting into this world as a form of communication and information gathering. Google is more than a company; goggle became a verb in the Merriam-Webster Dictionary in 2006 meaning information retrieval. YouTube is more than a form of amateur video entertainment; it is a form of creative expression.

Two specific education initiatives that capitalize on digital media are the Khan Academy and EdX. The Khan Academy was founded in 2006 on the concept of instruction through short video and EdX is a new collaboration between MIT and Harvard University to offer open-source, online instruction. In both cases, the institutes use digital media exclusively to provide education for free to the internet universe.

The internet universe, however, is different from the “Net society,” an online community and forum for communication, expression and discussion. In order to be a member of the “Net society” it is essential for “netizens” (citizens of the Net) to develop digital communication skills. There is a necessary learning curve, however, the net result, is a learning experience that is more engaging and entertaining.

Recent developments in the education literature suggest that students benefit from a constructivist approach in which students construct their own understanding of concepts and information (Jonassen, 1991). On the other hand, rapid changes in technology cause some educators to immerse themselves in the new technology and look for opportunities to implement the technology in the classroom. As Hofer and Swan (2005) point out, this is like a “hammer in search of a nail,” a seemingly inefficient strategy for creating new pedagogy. Gehringer and Miller (2009), recognize that active learning exercises need not be created solely by the instructor and that students may benefit in multiple ways by giving them an opportunity to construct their own activities to master subject content. In the classroom experiments, the instructors witnessed several student groups utilizing digital media to create learning activities, specifically videos to explain complex subject content. Gehringer and Miller (2009) investigated whether students were more engaged with activities that the students helped create and they were able to demonstrate that student engagement clearly increased with student created learning activities.

Fredenberg (2008) and Armstrong *et al.* (2009) both reported favorable results using student created podcast technology in classrooms. The term “podcast” is a portmanteau of iPod and broadcast and a vodcast is a portmanteau of video podcast. Fredenberg (2008) noted the value of student created vodcasts which were shown to be positive and effective. Fredenberg (2008) reported that students were more engaged and felt more confident in their skills and abilities after mastering the technology. Armstrong *et al.* (2009) required student created podcasts in their courses (students could elect audio versus video.) The reflections of students and instructors were very positive. Specifically mentioned in the study were ideas such as: student empowerment – students developing capability to create multimedia presentations; students developing a sense of professionalism; students learning new people skills; students enjoying a

nice break from the routine; students having a new and fun experience; and students developing a stronger appreciation for planning and team work. Clearly there is a certain “wow” factor in learning activities that integrate new technology, social interaction and course content.

Kearney and Schuck (2004) examined the value of digital video in the grade school curriculum in Australia to enhance learning outcomes. They experienced very positive results with student created digital videos. O’Neille (2010) investigated secondary school, science students in terms of cultivating a sense of ownership and concluded that students take greater ownership as learners when participating in video projects. Using surveys and ethnographic methods, O’Neille (2010) revealed how students cultivate a sense of ownership in an informal science video project. Student ownership of learning plays an important role in how the student engages in the learning environment. In this study, ownership is defined as a complex, multifaceted process that captures the relationships that students build between themselves, as youth and as learners, with the subject they aspire to participate in and with the context in which that participation takes place.

Based on this research of the literature, we created classroom assignments in a regional, comprehensive, northeastern university for school of business students to further investigate the potential value of student created videos.

Our analysis of the literature and our classroom experience suggests students, asked to create videos to explain or experience course subject content, will enjoy the experience, will appreciate the experience and will believe that they benefit from the experience.

Methodology

Two different assessments were made regarding student created videos in the college classroom. In the first case, three advertising classes, in an undergraduate school of business marketing course, at a regional, comprehensive, northeast state university, composed typically of college juniors and seniors, were given an assignment to create a one minute television advertisement. Students worked in groups of two to five members and presented the video advertisements in class on the last day of class in the semester. Students were given two weeks’ notice and they were not given any instruction on the use of video recording and editing technology. On the last day of class, after the videos were presented, students were given a survey asking them about their experience with the video assignment. The survey included an open ended question and eleven Likert scaled questions (rating questions 1-7, 1 strongly disagree – 7 strongly agree.) Seventy-three students completed the Likert closed ended questions.

In the second case, students in an accounting class in the same undergraduate school of business, composed mostly of sophomores and juniors, were provided an opportunity to earn optional extra credit points (up to five extra credit points out of five-hundred) if they created a two to three minute educational video for presentation to the class to educate their viewers on a chosen accounting topic. Students were allowed to work in groups of three to five members and chose an accounting topic as the focus of their video presentation. The concepts were chosen from a list of concepts predetermined by the instructor to be problematic for student comprehension in previous years. Three groups of students (nine students in total) created the educational videos on a separate topic on a first-come basis from the predetermined list. Like the advertising students, the accounting students were given two weeks’ notice. Students were not given any instructions on the use of video recording and editing technology but were allowed to creatively and autonomously develop their short educational videos and assumed roles independent of the instructor in choosing the technology and delivery format. The videos were shown on the last day of class, during class, to all students, whether they chose to create the videos or not. Each student was then given a survey asking them about their experiences with the optional extra credit assignment either as a viewer or as a creator of the videos. Most students commented on the videos and some did not. The survey was similar to the one administered in the advertising classes with an open-ended question and eleven Likert scaled questions (rating questions 1-7, 1 strongly disagree – 7 strongly agree.) The accounting survey included seven additional questions, two to differentiate those students who created videos from the

students who merely viewed the videos. Thirty three students completed the Likert, closed ended questions in the accounting class and thirteen completed the open –ended question.

Data Analysis Advertising Class - Required Video Assignment

The results of the survey indicated that students enjoyed creating television advertisements; they thought the experience was both important and useful and enjoyed the project. These results were not universal; for many of the questions, the responses were bimodal, some students scored the questions very high and some very low, few in the middle. For the following questions, enjoyed the experience, glad I completed the experience, creating videos was interesting and I would recommend the project for future classes, the mode of the answers was a 7, strongly agree. The question that was rated the lowest, *this project would be help in my career*, 15% of the students rated this as a 1; they did not think the project would be helpful at all. This is surprising because one of the major motivations for the project is that students are more involved with video in their everyday lives and because this technology is more engaging, they should expect that their future careers will utilize video technology in some manner.

Descriptive Statistics for the Advertising Class

For the surveys that were negative, the responders provided little criticism. The negative comments typically centered on not having appropriate equipment, enough experience with editing software nor enough time. Typically, some students indicated frustration and anxiety when these conditions existed.

Table 1. The open ended question revealed some other positive aspects of the experience.

<i>Descriptive Statistics for Advertising Classes</i>	Mean of All Responses
Survey Questions	N = 73
Creating videos in class is an <i>Important Exercise</i>	4.59
Creating videos in class is an <i>Enjoyable Experience</i>	5.01
Creating videos is a <i>Useful Experience</i>	4.67
Creating videos is an <i>Interesting Experience</i>	5.08
I am <i>Glad</i> I created a video	4.79
The video project was the <i>Most Useful</i> project in class	4.15
I would rather do a <i>Different Project</i> than the video project	4.33
Participating in the video project will <i>Help My Career</i>	3.84
Creating videos <i>Enhances Learning Content</i>	4.75
Creating videos will <i>Enhance Learning in Future classes</i>	4.52
I would <i>Recommend This Project</i> for future classes	4.71

Of the open ended questions, thirty-two were completely positive, twenty-eight were left unanswered and twelve were mixed, containing both positive and negative thoughts. The negative responses focused on lack of time and lack of technology skill and inability to coordinate schedules with group members. It should be noted that prior experience with any outside student project, especially at a college that is heavily commuter rather than residential, where 90% of the students are working at least ten hours a week, will typically yield the same comments. A few students also commented on the project not being relevant to their education and fail to see how this project would serve any useful purpose in their future career.

On the positive side, the following comments were provided: These comments were constructed before the students reviewed each other's work.

- *It was a fun and a good experience*
- *I like the idea but many of us lacked the equipment*
- *I found the project to be enjoyable and educational*
- *The video project was definitely a great learning experience*
- *The video project was fun and enabled us to be creative*
- *It let us experience what it is like to work on an ad*
- *It allowed us to put what we learned in class on a real project and experience a real project*
- *It helped us learn how much actually goes into creating an ad*
- *I really enjoyed it, it was fun to do and gave me an opportunity to be creative*
- *It was great. It helped me learn a lot about how to build a real commercial from a storyboard*
- *It was definitely useful to at least see how the process works...*
- *It was a fun way to spend class*
- *It was extremely funny*
- *It was a nice change of pace (creating an ad in class,) it was also very funny too. Gave me a good idea of what was expected on my own TV ad.*
- *I had a great group.*
- *Proactive approach to learning. Very relevant and kind of fun. Puts you at ease with classmates.*
- *I really enjoyed the project....it was pretty fun and really shows what goes into making a TV commercial.*
- *I enjoyed my experience*
- *I enjoyed making a video. I loved working with my best friends.*
- *Creating the storyboard is enough....though it is fun to watch in class*
- *I enjoyed creating our project, because it is more than memorizing terms, it's using creativity*
- *I really enjoyed making the video with my group, it was a fun experience. It really gives you an idea of what really goes into making a commercial and how hard it really is, and how important it is to have a concept that is going to reach your target audience and resonate with them.*
- *I thought it was fun and gave the students a chance to be creative*
- *I liked doing it, it was fun and entertaining.*
- *It was relevant and enjoyable*

The positive comments support the notions that students appreciate: having an opportunity to exercise personal creativity; having educational activities that are: experiential, active, and entertaining; having an opportunity to engage in social learning and having an opportunity to gain familiarity and comfort with classmates. Although not mentioned directly, all students had an opportunity to develop some level of video technology expertise which is expected to increase in relevance as they go forward in their education and their work experience.

Accounting Class – Optional Extra Credit Point Video Assignment

The results of the survey were divided between those respondents who created videos and those respondents who merely viewed the videos. The results indicated that students who created the educational videos overwhelmingly rated the video creation assignment more positively on 94% of the questions. The only question that student video creators agreed with student video viewers was "I would rather do a Different Project than the video project." For this question, each group rated it 4.2.

The survey indicated that the students enjoyed creating short educational videos on accounting topics and would recommend the assignment for future classes; both student video creators and viewers agreed with these descriptors.

The student video creators strongly agreed that the assignment was important, enjoyable, useful, interesting and they were glad they created the video assignment; the mode for these questions was a 7, strongly agree. The mode for student video creators was also a 7, strongly agree, for the following descriptors: would recommend the project for future classes, video assignments can aid learning, the assignment enhanced my learning and video technology can aid learning. The question receiving the strongest agreement among all video creators was “creating videos in this class is an interesting experience” which received a mean rating of 6.9.

Two questions received multimodal responses. The question “the video project was the most useful project in this class” received the lowest rating among the student video creators, 4.7, however, 33% of the respondents rating it 7, strongly agree. The question “I would rather do a different project than the video project” received a rating of 4.2 with 11% of respondents rating it 1, strongly disagree, while 33% of respondents rated it 7, strongly agree. It was surprising that this descriptor received a neutral response of 4.2 as current students have been more involved with technology and communicating digitally throughout their adult lives.

Table 2.

<i>Descriptive Statistics for Accounting Class</i>			
Survey Questions	Mean of All Responses N = 33	Mean of the Video Creators N = 9	Mean of the Video Viewers N=19
Creating videos in class is an <i>Important Exercise</i>	4.68	5.78	4.37
Creating videos in class is an <i>Enjoyable Experience</i>	5.14	6.44	5.00
Creating videos is a <i>Useful Experience</i>	5.15	6.33	4.95
Creating videos is an <i>Interesting Experience</i>	5.39	6.88	5.21
I am <i>Glad</i> I created a video	3.38	6.56	1.74
The video project was the <i>Most Useful</i> project in class	2.89	4.67	1.95
I would rather do a <i>Different Project</i> than the video project	4.21	4.22	4.21
Participating in the video project will <i>Help My Career</i>	3.79	5.00	3.16
Creating videos <i>Enhances Learning Content</i>	5.01	5.67	4.89
Creating videos will <i>Enhance Learning in Future classes</i>	4.92	5.33	4.89
I would <i>Recommend This Project</i> for future classes	5.05	5.67	5.21
Additional Survey Questions For Accounting Students			
I completed the video assignment	3.08	7.00	1.00
I viewed the video assignment	6.21	7.00	6.56
The video assignment was <i>Interesting</i>	5.45	6.00	5.53
Student generated <i>Videos Can Aid Learning</i>	5.68	6.33	5.89
This video assignment <i>Enhanced My Learning</i>	5.02	6.00	4.95
Video <i>Technology Can Aid Learning</i>	5.98	7.00	6.00
This was a <i>Positive Learning Experience</i>	5.33	5.89	5.42

Descriptive Statistics for Accounting Class

Students rate each question 1-7, 1 strongly disagree – 7 strongly agree. Thirty-three surveys were completed. Five survey respondents indicated they did not view the videos.

An open ended question was included in the video creation survey. It requested respondents to describe their feelings about the video project experience (relevance, educational value, difficulty, enjoyment, etc.) Answers to the open ended question revealed additional positive and few negative aspects of the video experience.

The students who created the videos provided little criticism. The video creators negative comments focused on the time involved with the technicalities of making a video, using comedy in a video at the expense of an educational benefit, and lack of knowledge on the topic. It was surprising that a respondent commented on lack of knowledge on the topic as this was the goal of the assignment, to learn the topic after it was already reviewed in class. For the students who merely viewed the videos and were not involved with creating the videos, the only suggestion was that this was not their preferred learning style. No other criticisms were provided among all viewers.

Positive comments provided in the open ended question echoed the descriptive statistics and provided additional evaluative feedback. Respondents who created videos thought the video creation was creative, unique and educational. They indicated that videos helped in their learning and that videos were a more enjoyable way of learning material. Respondents who merely viewed the videos provided useful comments as well. They indicated that the videos were extremely helpful, put a fun twist on learning experiences, were a very good way to review material while helping others to understand the material, interesting to see the material learned in a video format, were a good learning experience, and a simple way to remember/learn the material.

The following comments were constructed after the students reviewed each other's work. For those students who created the videos the comments provided on the surveys were:

1. *I though the project was creative, fun, unique and educational. It was more time consuming to actually work out the technicalities of making a video.*
2. *To me, making this video was not usually what I might do normally to learn new or hard to understand material. As a student I would not necessarily understand the new material as opposed to someone much more knowledgeable in the material. I would have gotten more out of it had I been an upper classman.*
3. *This was a good experience because in enhances a more enjoyable way of learning.*
4. *I believe the Duppey hot dog [video] although funny didn't really teach me much. The bad debt expense video helped a lot.*

For the students who viewed the videos but were not part of the video creation, the comments provided on the surveys were:

1. *Very helpful – puts fun twist on classes learning experience which makes the information easier to retain.*
2. *The video projects seemed enjoyable, entertaining and educational.*
3. *I think this is a very good way for students to earn extra credit while reviewing the material and helping others understand it as well.*
4. *I wish I was able to do it then I could have gotten extra credit and learned about a specific topic.*
5. *It was interesting to see the information that we have been learning in a video format. It was entertaining to watch & learn because of people's sense of humor in the videos.*
6. *I did not partake in making a video but I did enjoy watching them and think it is helpful and fun.*
7. *The videos shown in class were extremely helpful. They were able to determine when to record a bad debt expense and where to record it. I also agreed with the definition of the matching principle.*
8. *Video projects can be helpful. Although I did not complete the extra credit I did find it to be a good learning experience to view the videos.*

9. *It was pretty funny but not the best way to learn the material for me personally. It was pretty funny though. It's a simple way to remember/learn the material if that's what works for you.*

Students who created the videos commented anecdotally that the process of determining the specific content and the creation of the video itself, created a learning opportunity outside the classroom.

Similar to the marketing students, the positive comments from the accounting students support the notions that students appreciated the opportunity to be autonomous and to exercise personal creativity and having educational activities that are experiential, active, and entertaining.

The results between accounting and marketing students were consistent. Overall, students perceive value in the video assignment in terms of learning, importance, usefulness and entertainment.

It is interesting to note that the digital video project as an extra credit project was well received. Whether students created or simply watched the videos, they were entertained and felt they learned something.

Conclusions

In this study we demonstrated that in a business course setting, students enjoyed student created, video projects and saw the projects as both entertaining and educational. The bimodal advertising class responses might be explained by a lack of technical “know-how”. Although the instructors expected students to be familiar with video equipment and editing software, this expertise is not as ubiquitous as originally hypothesized. Very little time (advertising classes) or no time (accounting class) was spent in the classroom preparing students for the video creation. Those students who were not comfortable with video equipment and editing software were more likely to feel frustrated and less likely to enjoy the project. This issue will be addressed in future classes by devoting at least one class or portion thereof to video creation and video editing and by requiring students to complete a mini exercise in class in which they will utilize these tools early in the semester.

As noted by Kearney and Shuck (2004) a gap exists in assessing learning outcomes for student created videos and this study does not address that gap. The authors do agree with previous research that there are several positive aspects about student created videos that should be considered in any college classroom. The positive aspects of student created videos are: deeper learning; more engaging learning; more active learning; experiential learning; more personal involvement – students must take ownership of their ability to acquire knowledge; and, a more entertaining and engaging experience. In addition, students have an opportunity to bond with fellow students outside of the classroom in a more meaningful and profound manner. This is extremely beneficial in largely commuter schools and large colleges versus residential and smaller colleges. It would be beneficial also in colleges where students work part-time. Projects can be selected that connect students closer to each other, the university, the community and the world.

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