Integrating Facebook into the College Classroom: Student Perceptions and Recommendations for Faculty

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Abstract

This paper describes how Facebook was integrated into a university course to help students better engage with course material, each other and the instructor. The Groups feature of Facebook allowed students and the instructor to interact and share information with one another on Facebook without having to "friend" each other, allowing each person to maintain privacy over his/her Facebook content. Researchers tracked Facebook activity throughout the semester and conducted a survey with students to better understand their Facebook behavior and perceptions about the use of Facebook as part of the course.

The use of Facebook was optional for students and an alternative for another assignment. Fifty-two of 60 (87%) students chose the Facebook option. Over the course of the semester, students wrote 283 unique posts related to course content, and these generated 840 comments. Findings from the survey showed that many students thought the Facebook Group made a positive impact on their understanding of course concepts, their overall performance and their enjoyment of the course. Moreover, most thought the Facebook Group had a positive impact on their relationship with other students and the professor. Recommendations are provided for faculty interested in using Facebook in the college classroom.

Introduction

As students and technology evolve, educators continuously strive to engage students with course material and improve the educational experience of students in colleges of agriculture. Technology in particular has dramatically impacted the educational experience across North America. In today's college classrooms, educators providing traditional instruction from the front of the room are likely to see the backs of laptops, with the hope that students are engaging with course material. Many educators understand the potential of technology to positively impact classroom learning,

however, many still hesitate to use available technology to enhance pedagogy. A 2007 report on the educational use of technology (Kleiner et al., 2007) concluded that faculty reluctance was a major impediment to integrating technology into course material.

Although technology has influenced many aspects of education over the past 20 years, arguably no technology has had more impact than the Internet. In the early 2000's the term "Web 2.0" was coined to describe the evolution of the Internet from a static repository of information to a dynamic and interactive platform for collaboration using web functions such as wikis, blogs, media sharing and social networking sites. The continuing evolution of the Internet in the days of Web 2.0 offers opportunities for communication and information exchange that would have been unimaginable by most people just 15 years ago. Perhaps more than any other site, Facebook exemplifies this phenomenon. With 1.15 billion active users (Facebook, 2013), Facebook offers an incredibly efficient medium for sharing written, photographic, audio and video information. Moreover, ever since its origin in 2004 as a website exclusively for college students, large numbers of young people have adopted Facebook as their choice of social networking tools. In a large study of over 36,000 college students from the U.S. and Canada, Smith and Caruso (2010) found that just over 90% of college students use online social networking sites, and of these, 97% use Facebook. With tremendous potential for information sharing and such high penetration among college students, some educators have begun exploring whether they can use Facebook to improve the pedagogical objectives of their courses.

Research into the use of social media to enhance education is in its infancy, but studies have begun to appear in the literature and generally show positive potential for the pedagogical use of social media. Studies have investigated topics such as student use of Wikipedia for coursework (Head and Eisenberg, 2010), faculty use of YouTube (Burke et al., 2009), Second

Life (an online virtual world simulation) (Holmberg and Huvila, 2008) and Facebook (Mazman and Usluel, 2010) as teaching tools. These studies all show support for the promising use of these media as pedagogical tools. Other papers have discussed the merits of social media in education by highlighting their ability to facilitate interaction, collaboration, active participation, information and resource sharing and critical thinking (Ajjan and Hartshorne, 2008; Mason, 2006; Selwyn, 2007). Lee and McLoughlin (2008) add that social media is an effective teaching tool because it can help build social support, increase connectivity and promote collaborative content creation. Regarding Facebook, Mason (2006) points to the platform's beneficial qualities such as enabling peer feedback, goodness of fit with social context and interaction tools. Higgins et al. (2013) explain that these aspects of social media may promote constructivist pedagogies because they actively engage students in the educational process and facilitate social interaction, both considered to be important components of constructivist learning.

In addition to the pedagogical merits of social media, students seem to want to see social media integrated into their educational experience. According to Roblyer et al. (2010), students are more interested in the educational use of Facebook than faculty. This finding is not surprising since there has been evidence that students who corresponded with their professors via email experienced improved relationship with them and that email "allows them to more freely express their ideas to professors" (Jones, 2002, p. 9). Moreover, contrary to the belief of some faculty (Junco, 2012), 85% of students would not feel that their privacy is being invaded by faculty who encourage the educational use of Facebook (Roblyer et al., 2010). In fact, Mazer et al. (2007) found that students who experienced more selfdisclosure from faculty on Facebook reported more motivation and higher levels of learning.

Despite the willingness of students to incorporate Facebook into their coursework, very few faculty appear to be doing so. Moran et al. (2011) found that 77% of faculty reported using social media in their personal lives, yet only 4% had incorporated Facebook into their courses. Given the pedagogical potential of Facebook, its lack of adoption into the classroom is interesting especially given that faculty are using other types of technology to communicate with students. According to Jones and Johnson-Yale (2005) 92% of faculty correspond with students over email and 55% have course websites. If Facebook represents an advancement over these older technologies with regard to communication and information sharing, and a high percentage of students use Facebook daily and are willing to use it as part of their coursework, why haven not more instructors incorporated it into their courses? One possible reason is that many faculty members are not sure how to incorporate Facebook into their courses, and because social media is still relatively new, there are few resources available to help guide faculty who

might otherwise be interested. The purpose of this paper is threefold: 1) to present a case in which Facebook was incorporated into a college course including the way it was used in the curriculum; 2) to present the results of Facebook activity in the course throughout the semester; and 3) to present the results of a survey with students about their use and experience with Facebook as part of the course. This paper will include recommendations for faculty interested in incorporating Facebook into a college course.

Methods

The methods for the material presented in this paper took three forms. First, observation notes were taken throughout the semester by the first author who implemented Facebook into the curriculum of a 200level course in the College of Agriculture and Natural Resources (CANR) at Michigan State University. The course, Introduction to Travel and Tourism, had an enrollment of 60 students. Although the instructor conducts agritourism research, the focus of the course was on tourism, so many of the students were not CANR majors, but instead were taking the course as an elective. The observation notes included initial considerations about how to integrate Facebook into the course, such as whether to require students to participate, which Facebook features to use and whether (and how) to grade students' Facebook activity.

Second, Facebook activity was tracked throughout the semester for quantity and quality. To assess quality, each post and comment was given a quality score that ranged from one to three. Regarding student posts, most scored at least a two, but received a three if it was particularly relevant to course material. As for comments, a short comment such as "interesting post" or "lol" (laugh out loud), would earn a score of one. A score of two would be awarded for a comment that was more thoughtful, but generally short. Comments that were thoughtful and longer than a sentence, or advanced an ongoing discussion (either online or from class), were given a score of three. To minimize the impact of this subjective assessment, each comment and post was assessed and tracked by both the course professor and a graduate teaching assistant. Students' total scores for their Facebook activity were based on the average of the total score by the two raters. For the analysis of the Facebook activity, all posts were also categorized by type of post (e.g., linked article, photo, question, etc.). Descriptive statistics were calculated for all Facebook activity such as average number of posts and comments (overall and per student), the types of posts and average number of comments per post.

Finally, a paper-based survey was developed and distributed to students in class two days before the end of the semester. The survey included items to assess students' typical use of Facebook, student Facebook behavior as part of the course and their opinions about the use of Facebook as part of a university course. Descriptive statistics were compiled for the survey

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results. This survey study was deemed exempt by the MSU institutional review board.

Results and Discussion

The findings for this paper are grouped into three areas that reflect the methods described above: 1) a description of how Facebook was integrated into a university course; 2) the Facebook activity associated with that course; and 3) a short survey study of students in the course regarding their Facebook activity.

Integrating Facebook into the Course

Several factors led to the decision to use Facebook as part of the course. First among these is that the Internet provides access to a significant amount of course-related material that is worth sharing with students, including articles, photos, videos and blogs. For years, the instructor shared some of that material with students either in class, through email or via web-based course management software such as Blackboard, WebCT or ANGEL. Although these may have been an effective method for dissemination, it was not necessarily a great way for students to engage with the material. Using Facebook would have several advantages over using course management software. For example, students familiar with how to post new material using Facebook commented on and engaged in "discussion streams" through the Facebook Group page. Additionally, most students used Facebook at least once per day, with many using it several times throughout the day. Finally, Facebook offers the opportunity for students uncomfortable speaking up in class to engage in course-related discussions and provides an easy way for instructors to share interesting material that students find and pass on to the instructor.

Because of its potential to improve student engagement and learning, the instructor decided to experiment with Facebook as part of the course. Several fundamental questions became apparent. Should the instructor "friend" students on Facebook? Should the students be required to participate? Would their participation be graded, and if so, how? After investigating options and considering alternatives, the instructor set up a Facebook Group for the course and acted as the group administrator, inviting students as members of the group. Using Facebook Groups allows students and faculty to interact and share information with each other without creating faculty-student friend status, thus allowing students and faculty to keep their Facebook content private. Another advantage of Facebook Groups is that it shows who has viewed a post regardless of whether they commented or liked the post.

The Facebook assignment was worth 10% of each student's grade. Student participation was optional, and the instructor provided an alternative assignment that was also worth 10% of the overall grade. The optional assignment required students to write two short (one-page) summaries and analyses of trade and popular press articles relevant to the course content. Students

who participated in the Facebook option received a grade for the quality and quantity of their Facebook activity. A score of 21 (seven high quality posts, 21 low quality ones, or any mix of quantity and quality) was required for a 4.0 for this assignment. Of the 60 students in the course, 52 selected the Facebook option (87%), and three of those who did not select this option still joined the Facebook Group and participated in discussions. None of the students had ever taken a course that used Facebook.

There was concern about the amount of time the instructor would need to invest to spark Facebook activity, however, student participation began almost immediately, as students began to make posts and comment on each other's posts. Within one week of the Facebook Group's establishment, 32 different students had made 57 separate posts, each of which was viewed by an average of 42 students. These posts generated 192 separate comments from 38 different students with approximately 40% of the comments consisting of thoughtful responses that were comprised of multiple sentences.

Some of the comments and posts were tangentially connected to the content of the course. For instance, many people used the page to share photos and stories of some of their travels. Although some posts were not directly related to course content (even for a tourism course), they seemed to be useful at helping students make a connection with one another and helped to develop a sense of community among the students. One particular observation was that many of the international students in the class (27% of all students) shared information and photos about their home countries or cities. These often generated comments and questions from American students and seemed to help break down many of the barriers that exist between international and domestic students. Only one comment was deemed inappropriate and the instructor addressed the situation immediately.

Another concern was that using Facebook would reduce in-class discussion. In fact, Facebook posts often provided good examples and stimulated class discussion. The instructor often highlighted students who provided particularly interesting or relevant posts or comments, and ask them to provide explanation to further topic discussion. The Facebook Group allowed students an opportunity to voice their opinion and participate in discussion in a safe environment when they otherwise may not have done so in a formal dialogue setting.

Facebook Activity

The amount of activity generated in the Facebook Group far exceeded the expectations of the instructor. Over the course of the semester, 49 different students made 283 different posts, which represented an average of 5.7 posts per student. The instructor made a total of 19 posts over the course of the semester. A total of 52 different students made 840 comments for a mean of 16.5 comments per student.

As mentioned above, each post was placed into one of 9 different categories. Table 1 shows the number of posts for each category as well as the mean number of comments for each type of post. Links to articles were by far the most common type of post. Not surprisingly the posts about course information generated the fewest number of comments as these were all posted by the instructor and were meant to be announcements, rather than an attempt to spark a discussion. Each of these informational posts were viewed by all 55 students who were members of the Facebook Group, suggesting that Facebook is an effective way of disseminating information to group members. The posts that posed a question to the class (all but two of these came from students) generated the most comments.

Student Survey

A total of 54 students completed the survey. For most students, the course did not have a great impact on their overall use of Facebook. Only four students reported not having a Facebook account before the course started, and each of those was a first-semester student from China, where Facebook was prohibited at the time. Most students (76%) reported using Facebook about as often at the time of the survey as before the course began, and 13% reported using Facebook less often before the course. Most of the students were experienced users of social networks before the course began with 87% reporting they had been using social networks for more than 2 years. Regarding frequency of use, 83% reported checking Facebook more than once per day, with about half the students (49%) checking their Facebook account five or more times per day. More than 75% indicated that they use social networks for more than 20 minutes per day.

Privacy was one reason the instructor did not require the use of Facebook. Although a Facebook Group does not give members access to each other's

	Number of Posts	Mean Number of Comments per Post
Course Information	5	0.2
Question to others	24	9.8
Link to Website	49	2.1
Link to Article	125	2.7
Personal Photo	39	3.4
Discussion about Material from Course	9	3.9
Statement	3	2.3
Video	46	2.4
Other	2	2.0
Total	302	3.2

private Facebook content, many students have weak privacy settings. The instructor was concerned that students with weak privacy settings might be concerned that interacting with non-friends (the professor and other students) as part of a Facebook Group might provide an easy opportunity for others to link to their Facebook content. Privacy did not, however, seem to be a concern for most students. When asked about the extent of their concern with the professor and other students viewing their Facebook content both before they began the course and at the end, most students indicated they were "not at all concerned" about others seeing their content and at the end of the semester even fewer had concerns than at the beginning (Table 2).

Students were asked on the survey whether they became Facebook friends with other students in the course and 47% (including 73% of international students) had become Facebook friends with someone from the course, and 30% (and all of international students) had become friends with more than one student from the course. Students were also asked about the impact the Facebook Group had on their relationship with other students, and although 55% indicated it had no impact, 45% indicated it had either a "positive impact" or a "strong positive impact." No students indicated that the Facebook Group site had a negative impact (Table 3). A similar question was asked about the Facebook Group's impact on the student's relationship with the instructor and had very similar results (Table 3).

To better understand student perceptions of the Facebook Group as a pedagogical tool, the survey included several items related to their Facebook activity, as well as the content itself. Students were asked what percentage of the posted links they followed and what percentage of posts and comments they read. Almost 60% of the students read more than half of the posts, 36% followed more than half of the posted links and 32% read more than half of the comments (Table 4). Students were also asked what percentage of the content generated by the Facebook Group was relevant to the course content, and the vast majority (64%) indicated that at least 76% of the content was relevant to the course (Table 5). Another

	Very	Somewhat	A Little	Not at All			
	Concerned	Concerned	Concerned	Concerned			
Concerned about content being seen by professor							
Before Course	3.8%	11.3%	26.4%	58.5%			
At End of Course	10.9%	6.5%	13.0%	69.6%			
Concerned about content being seen by other students							
Before Course	0%	17.0%	13.2%	69.8%			
At End of Course	4.3%	6.4%	19.1%	70.2%			
Note: Data is from Introduction to Travel and Tourism a 200-level course with 60							

	Strong Positive Impact	Positive Impact	No Impact	Negative Impact	Strong Negative Impact
Relationship with other students	13%	32%	55%	0%	0%
Relationship with professor	15%	30%	55%	0%	0%

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survey item asked students whether they would have used the Facebook Group as much if it had not been part of their grade. The majority (64%) indicated that they would have used the Facebook Group

Table 4. Student Activity with Facebook Group Content								
0% 10% or less 11% - 25% 26% - 50% 51% - 75% 76% or more								
Percentage of Posts Read	0%	11%	6%	23%	36%	21%		
Percentage of Links Followed	0%	13%	17%	32%	21%	15%		
Percentage of Comments Read	0%	23%	21%	24%	26%	6%		
Note: Data is from Introduction to Travel and Tourism a 200-level course with 60 students taught in the 2012 fall semester at Michigan State University.								

less often if it had not been part of their grade. This finding reinforced the instructor's feeling that students would be less likely to use the Facebook Group if it was not required.

When asked about how the Facebook Group impacted aspects of the course such as enjoyment of

the course, understanding of course topics and their course performance, students generally felt the Facebook Group made a positive impact (Table 6). A total of 57% indicated the Facebook Group had at least a positive impact on their class

performance, while 40% indicated it had no impact. About three quarters of students felt the Facebook Group had at least a positive impact on their understanding of course concepts and 90% said it had at least a positive impact on their enjoyment of the course. When asked whether they would recommend a future student to join the Facebook Group, 100% of those who answered the question indicated they would. Seven students did not answer the question.

Summary

Although the use of Facebook described in this study was an experiment, the level of participation was significantly higher than expected. Students also seemed more engaged in the material than in previous semesters when Facebook was not part of the course, and students appeared genuinely excited to find relevant resources to post. The Facebook Group also seemed to be a useful tool for encouraging student interaction with each other and with the instructor, and survey results supported this observation.

One challenge from an administrative perspective is with the tracking of student participation, which is an especially difficult endeavor with larger class sizes. However, it is with these groups that Facebook is perhaps most valuable given the opportunities for engagement, participation and interaction, which are sometimes more difficult to elicit with large class sizes. Tracking only the quantity of each student's activity, and not the quality, would be easier, but might result in an overall decrease in the quality of the generated content. Focusing only on the quality might discourage the seemingly vacuous activity (e.g., likes, lol), but these too are important in order to make the Facebook Group seem genuine, natural and fun.

Time will tell whether Facebook will maintain its level of popularity among college students in the years to come. Facebook has, in fact, begun to see a decrease in use among teenagers (Bercovici, 2013). However, if the

Table 5. Percentage of Facebook Group Content That Is Relevant to Course Conent								
0% 10% or less 11% - 25% 26% - 50% 51% - 75% 76% or more								
0%	0% 4% 0% 11% 21% 64%							
Note: Data is from <i>Introduction to Travel and Tourism</i> a 200-level course with 60 students taught in the 2012 fall semester at Michigan State University.								

Table 6. Impact of Facebook Group on Aspects of Course							
	Strong Positive Impact	Positive Impact	No Impact	Negative Impact	Strong Negative Impact		
Enjoyment of Course Material	28%	62%	10%	0%	0%		
Understanding Course Topics	10%	64%	26%	0%	0%		
Course Performance	4%	53%	40%	2%	0%		
Note: Data is from Introduction to Travel and Tourism a 200-level course with 60 students taught in the 2012 fall semester at Michigan State University.							

60 students in this course are any indicator, Facebook currently enjoys very high participation rates among this group and Facebook Groups offers several potentially effective features to uniquely engage students in course material and provide opportunities for participation and interaction that might not otherwise happen in the university classroom.

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