Facebook's Use in Higher Education

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ABSTRACT

Social networking sites have experienced explosive growth and they have been integrated into the daily lives of many people. While the majority of college-aged students interact on Facebook every day, both research and implementation of Facebook as a pedagogical tool in the higher education classroom is lacking. This research-in-progress study investigates the question, "How can Facebook can be used to enhance educational experiences beyond that of the traditional classroom?" To do so, students from a southwestern university will participate in a multi-round Delphi study. By generating and ranking ideas directly from students, the results will have content validity and may uncover interesting and state-of-the-art ideas. The results will be available for presentation at the conference.

Keywords

Social networking, Education, Facebook, Delphi Method

INTRODUCTION

SNSs (Social Network Sites) have experienced tremendous growth in the last decade. In 2008, each of nine SNSs claimed to have over 50 million users (Cardon, 2009). Facebook, however, has been the fastest growing and is the most widely used SNS in the world. By January 2009 there were 150 million active Facebook users, half of whom logged in at least once a day (Zuckerburg, 2009). At that time, Facebook was assessed as the fourth largest Internet site in the world, behind Google, Microsoft and Yahoo (Schonfeld, 2009). In March 2010, Facebook overtook Google in terms of weekly U.S. traffic, with more than 500 million members (Hardawar, 2010). By mid 2011, Facebook boasted more than 750 million users (Facebook Press Release, Timeline). Facebook is now translated into over 100 languages and has worldwide impact (Smith, 2010).

Facebook was originally created for college students to connect with each other; therefore access was limited to those with approved ".edu" email addresses (Facebook Press Release, Timeline). While the original demographic was 18 – 24 year olds, there has been fast growth in other demographics as well (Facebook Press Release, Statistics). However, recent data suggests that the majority of U.S. teens and young adults use a SNS (Lenhart, 2009).

Different types of learning management systems (LMS) have been around for years; however, Salavuo (2008) argues that SNSs such as Facebook may be better matched for collaborative teaching and learning than other types of pedagogical tools. First, because a vast majority of college students use SNSs, they are comfortable with interfacing via an SNS. This familiarity allows them to utilize the functionality more thoroughly and be more in control of their environment. Second, SNSs often provide superior support for multimedia formats. This is becoming increasingly important as students have come to expect media richness in their learning materials in the form of videos and graphics. Media-rich formats, such as photographs and video, can also facilitate greater community building through increased interpersonal knowledge. Third, information contained in personal profiles may help students recognize others with similar interests and identify those with particular expertise, thus creating opportunities to learn from others as well as to share their own knowledge. Fourth, mobile access is another advantage of SNSs. While some LMSs offer limited mobile support (e.g., Moodle), their functionality tends not to be as robust as that of Facebook. Facebook is supported in full functionality by free applications to every type of mobile device OS. Fifth, the use of SNSs is also not limited by semester boundaries. While students may no longer have access to course-related LMS discussion forums after the semester is over, this is not the case with SNS groups (Magro, Ryan, Sharp, and Ryan, 2009).

PAST USES OF SOCIAL NETWORK SITES IN EDUCATION

Although Facebook is one of the fastest growing and most popular SNSs among university students, there are still relatively few empirical studies examining its use in educational settings. We classify the extant literature into several categories: 1) the impact of student individual differences on adoption and usage, 2) student-faculty interactions, 3) student-to-student collaboration, and 4) SNS influence on individual learning. Below, we discuss representative literature from each of the categories.

The Impact of Student Individual Differences on Adoption and Usage

In a study of undergraduate students, Orr, Sisic, Ross, Simmering, Arseneault, and Orr (2009) found that the personality trait of shyness was significantly negatively correlated with the number of Facebook "friends." However, in a study investigating how personality types affected students' use of Facebook, relatively few significant relationships were found between the "Big Five" personality variables (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) and Facebook use. The authors, for example, hypothesized that students who scored higher on the trait of neuroticism would be more likely to spend more time on Facebook and share personally-identifying information, but be less likely to use private messages. This proved not to be the case. While individuals in the high extraversion group reported membership in significantly more groups, there were no significant differences between the high versus low groups on agreeableness and openness to experience traits in regard to features of Facebook use (Ross, Orr, Sisic, Arseneault, Simmering, and Orr, 2009). All in all, studies have shown that the relationship between personality traits and Facebook usage is far less than originally suspected.

Student-Faculty Interactions

In a study of 133 undergraduate students in a basic communication course, Mazer, Murphy, and Simonds (2007) found that when using Facebook, the level of self-disclosure of the faculty impacted student motivation, affective learning and classroom climate. Students were randomly assigned to one of three experimental conditions based upon the instructor's level of self-disclosure: high, medium, and low. Using ANOVA, the results showed statistically significant differences in each case, supporting the hypotheses that a higher level of self-disclosure on the part of the instructor resulted in higher levels of motivation and affective learning as well as a more positive classroom climate. This suggests that the attitudes and tactics of the instructor significantly affect the student's perception of the instructor, the course, and their own willingness to use SNS features.

Another study examined the use of Facebook in higher education as a tool for student-faculty communication. As an additional means of access, several classes at a university offered virtual office hours using the Facebook instant messaging client. Traditional face-to-face office hours were also offered. The results suggested that students had a higher satisfaction rating for classes that offered virtual office hours in addition to traditional office hours, over classes that just offered traditional office hours. Student perception of the virtual office hours were positive, with students strongly indicating they liked having the opportunity to interact with their professors using Facebook. Students also considered the virtual office hours a good addition to the class, and indicated they would like it available in their future classes (Li and Pitts, 2009). This successful experiment suggests that Facebook is a tool already in a student's possession, and just waiting to be employed to enhance their academic experience.

Student-To-Student Collaboration

Magro et al., (2009) used a qualitative methodology, autoethnography, to investigate how Facebook could help first semester doctoral students adapt to a Ph.D. program and a new national culture through collaborative discussions. Each week during the semester, tips were posted by the instructor then students would post related discussions, observations, and/or questions. At the end of the semester the doctoral students shared their thoughts about participating. Their findings suggested that the Facebook discussions assisted in different types of collaborative knowledge exchange. The interactions also appeared to help the students reduce their anxiety levels about starting a Ph.D. program, adjust to a new national culture, and promote socialization and community.

Another study followed a student project to create viral interest in their school's basketball games (Williams and Chinn, 2009). Students started from scratch with an introduction to Web 2.0 tools, then evaluated and used various tools in small teams to create projects and generate interest. In a short time the students were able to understand not only the concept behind tools like Facebook, YouTube, and distributed message boards, but the value of using them. Students designed and implemented a structured plan to reach their community through various social media applications and experienced success.

Attendance at basketball games grew 200%. Students learned how to use social media tools through experience and were able to articulate their observations as evidenced in interviews with quotes such as the following:

> "We noticed that a lot of the posts were more like one time ads rather than trying to spark interest which was our goal. We tried to make conversation." (Williams and Chinn, 2009, p. 172)

The experiences of this group of students show that employing social media technologies in the classroom stimulated experiential learning and teamwork.

SNS Influence on Individual Learning

In 2008, Bowers-Campbell studied the efficacy of using Facebook as a motivational tool in a university classroom setting, specifically a developmental reading course. The authors argued that Facebook would enable students to better meet "college reading expectations since it offers potential for battling low self-efficacy and poor self-regulation behaviors plaguing many developmental learning students" (p. 76). Facebook was shown to be effective at fostering a sense of connection between instructor and students even prior to the beginning of the class, further breaking down the self-efficacy barrier. Using Facebook in this manner, helped students develop a level of control within themselves and improve outcomes (Bowers-Campbell, 2008).

METHODOLOGY

The above studies demonstrate that Facebook can be used as a pedagogical tool. However, given the relative paucity of empirical educational SNS research, the purpose of this study is to identify important ways that Facebook can be used to enhance educational experiences beyond that of the traditional classroom. The Delphi approach will be used to gather data and rank ideas among survey respondents. The Delphi method consists of a series of related survey instruments administered in a sequence of rounds. In Delphi studies, an initial questionnaire, administered in the first round, serves to broadly discover data relevant to the questions on a particular topic. Subsequent questionnaires summarize, filter and categorize responses from previous sessions, and ask respondents to re-evaluate their opinions based on the collective responses and summarized results. The final result is a consensus at some level among the respondents. The Delphi method has long been used in MIS research with successful results (e.g., Brancheau, Janz and Wetherbe, 1996; Keil, Tiwana and Bush, 2002).

In our study, we anticipate gathering data from approximately 150 undergraduate and graduate students at a large university in the southwestern United States. The Institutional Review Board (IRB) has approved this research. Round 1 of the survey will consist of two parts. Part 1 will include key demographic questions such as age, gender, major, and family income. Other questions will be asked such as: "How many friends would you estimate you have on Facebook?" and "Has Facebook ever been used in one of your classes before? If yes, please describe how it was used." Part 2 will state: "Identify and briefly describe about ten ways that Facebook can be used to enhance educational experiences beyond that of the traditional classroom." As with other Delphi studies, Round 2 will compile answers from the first round and then ask: "Please rank what you consider to be the top ten ideas for using Facebook to enhance educational experiences beyond that of the traditional classroom (where 1 is the best idea, 2 is the 2nd best, etc.)." Round 3 will provide the respondents with peer rankings from Round 2 and ask the respondents to rank their top ten. They do not need to respond in the same way that they did in the previous rounds.

ANTICIPATED RESULTS AND CONTRIBUTION

We believe that this study will generate novel ideas about how Facebook can be used to improve learning beyond traditional methods. Since the data will come from students, the data will have high content validity. As SNSs continue to increasingly pervade our everyday lives, educators should become aware of how they can effectively use SNSs to enhance the learning process. We will have collected the data and will present the analyzed results at the conference.

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