Full Length Research Paper

The integration of facebook into class management: an exploratory study

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Abstract

From a class management perspective, this study aims to analyze the interaction between students and mentors in the Facebook class websites and students' social networking in the Facebook by using Facebook provided functions. The research focus is students' perceptions of the Facebook as a class website. The survey results indicate that most students express positive attitudes on their Facebook class websites in terms of system interface, feeling exchange, and information communication. The qualitative analysis yield five themes: role of class leader, knowledge sharing, system interface, role of mentor, and value of class website.

Keywords: Class management, class website, social networking.

INTRODUCTION

Due to the popularity of social networking, many researchers begin to explore the effect of the Facebook on young adults' social behaviors. For example, Baker and White (2011) used a qualitative methodology to identify why some young adults would not adopt the Facebook. Kalpidou et al. (2011) examined the relationship between the Facebook adoption and well-being for college students. Wise et al. (2010) investigated users' emotional responses on Facebook. However, of those related studies, none attempts to apply the Facebook into educational research settings, especially for class management.

In Taiwan, college students with the same majors are usually arranged into different class units. For instance, 80 freshman college students majoring in computer science may be divided into two class units. Each class unit owns the same number of students. The school may assign a learning mentor to each class unit. The mentor, whose assigned duties last for four years (until student graduation), should convene several class meetings and schedule individual learner meetings in order to better understand students' current learning status and social adjustment. The researcher as an information technology specialist at an academic department in a teaching-based college once employed the blog technology to create several class websites for class units. After one-year implementation, most learning mentors and college students perceived the class websites as a perfect class management too. However, the blog-based websites only functioned as a one-way communication site (only for announcement posting). Currently, since the Facebook adds a new function called "Create Group" in the system, many college students use this tool to create non-learning-related social groups, such as a guitar club or a baseball club. In a Facebook group, members can post any information (words, photos or videos) and express their opinions by replying the messages or clicking the "Like" button. Moreover, file uploading, online chatting, event creation, and simple survey functions are available in the Facebook system.

By following the Facebook trend, the researcher shifted the focus of the class website from the blog-technology to the Facebook create-group tool. In 2011, each class unit at an academic department created their own groups as class websites in the Facebook. Learning mentors and students could exchange information in the Facebook class website (group).

The current study draws on three theoretical discussions to serve as the research rationale of adopting Facebook class website. The first one is Bielaczyc and Collins (1999)' learning community theory which claims that students should learn to respect for all members of the community and to work with people in order to share knowledge and information. The second theory is Siemens' (2005) connectivism which sees learning as the network development. In other words, students learn new information from online users' opinions in the network environment. The last one is Tapscot's "growing up

Table 1. Reliability Test for Attitude Survey (N=35)

Construct	Reliability Value
System Interface	0.64
Feeling Exchange	0.78
Information Communication	0.88

digital" discussion which contends that the 21th century generation students (called net generation) enjoy learning new information in the Internet.

From a class management perspective, this study aims to analyze the interaction between students and learning mentors in the Facebook class websites (groups) and students' social networking in the Facebook by using Facebook provided functions. The survey and interview methodology are adopted to collect students' perceptions of the Facebook as a class website.

RESEARCH DESIGN

Research Participant

Participants are students majoring in education at a public university in Taiwan. These students all come from the same department, which consists of eight class units (336 students in total). Only 104 students (male: 34; Female: 70) responded the quantitative survey. Regarding the qualitative approach, nine students were invited for further interview discussions. The opinions from those students serve as the corroborative evidence to support the quantitative data. Overall, the average age of the participants is 20 years old.

Research Method

This study adopted Creswell's (2008) mixed methods to investigate the interaction between learning mentors and students in the Facebook class websites. In the quantitative part, a self-developed questionnaire surveyed students' attitudes toward the Facebook class websites. In the qualitative part, a 30-minute interview elicited each participant's perception of using Facebook class website.

Research Instrument

The study developed an "Attitude Survey for adopting Facebook Class Website" questionnaire to collect quantitative data. The survey is a 5-point Likert scale and contains three constructs: system interface, feeling exchange, and information communication. Each construct comprises four question items. In order to establish the survey validity, an educational assessment expert verified the questionnaire. Moreover, one statistical technique (Cronbach alpha) was performed to test the survey reliability.

The reliability test contains two basic procedures. First, a sum function in the statistical software (i.e. SPSS) adds up each item's value included in each construct. For example, the total value of the "System Interface" equals to the sum of item 1, item2, item 3, and item 4. Second, the Cronbach alpha tests each construct's reliability value. Table 1 summarizes the result of the reliability test.

Regarding the qualitative instrument, the researcher employed the survey items as an interview guide to facilitate the interview process during which students deeply discuss items' descriptions. An in-depth insight of students' usage experiences about the Facebook class websites was obtained.

Research Procedure

In order to make overall research process more smoothly, the paper-based questionnaire was transformed into the digital-based survey system. The researcher sent the survey link to targeted students. During two-week implementation, 104 copies of survey data were collected. In the next stage, the researcher randomly chose nine students among the students who responded to the survey for further interview discussions. Each interview process was recorded by a professional digital recorder for subsequent transcription and analysis.

Data Analysis

A descriptive statistical technique, which includes mean and standard deviation, was used to analyze the collected quantitative data. The purpose of the descriptive statistics is to check if any outliers appear in the data set. For the qualitative data, this study employed Moustakas's (1994) four-stage analysis to interpret written transcripts from recorded interview files.

RESULT AND DISCUSSION

Quantitative Finding

Table 2 summarizes the analytical results of descriptive statistics. In the quantitative finding, the bench mark

Table 2. The Results of Descriptive Statistics (N=104)

Item	Mean	SD
System Interface		
1. I am familiar with all functions provided by the Facebook class website	4.38	0.49
2.I actively use Facebook class website	4.38	0.49
3.Mentors encourage students to make use of functions in the Facebook class website	**3.44**	0.69
4.Functions provided by the Facebook class website fulfill the needs of my interaction with my classmates	4.19	0.40
Feeling Exchange		
1. Mentors engage in online discussions with students in the Facebook class website	**3.80**	0.99
2.I feel that using Facebook class website facilitates my interaction with my classmates and mentors	4.50	0.50
3.I interact with my mentors in the Facebook class Website	4.21	0.87
4.I interact with my classmates in the Facebook class website	4.56	0.55
Information Communication		
1. Updated information often pops up in the Facebook class website	4.29	0.46
2. I often browse the contents in the Facebook class website	4.50	0.50
3. I can find the information I want in the Facebook class website	4.39	0.49
4.Classmates often post new information in the Facebook class website	4.40	0.49

value 4.0 is used because the 4.0 represents the data set tends to move toward the positive side.

The results show that most students exhibit positive attitudes (more than 4.0) toward the adoption of the Facebook class website. However, students feel that mentors are not active members in the Facebook class environment. In the construct of system interface, the mean score of the third question item is below 3.5 (Mentors encourage students to make use of functions in the Facebook class website); in the construct of feeling exchange, the mean score of the first question item is below 4.0 (Mentors engage in online discussions with students in the Facebook class website).

The survey results can be interpreted that most students enjoy using the functions embedded in the Facebook class website. They like to use the website to share information and knowledge for the extensive feeling exchange. Although the quantitative finding reports students' positive attitudes on the Facebook class website adoption, the hidden factors, especially for controversial parts, are needed to be clarified by the qualitative finding.

Qualitative Finding

Through constant comparisons among meaningful sentences in all written transcripts, five main themes were established:
1. Role of class leader: The class leaders are enthusiastic information communicators. The information they post always provokes intensive responses and transmits important messages. Moreover, they can make use of functions in the Facebook class website, such as online survey or event creation, to enhance internal cohesion in the class unit.
2. Knowledge Sharing: In addition to the information related to school and curriculum, students might post something interesting in the Facebook class website. Such online behaviors can strengthen feeling exchange among students both in the virtual (web) and physical (face-to-face) context.
3. System interface: Students feel that the functions embedded in the Facebook class website are easy to use. The most used functions for students are "message reply" and "like". Students seldom use "online survey",

"class even creation" and "class log" functions.

4. Role of mentor: Most students feel that mentors do not actively engage in students' online message discussions. Mentors only post the information or reply messages related to class activities. Some students consider that perhaps mentors are not familiar with functions embedded in the Facebook class website. Most students perceive that mentors do not encourage students to use those functions.

5. Importance of class website: The Facebook class website serves a hub which connects students' intrinsic feelings. Most students feel that the value of the class website is to build the sense of belonging for them. Compared to other available online technologies for creating class websites, students consider that the Facebook group tool as a class website is the best choice. "Easy to use and access" and "popularity among college students" are strong points for the Facebook group tool.

Overall, the qualitative results support the quantitative finding. For example, most interviewees perceive that mentors are not active members in the Facebook class website. They also do not encourage students to make use of functions in the Facebook class website. The reason about mentors' online behaviors is unknown because the study only focuses on the students' opinions.

One additional finding is that students emphasize the importance of class leader and class website. Without an enthusiastic class leader, class members would not actively join the online discussions. As for the class website, students consider the virtual world is a hub which connects classmates' intrinsic feelings happened in the physical context.

CONCLUSION

The purpose of the study is to investigate the interaction between students and learning mentors in the Facebook class websites. From the quantitative and qualitative results, most students show positive attitudes toward the adoption of the Facebook group tool as their class websites. Students can employ functions embedded in the Facebook class websites to engage in feeling exchange and information communication. Since current literature lacks of related knowledge for the Facebook class website, this study only reports a preliminary finding. Additional future studies are expected to add the knowledge gap as the result of this exploratory study.

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