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Assessment of Student Perceptions of a Lecture Club on a Social Networking Website

Efforts were made to improve the efficiency of college education through the use of information technology. This paper investigates student perceptions of a lecture club provided on a social networking website. For the empirical study, the instructor ran a lecture club for two consecutive semesters on Cyworld (www.cyworld.co.kr), a popular website among Korean youth. The research subjects were students enrolled in a Popular Culture & Fashion class. A questionnaire was distributed on the last day of the lectures. After excluding students with perfunctory responses and those who did not sign up for the community website, a total number of 297 questionnaires were used for analysis. Descriptive statistics, Pearson correlation analysis, one-way ANOVA analysis, Duncan test, and t-test were carried out, with the SPSS for Windows 12.0 being used for statistical analysis. The findings show that most students subscribed to the website and responded with a favorable attitude that the lecture club was helpful.

Continual efforts have been made to improve the efficiency of college education through the use of

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information technology. The attributes and resources of the Internet support teaching and learning (Khan, 1997; Relan & Gillami, 1997), that are often referred to as Web-based instruction and Web-based learning. Web-based instruction has become a tool to make education more systematic in educational content and the methods have greater public access. The expertise for managing teaching and learning is being accumulated, while the interaction between instructors and learners is being closely observed (Henly & Reid, 2001). The effectiveness of these instructions or learning methods is reported in numerous studies (Alexander, 1996; Clark, 2002; Hayes, 2000; Malikowski *et al.*, 2007; Morgan, 2003; Papo, 2001).

A social network service focuses on building online communities that share information and interests or those interested in networking opportunities (Rhee & Kim, 2009). College students in the 21st century are more involved in such online communities. They are eager participants in a variety of online activities and spend a considerable amount of time in cyberspace. Cyworld (a Korean counterpart of U.S. based Facebook and MySpace) is one of the online communities that provide personal websites and online clubs with diverse purposes. It has about 24 million subscribers that represent 49% of the entire population of South Korea (Lee, 2009).

Limited studies have focused on such cyber clubs as a learning tool despite the tremendous influence of youth on cyber clubs. This study analyzes student perceptions of an online lecture club as supplementary learning tools. Research on Web-based instruction was carried out on lecture clubs offered by universities. The present study focused on a lecture club created on a social networking website frequently visited by college students.

RESEARCH BACKGROUND

Web-based Instruction

Various Web-based instructional materials and software utilizing information technology have been developed to support learning at universities. Educational options involving the use of information technology can be divided into Web courseware, information & communication technology, e-learning, and Web-based instruction. Such Web-based instructions are widely used since it allows users to participate in the learning process at the chosen time and place (Clark, 2002; Lee *et al.*, 2003). Web-based instructions imply utilizing modes of instruction or education that achieve both teaching and learning through the Web. This study focused on a Web-based Instructional Support System for a traditional lecture format among several types of WBI. The lecture club of this study is a Web-based Instructional Support System referred to as e-class, e-learning, and lecture website. This study focused on a lecture club used as a supplementary tool provided on social networking websites from the many options for education available in information communication technology.

Prior studies have been conducted on the effectiveness of Web-based instruction systems. Papo (2001) detailed the efficiency improvement of large-scale lecture formats when Web-based instruction systems were implemented. Malikowski *et al.* (2007) describe the functions of the course management systems (CMSs) in the United States: Blackboard, Desire2Learn, and WebCT. Lee and Stoel (2006) investigated student perceptions of the adoption of a web-based learning courseware application into a

merchandising program. Park and Cho (2008) developed and analyzed the effects of ICT based teaching-learning process plans for 'Designing My Home' unit in high school. The results of the study by Park and Cho (2008) showed that the ICT teaching · learning plans were more effective in various aspects than regular plans.

Web-based instructions were infrequently used in Korea despite the many merits of Web-based instruction (Choi, 1999). There is an opportunity for research to make Web-based instruction more effective and active. The present research investigates the student perceptions of Web-based instructions from the learner viewpoint.

Use of Web-based Instruction

According to Lynch *et al.* (2002), 80% of Universities in the US were equipped with Web-based course management systems (Urm, 2008). The use of Web-based instruction was increasing in the US. However, it was revealed that lecturers who used the Web-based course management system adopted it to deliver simple lecture materials rather than for other functions such as discussions or interactive quizzes (Morgan, 2003).

The results of research on the use of Web-based course management systems by lecturers in Korean universities show that 48.8% of the lecturers used Web-based course management systems. The largest percentage of 41.6%, used the system to share lecture materials versus the lower percentage that used it for discussion purposes (Urm, 2008). Web-based course management systems complement the conventional methods of education, though the systems that are intended to enforce learner-based instruction. There is a need to conduct research on study methods to enhance the efficiency of Web use in education. In addition, there exists literature on Web-based instruction in its use as a tool to make education more scientific and systematic. Expertise on online teaching and learning can be accumulated through the observations of the interactions between instructors and learners. Baek (2003) focused on the current use of the world wide web as a complementary tool for lectures in Management Education at Korean universities and suggested several recom-

mentations on the effective use of websites as a complementary tool.

There was research on the interaction between an instructor and a learner (Ahn & Oh, 2008; Kim *et al.*, 2004). According to Moore and Kearsley (1996), educational communication becomes smoother when interactions activate in a cyber education environment between: instructors and learners, learners and learners, and learners and learning content. The Web environment needs to be user friendly in order to encourage active communication among learners. In particular, the environment needs to become more efficient in the case of a discussion forum frequented by learners. Web-based instructions have limitations when compared to conventional methods of education. The present study expands the domain of the lecture club outside school websites because a program with more dynamic interaction is required for Web-based instruction.

METHODS

Research Questions

This study explores the following four issues:

(1) The investigation of the use of a lecture club on a social networking website, (2) the investigation of student perceptions, preference, and satisfaction with it, (3) the examination of the differences in student perceptions, preference, and satisfaction by course grade, (4) the examination of the differences in student perceptions, preference, and satisfaction by school year.

The Lecture Club

A college-level Popular Culture and Fashion class was selected as the subject of this study. This class was offered by the department of Clothing and Textiles and was open to students of any major. It aimed to interpret fashion trends as shown in popular culture and to understand the significance of the trends. For the empirical study, the instructor ran a lecture club for two consecutive semesters on Cyworld (www.cyworld.co.kr), a popular website among Korean youth. Cyworld is more advantageous

than online school lecture clubs for accessibility, convenient communication, and attracting student interest. The lecture club of Cyworld can be considered a transition for students since students can connect to the lecture clubs by visiting personal websites.

The lecture club has five categories: Announcements, Assignment Hand-In, Image Share, Q&A, and Free Bulletin Board. Image Share was a board where students and the instructor could post pictures relevant to the lectures. In addition to the Q&A bulletin board, the Free Bulletin Board (where students and instructor could freely share thoughts) stimulated communication. Considering that most students use the Internet while doing homework (e.g., using search engines to obtain necessary image files), students were asked to hand in assignments by uploading them onto the website, to be evaluated by the instructor. The feedback from the instructor would be delivered online to students. Online assignment submission can be practical for contacting lecturers since students can conveniently submit assignments within a specified period. It can solve the problem of collecting assignments in large-scale lectures with an added benefit of having its resources open to the public. Many student assignments serve as effective lecture references to enhance learning while sharing work. Students can check the time and contents of tutorials through instructor feedback. This is helpful as the students can express opinions by replying to lecturer feedback. Apart from categorized activities of such lecture clubs, announcements with regard to lectures were made through a function offered by the website to send messages to all club members. In addition the students were encouraged to send messages to the instructor. They can instantly receive further announcements that the instructor has made and feel at ease in asking questions to the instructor if the students often log onto the website that they use.

Instrument

A survey questionnaire was developed on the measurement of electronic learner satisfaction (Measurement of ELS) by Wang (2003). The first question was whether students subscribed to the

lecture club. Those who answered “no” were excluded from further analysis. The next questions concerned how many times the student would log on to the lecture club and how long they remained online once logged in. Respondents were asked to answer the five statements on a 7-point Likert scale that was designed to measure student perceptions of the lecture club. Items include, “it is more accessible than the school club” and “compared to the school club, communication with the professor or instructor was easier.” In addition, two items regarding preference and satisfaction were asked (7-point Likert scale). Finally, the students were asked to write general comments about the lecture club.

Data Collection and Analysis

The research subjects were students enrolled in the 2007 spring and winter semesters; the questionnaire was distributed on the last day of the lectures. Descriptive statistics, Pearson correlation analysis, ANOVA analysis, Duncan test, and *t*-test were carried out; with the SPSS for Windows 12.0 being used for statistical analysis.

Among the 356 students enrolled in the class, 305 participated in the empirical study. A total number of 297 questionnaires were used for the analysis after excluding students with perfunctory responses and those who did not sign up to the community. This sample included 136 males (45.8%)

and 161 females (54.2%). As for the school year, freshmen comprised the largest portion, 41.8%, with 124 students, followed by 98 seniors (33%), 41 juniors (13.8%), and 34 sophomores (11.4%).

RESULTS

The Use of the Lecture Club

An examination of the use of the website revealed that 224 students used the site and represented 73.9% of the respondents and was an indication that the students had easy access to the website. The analysis of the number of visits to the lecture club showed that 31.8% of the students visited the lecture club once a month, 27.7% every other week, 22.3% once a week, and 11.8% every other month. As for the duration, 49.2% of the respondents said they remained logged onto the website for less than 15 minutes, followed by those who remained for 10 minutes (31.7%).

Perceptions, Preference, and Satisfaction with the Lecture Club

The average of five questions on student perceptions was 5.75 out of a of 7. The understanding lecture materials ($M = 5.12$) and the assignment hand-in ($M = 5.13$) exhibited lower means than the other variables. The average preference for the lecture club

Table 1. *Sample Characteristics*

		Frequency	Percentage
Gender	Male	136	45.8
	Female	161	54.2
School Year	Freshmen	124	41.8
	Sophomore	34	11.4
	Junior	41	13.8
	Senior	98	33.0
College	Engineering	73	24.6
	Science	18	6.1
	International	59	19.9
	Communication	23	7.7
	Business	34	11.4
	Art/design	90	30.3

Table 2. *The Use of Lecture Club*

Items		Frequency	Percentage
Use of Cyworld	Yes	224	73.9
	No	73	24.1
Number of Visits	Once per 2 months	19	6.4
	Once per 1 months	94	31.8
	Once in two weeks	82	27.7
	Once a week	66	22.3
	More than once a week	35	11.8
Time Duration per Visit	Less than 1 min.	17	5.7
	1-5 min.	149	49.2
	5-10 min.	96	31.7
	10-15 min.	26	8.6
	More than 15 min.	9	3.0

Table 3. Correlation Analyses

	V1	V2	V3	V4	V5	V6	V7	M	SD
V1	1							5.75	1.24
V2	.638**	1						5.27	1.35
V3	.495**	.579**	1					5.30	1.24
V4	.286**	.299**	.526**	1				5.12	1.15
V5	.436**	.347**	.506**	.507**	1			5.13	1.26
V6	.569**	.517**	.410**	.286**	.519**	1		5.37	1.30
V7	.498**	.500**	.571**	.449**	.534**	.637**	1	5.57	1.11

V1: Accessibility, V2: Efficiency of Announcement Delivery, V3: Easy Communication, V4: Understanding Lecture Materials, V5: Assignment Hand-in, V6: Club Preference, V7: Club Satisfaction

** $p < .01$

was 5.37 and the average satisfaction with the management of the lecture club was 5.57. Students were more satisfied and content with the lecture clubs posted on a social networking website than others posted on the school website.

The open online assignment submission process needs to be analyzed further because concerns were raised on the open-ended questions, the online assignment submission format, and the fear that assignments would be exposed to other students. In terms of understanding lecture materials, the average score was lower than other categories. This may be because of the failure of the lecturer to upload PowerPoint presentations and notes on to the club Website. As Kim (2005) pointed out in the case of large-scale liberal courses unlike major subjects, they did not post lectures on the website since there was a high possibility that the lecture texts and notes might be used without permission. Instructors uploaded abstracts of the difficult lectures and reference materials upon request to help students better understand the content. However, several students requested more powerpoint slides used in the lecture, which means that the students desired.

Student perceptions of the lecture club were shown to have a significant correlation in the connection with the lecture club preference and satisfaction in the examination of the correlation among the research variables (see Table 3). Unlike the other variables, the understanding of lecture materials shows a lower correlation with accessibility, the efficiency of announcement for delivery, and preference ($r = .286$, $r = .299$, $r = .286$; $p < .01$). It is

thought that other variables, such as the teaching ability of lecturers and the subject difficulty that were not used in this study, have higher correlation. Future research needs to examine this in detail.

Differences in Perceptions, Preference, and Satisfaction by Course Grade

Easy communication, understanding of lecture materials, and satisfaction were significantly different depending upon the course grade of students ($F = 3.794$, $p = .024$; $F = 5.098$, $p = .007$; $F = 3.539$, $p = .030$). Students with a final A grade ($M = 5.56$) were likely to reply that the new lecture club offered better communication compared to a traditional lecture club, in contrast to students with grades of B ($M = 5.20$) or C ($M = 5.21$). There were significant differences between the students with A and C grades in the evaluation of the lecture club. More students with A grades found the lecture club to be helpful and satisfactory than those with lower grades. Students with higher grades showed a higher satisfaction with the lecture club, saying that it stimulated communication and helped in understanding lecture materials. According to Lee and Stoel (2006), student liking and satisfaction with WebCT were significantly related to WebCT assisted class performance. In this study, the grades of students did not show a significant effect on preference.

Differences in Perceptions, Preference, and Satisfaction by School Year

To examine the differences of perceptions, preference, and satisfaction according to school years, the

Table 4. Differences in Perceptions, Preference, and Satisfaction by Course Grade

Items	A n = 106	B n = 124	C N = 67	F	p-value
Accessibility	5.78 ns	5.69 ns	5.79 ns	.200	.819
Efficiency of Announcement Delivery	5.39 ns	5.20 ns	5.21 ns	.687	.504
Easy Communication	5.56 A ^a	5.19 B	5.13 B	3.794	.024
Understanding of Lecture Materials	5.38 A	5.07 AB	4.82 B	5.098	.007
Assignment Hand-in	5.32 ns	5.04 ns	4.97 ns	2.300	.102
Club Preference	5.45 ns	5.36 ns	5.21 ns	.704	.495
Club Satisfaction	5.75 A	5.56 AB	5.30 B	3.539	.030

a: different characters denote significant differences in means values at $p < .01$

Table 5. Differences in Perceptions, Preference, and Satisfaction by School Year

Items	Groups	M	SD	Difference between Means	t	p-value	df
Accessibility	Lower-graders (n = 158)	5.68	1.225	-.123	-.850	.396	295
	Upper-graders (n = 139)	5.81	1.265				
Efficiency of Announcement Delivery	Lower-graders (n = 158)	5.17	1.378	.217	-1.386	.167	295
	Upper-graders (n = 139)	5.38	1.316				
Easy Communication	Lower-graders (n = 158)	5.10	1.252	-.431	-3.018	.003	295
	Upper-graders (n = 139)	5.53	1.199				
Understanding of Lecture Materials	Lower-graders (n = 158)	4.95	1.096	-.361	-2.710	.007	295
	Upper-graders (n = 139)	5.31	1.198				
Assignment Hand-in	Lower-graders (n = 158)	5.00	1.215	-.287	-1.981	.049	295
	Upper-graders (n = 139)	5.28	1.286				
Club Preference	Lower-graders (n = 158)	5.32	1.222	-.080	-.523	.602	295
	Upper-graders (n = 139)	5.40	1.417				
Club Satisfaction	Lower-graders (n = 158)	5.52	1.020	-.093	-.723	.470	295
	Upper-graders (n = 139)	5.61	1.206				

students were divided into a freshman/sophomore group and a junior/senior group. Easy communication, understanding of lecture materials, and assignment hand-in showed significant differences in the two different groups. The upper-grades

perceived that the lecture club enabled more active communications ($M = 5.53$), assisted them in understanding lecture materials ($M = 5.31$), and made it easier to submit assignments ($M = 5.28$).

CONCLUSION

The interest in Web-based course systems will increase with the development of technology and various requests of learners. This paper examined student perceptions of a lecture club provided on an easily accessible website as a supplementary learning tool. The findings show that most students subscribed to the website and responded favorably to the lecture club as being helpful. Easy communication, understanding of lecture materials, and satisfaction were significantly different depending upon the course grade of students. Easy communication, understanding of lecture materials, and assignment hand-in showed significant differences in the freshman/sophomore group and the junior/senior group. This study confirms the usefulness of a lecture club on a social networking website as a learning tool.

The current research has limitations since it is confined to the evaluation of the lecture club from the perspective of learners for an effective future lecture club; the point of view of the lecturer should be taken into account. There is a limitation in generalizing the research findings to small scale liberal courses or major subject lectures since the research lecture in question was a lecture in a liberal course offered on a large scale. This study was an exploratory study of a lecture club as a supplementary tool. There was no examination of the effectiveness of the lecture club and did not consider the control group and other effectiveness variables.

The present study is significant since it created a lecture club on a social networking website that was frequented by students, in order to enhance accessibility and increase personal interest. Although the primary focus of the research was on the usefulness of a lecture club posted on a social networking website, we expect this research to contribute to the discussion about the influence of the accessibility of students and their interaction with a lecturer on a successful lecture and on how to run Web-based course management systems with greater efficiency. Research findings offer meaningful implications for the development of Web-based course management

systems and help lecturers better use personal websites or blogs for the lectures.

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