

E-Learning Experience of PSU Students in the Basic Economics Subject

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Abstract - The huge popularity of the internet as a social networking, business and educational tool paved the way for the growth of websites that make it possible to strengthen brand and professional positions either in the organization, industry or educational institutions. Integrating this online technology in the teaching-learning process through designing and developing a course website is essential as it enhances communication between the teachers and students. A website can be a mean to distribute information and provide support to students and serves as a virtual presentation of what an organization is doing and offering to its clients, stakeholders and interested parties.

With the communication technology getting more advanced, taking advantage of it in the teaching-learning process is an opportunity for any faculty members or students in any HEI like the Pangasinan State University, to be highly considering off.

This study is aimed at knowing the perception of the learners who used the e-learning methodology for the first time in taking their examination in the subject Basic Economics in PSU Lingayen Campus. Aside from knowing what the respondents felt during and after utilizing the online technology, the relationship of their computer-related variables and their acceptability of the e-learning methodology as well as their level of computer skills competence.

Keywords - e-learning acceptability, Pangasinan State University, computer skills competence

INTRODUCTION

The huge popularity of the internet as a social networking, business and educational tool paved the way for the growth of websites that make it possible to strengthen brand and professional positions either in the organization, industry or educational institutions. Integrating this online technology in the teaching-learning process through designing and developing a course website is essential as it enhances communication between the teachers and students. A website can be a mean to distribute information and provide support to students and serves as a virtual presentation of what an organization is doing and offering to its clients, stakeholders and interested parties.

Taking advantage of the internet technology in delivering lectures or giving of assignments and exams on the part of the teacher and submitting them using the same medium on the part of students is an option which brings ease to both parties.

There is an increasing body of research evidence on the use of e-learning technology as a methodology of delivering educational services to students [2]. The “Regional Report 2008 on ASEAN University—Level e-Learning” bared that different colleges and universities in different countries worldwide have adopted and utilized e-learning in their delivery of educational services.

In the Philippines, the Republic Act No. 8792 enacted has created the Information Technology E-commerce Council (ITECC)

unifying not only the government's efforts to make the country an electronically capable of participating to the international community, but the private sectors' efforts as well. The rules and policies on electronic transactions with its legal framework for the e-commerce participation of the country to international economy are defined in the Act.

The Philippine eLearning Society (PELS) is the promoting organization of e-learning in the country. Founded on 2000 by the lead of Dr. Benito Teehankee, who is an expert in online learning in the country [5]. The PELS screens papers on e-learning for annual conference, award exemplary papers for annual conferences and conduct online seminars. With the organization, Filipino educators find encouragement and motivation in exploring the advantages of e-learning in their teaching methodology.

Prominent Universities in the country such as the University of the Philippines, the University of Sto. Tomas, Ateneo de Manila University, and De La Salle University among others are the prime advocates of e-learning [4]. These educational institutions have added e-learning course in their curriculum as alternative to traditional classes.

With the effectiveness of delivery mode in e-learning as a factor, online courses are delivered effectively. As course compliance, learners are confident with the system [6]. In a study conducted to determine the preference of computer-majoring students, presentation elements in each of the topics of Computer Programming are visual learning which include text, images, diagrams, drawings, charts and pictures [7].

A study [1] whose focus were students enrolled in Math showed a positive effect in terms of the exam results of the Math students who were asked to use e-learning on to topics circles and parabolas presented by diagrams and animations of visual presentations.

The role of Information Technology (IT) in redefining the role of the teachers, learners and school administrators. Philippine higher

educational institutions cope and keep abreast with the latest technology of providing quality education to Filipino students [2].

E-learning is a new teaching methodology in the Pangasinan State University Lingayen Campus, the very place of the study. As used in this study, e-learning refers to the on-line way of taking test among students. This research rose to the challenge of delivering teaching by integrating information and or internet technology in the teaching-learning process. It determined the experience of students in utilizing internet technology through a course website. Aside from the computer, other electronic tools were used by the students to access the requirements they were obliged to accomplish in their course.

OBJECTIVES OF THE STUDY

The main objective of this study is to determine the experience of the students who used an e-learning approach for the first time as they open the course website in downloading and uploading their assignments and taking their examination in the subject Basic Economics. The effectiveness of the e-learning methodology in delivery of instruction was also assessed based on the students' perception. Their level of acceptability of the e-learning in taking their test was also measured.

MATERIALS AND METHODS

The students enrolled in the subject Basic Economics during the mid-year class 2016 were the respondents of the study. Using the course website designed and developed for the examination of the respondents, the said students were enrolled in the course website and accessed it to access their assignments, download lectures and answer their exams. After the final exam, the students from two classes were asked to answer a survey on the same website. Hundred students complied with the request.

To determine the e-learning experience of students in the subject Basic Economics, an

open question was asked to them. They have answered such question openly through an essay. Their personal profile and relevant computer-related variables were also solicited. Using a Liker-five point scale, the respondents' level of computer scale was gathered. The respondents rated the level of convenience of the exam they took using e-learning.

Using weighted mean, their level of computer skills competence and the level of their acceptability in using e-learning were computed and analyzed using the mean score and descriptive meaning below:

Mean Score	Level of Competence of Computer Skills	Level of Acceptability of E-Learning
4.20 - 5.00	Highly Competent	Highly Acceptable
3.40 - 4.19	Competent	Acceptable
2.60 - 3.39	Averagely Competent	Averagely Acceptable
1.80 - 2.59	Fairly Competent	Fairly Acceptable
1.00 - 1.79	Not Competent	Not Acceptable

Their profile variables were summarized using frequency and percentage.

RESULTS AND DISCUSSION

The personal and computer-related profile of the respondents are presented below.

Table 1 shows that most of the respondents were aged 18-19 years old. This is the ideal age range of Filipino college students who are in second or third year. There were 56 2nd year and 44% third year students in the study. Male group was four times as more than the female group, with 56% and 44% percentage, respectively. Sixty of the respondents were BSEd

Physical Science, while the remaining 40 students were BSEd Social Studies major.

With their computer-related profile, 30 of the respondents spent 3-6 internet hours, 28 of them spent 1-3 hours. A combination of 32 student-respondents consumed more than six hours in the net per week. Twenty-four respondents spent 21-40 pesos in the internet per week, 22 of them spent 40-60 pesos per week. Sixteen (16) of the respondents spent 60-80 pesos per week. A combination of 24 students spent 81 pesos and above per week in their internet consumption. For the internet-enabled device, 96 percent of the respondents had smartphone, 26 of the total respondents had laptop/ netbook, 20 of them had desktop and 12 of the total respondents had i-pad. For the websites regularly visited by the student-respondents, 96 of them oftentimes visited social networking specially the Facebook. Eighty-six (86) of them visited the You-tube, 82 for the educational game, 48 respondents visited their e-mails regularly.

Table 1. Profile of the Respondents

Profile	Frequency	Percentage (%)
Age		
16-17	6	6
18-19	92	92
20-21	2	2
Year Level		
2 nd Year	56	56
3 rd Year	44	44
Sex		
Male	78	78
Female	22	22
Course		
BSEd Physical Science	60	60
BSEd Social Studies	40	40

No. of hours	6	6
1 hr & below		
spent for	28	28
1 hr - 3hrs		
internet	30	30
3-6 hours		
per week	10	10
6-9 hours		
	12	12
9 hr - 12 hrs		
	2	2
12 -15 hours		
	8	8
15 and above		
Internet	14	14
₱ 20 & below		
Expenses	24	24
₱ 21 — ₱ 40		
per	22	22
₱ 40 — ₱ 60		
week	16	16
₱ 61 — ₱ 80		
	12	12
₱ 81 — ₱ 100		
	10	10
₱ 101 — ₱ 200		
	2	2
₱ 201 & above		
Internet-		
Laptop/	26	26
Netbook		
enabled	20	20
Desktop		
devices	12	12
Tablet/ I-pad		
owned	96	96
Smartphone		
Websites		
Social	96	96
Networking		
regularly		
Online	34	34
Gaming		
visited		
Educational	82	82
sites		
	86	86
You-tube		

E-mail sites	48	48
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Majority of the student-respondents were aged 18-19, second year college, males, spent 3-6 hours per week in the internet, paid 21-40 pesos, with smartphone and had regularly visited social networking sites.

Respondents described their first-time experience on using e-learning in their subject. Many felt the mixed emotions of excitement, nervousness and enjoyment.

Other respondents expressed their joy in experiencing the e-learning for the first time in taking their test.

The respondent also realized that with e-learning, students can access and answer the exam anywhere even if a student got sick and is not able to come to class.

Many of the respondents noticed that result of their test was immediately made known to them after passing their test answered with the 'submit' click. They were able to review their answers as well before submitting them.

However, one of five or 20 percent of the respondents expressed uncertainty before taking the test. They were worried if the computer won't work efficiently, if brown out occurs, or since it was their first time, they might mess up with the exam. After their test, they showed sigh of relief for doing the on-line exam right.

The level of computer skills competency of the respondents is presented in the table below. Computer skills were classified to four: 1) computing skills; 2) file management skills; 3) Microsoft Office and PDF skills; 4) Emailing skills; and 5) Online/ Internet Skills.

Table 2. Level of Computer Skills Competency of the Respondents

Computer Skill	Weighted Mean	Descriptive Meaning
General Computing Skills	3.91	Competent
File Management Skills	3.85	Competent

Microsoft Office and PDF Skills	3.82	Competent
E-mailing Skills	3.81	Competent
Online/ Internet Skills	4.07	Competent
OVER-ALL AVERAGE WEIGHTED MEAN	3.90	COMPETENT

With an aggregate average weighted mean of 3.90, the computer skills of the respondents was competent. They were competent in terms of computing skills, file management skills, Microsoft Office and PDF skills, e-mailing skills and online/ internet skills, with the average weighted mean of 3.91, 3.85, 3.82, 3.81 and 4.07, respectively.

For the computing skills, the respondents were highly competent in using the mouse and right click menu functions with an average weighted mean of 4.38. They were also highly competent in turning on and shutting down the computer properly with its weighted mean of 4.26. But they were only competent in understanding file extensions and differences between file types as bared by the lowest weighted mean of 3.45.

In the file management skills, the respondents can competently move a file from hard drive to a flash drive the most with the average mean of 4.18. They can competently delete and rename files and organize, copy/paste files in directions with both average mean of 4.04. Installing a software program for the respondents registered the lowest weighted mean of 3.45 but still they can competently do it.

In terms of Microsoft Office and PDS skills, the respondents were competent in creating a basic word document with a registered average mean of 4.12 and they can as well, create a simple presentation using power point with 4.02 average weighted mean. The lowest competency that the respondents can do is to convert office files to

PDF as proved by the average weighted mean of 3.52.

The e-mailing skills of the respondents registered the lowest over-all weighted mean (3.81) among the five computer skills competency of the respondents. The respondents can competently create and activate and e-mail account, compose, send, receive, reply and forward e-mail. They can also competently attach/remove documents to or from e-mail messages and can competently understand and apply basic e-mail etiquette.

With the online or internet skills of the respondents, they were highly competent in using social and communication sites and in using the browser and basic commands to surf the net with the weighted mean of 4.38 and 4.20, respectively. They were competent in using search engines to locate desired information form the internet (weighted mean = 4.16). The least online/ internet skills the respondents had was “understand the copyright restrictions apply to computer software and internet documents” registering a weighted mean of 3.82. But with all the five computer skills competency, the online/ internet skills of the respondents recorded the highest average weighted mean.

The level of acceptability of the respondents is presented in the table below. Their perception on the idea or usage of e-learning was rated using a five-point Likert scale.

Table 3. Level of Acceptability of Respondents in Using E-learning

	Weighted Mean	Description
1. The idea or concept of taking test online is new, challenging and exciting	3.78	Acceptable
2. Access to the e-learning site is easy.	3.70	Acceptable
3. The e-learning enrollment process is not complicated	3.74	Acceptable

4. Exploring the contents and links of the e-learning is easy to do.	3.62	Acceptable
5. The directions given in the enrolment to the access of the Basic Economics exam were clear and understandable	3.82	Acceptable
6. The atmosphere or environment in taking the on-line exam	3.30	Averagely Acceptable
7. The arrangement of test questions	3.48	Acceptable
8. The easiness of answering each item	2.98	Averagely Acceptable
9. Clear or concise given instruction	3.62	Acceptable
10. Clearly written test questions and clearly drawn and labelled economics graphs and tables	3.72	Acceptable
AVERAGE WEIGHTED MEAN	3.58	Acceptable

The respondents accepted the utilization of e-learning in their subject Basic Economics with the average weighted mean of 3.58. It was acceptable for them most that the direction given during the enrolment to the e-learning and access to their test online, registering a weighted mean of 3.82. It was acceptable for the respondents that the idea or concept of taking test online is new, challenging and exciting with a weighted mean of 2.78. They accepted that the test questions were clearly written, and the graphs and tables pertaining to the subject economics were clearly drawn and labelled. Answering each item in the

Basic Economics exam was not that easy as bared by the 2.98 weighted mean with the descriptive meaning of “averagely acceptable”. The atmosphere or environment where they took the online test was also averagely acceptable. The computer shop which caters to non-students made this response from the respondents’ low in terms of acceptability recording 3.30 weighted mean.

CONCLUSIONS

Most of the student-respondents in the e-learning study belonged to the 18-19 age range, second year college, males, spent 3-6 hours per week in the internet, paid 21-40 pesos, with smartphone and had regularly visited social networking sites.

With the experience of the student-respondents in the e-learning for the first time, many felt the mixed emotions of excitement, nervousness and enjoyment. Many said that e-learning is convenient even if students fail to come to school due to family emergency or if they got sick because they can still access their tests or assignments without going to school. Others maintained that e-learning is a new teaching methodology worth adopting for their students when they become teachers. It’s a way of becoming globally competitive using modern technology specially the internet and the computer. Notable in their responses was knowing their score instantly after submitting the test. However, some students were uncertain before taking the test. They overthought of bad possibilities such as occurrence of brownout, malfunctioning computer system, and not sure to do since it was their first time to use e-learning in answering test. At the end, they realized that those uncertainties were shallow.

The computer skills of the respondents was competent. They were competent in terms of computing skills, file management skills, Microsoft Office and PDF skills, emailing skills and online/ internet skills. For the computing skills, the respondents were highly competent in using the mouse and right click menu functions with an average. They were also highly competent in turning on and shutting down the computer properly. But they were only competent

in understanding file extensions and differences between file types. In the file management skills, the respondents can competently move a file from hard drive to a flash drive. They can competently delete and rename files and organize, copy/paste files in directions. Installing a software program for the respondents registered the lowest weighted mean but still they can competently do it. In terms of Microsoft Office and PDS skills, the respondents were competent in creating a basic word document, and they can as well, competently create a simple presentation using power point. The lowest competency that the respondents can do is to convert office files to PDF. The e-mailing skills of the respondents registered the lowest over-all weighted mean among the five computer skills competency of the respondents. The respondents can competently create and activate and e-mail account, compose, send, receive, reply and forward e-mail. They can also competently attach/remove documents to or from e-mail messages and can competently understand and apply basic e-mail etiquette. With the online or internet skills of the respondents, they were highly competent in using social and communication sites and in using the browser and basic commands to surf the net. They were competent in using search engines to locate desired information from the internet. The least online/ internet skills the respondents had was “understand the copyright restrictions apply to computer software and internet documents”. With all the five computer skills competency, the online/ internet skills of the respondents recorded the highest average weighted mean.

With the level of acceptability of the respondents in utilizing e-learning in their subject Basic Economics, it was ‘acceptable’ for them to use this methodology in the teaching-learning process. It was acceptable for them most that the direction given during the enrolment to the e-learning and access to their test online. The idea or concept of taking test online is new, challenging and exciting was also acceptable for the respondents. But, answering each item in the Basic Economics exam was not that easy and it was “averagely acceptable”. The atmosphere or

environment where they took the online test was also averagely acceptable.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. More exposure to the e-learning system of delivering instructional services to PSU students should to make the students updated with the trend use in education. It’s an option that can enhance motivation and interest among our students.
2. Before using the e-learning, the teacher should thorough explain possible risks that may occur during the test so that the students can prepared for those uncertainties and in the process can address possible problems.
3. The computer skills competency of the students in terms of e-mailing and online/ internet should be enhanced more through a lecture or a seminar. Converting office files to PDS should be also taught or re-taught to them. Their Microsoft office applications should be enhanced more.
4. The atmosphere in using e-learning among the students should be more conducive. The absence of non-students in e-learning, absence of noise can improve that atmosphere. More computers should be provided by the University for the students to use. In case of lack of computers inside the campus, the teacher shall make an arrangement to computer shop owner to address the mentioned problems to make the venue more conducive for the students.
5. E-learning should be encouraged among the faculty and students of the Pangasinan State University not only to be updated with the trend or take advantage of it, but to become globally competent educators and learners. This is one of the many ways of achieving

PSU's vision of becoming a premier University in Southeast Asia.

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