

Preparedness of AB Economics Students on the Adoption of E-Learning

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Abstract – This study was carried out to determine the preparedness on the adoption of E-learning of AB Economics students in PSU Lingayen Campus. It explored certain problems such as the level of computer and internet literacy of the AB Economic students, their level of awareness about E-learning and their level of acceptability in adopting E-learning. It also established significant difference between extent of preparedness and the profile variables of the AB Economics students. The study employed the use of descriptive and inferential design to establish the nature of the relationships. The validity and reliability of research instrument was established and data were collected from 111 AB Economics students through complete enumeration. Frequency and percentages, average weighted mean, ranking and Analysis of Variance were used to statistically analyse the data. The findings of the study revealed that most of the AB Economics students are females, have an age bracket of 18 – 19 years old, possess a normal level of internet utilization, frequently visit social networking sites, owned smartphones as an internet-enabled device, spend less on internet services and have high level of computer and internet literacy in terms of general computing skills and online internet skills. The findings also revealed that they are moderately aware of E-learning system, have the acceptance on the adoption of E-learning as an alternative form of learning and moderately prepared on the adoption of E-learning. Profile variables of the AB Economics students such as age, sex, year level, level of internet utilization, websites visited and internet-enabled devices are found to have no significant difference with that of level of preparedness in adopting E-learning.

Keywords – E-learning, preparedness, Learning Management System, AB Economics

INTRODUCTION

As modern education diversifies nowadays, digital technologies become a pivotal factor. The rapid progress in information technology particularly the use of Internet and computers has been embraced by people and become essential part of the teaching and learning process. This paves the way on the prevalent use of E-learning as a toll to provide learning management system that streamlines educational workflow and enhances the quality of education. E-learning becomes a powerful tool that boosts student and teaching engagement and delivers ways to transform teaching-learning process easier and interesting.

Pangasinan State University, one of the premier state universities in the Philippines, is mandated to provide advanced instruction in the arts, agricultural and natural sciences as well as in technological and professional fields. Despite the existence of some numerous e-learning initiatives in Pangasinan State University, implementation of such initiatives is in infant stage. In PSU Lingayen, no programs are found using e-learning system as a learning tool.

Specifically, as far as the current researcher's knowledge is concerned, no previous studies are found that focus on e-learning in AB Economics program. Therefore, this study will attempt to examine why such initiatives are not properly implemented. More specifically, the study will intend to find out the preparedness and acceptance in e-learning system of AB Economics students. The importance of the study lies in the fact that it will be the first exploratory research that addresses the acceptance and adoption of E-learning of AB Economics student.

OBJECTIVES OF THE STUDY

This study was conducted to determine the preparedness of AB Economics students on the adoption of E-learning system. Specifically, it sought to answers the following queries:

1. What is the socio-economic profile of the respondents in terms of the following:
 - a. Age;
 - b. Sex;
 - c. Year Level;

- d. Level of Internet Utilization;
 - e. Websites Visited;
 - f. Internet-enabled Device Owned;
 - g. Average Internet Weekly Expenses?
2. What is the level of computer and Internet literacy of the AB Economic students?
 3. What is the level of awareness possessed by AB Economics students about E-learning system?
 4. What is the level of acceptability of the respondents in the adoption of E-learning?
 5. What is the extent of preparedness of the AB Economics students in establishing an E-learning?
 6. Is there a significant difference between the extent of preparedness of the AB Economics students on the adoption of E-learning and their socio-economic profile variables?
 7. What are the perceived problems to be encountered by AB Economics students on the adoption of E-Learning system?

The hypothesis of this study was formulated based on the stated research problems. The null hypothesis states that there is no significant difference between the extent of effect of unemployment to socio-economic conditions of the unemployed individuals and their socio-economic profile variables. The null hypothesis was tested at 0.05 level of significance.

MATERIALS AND METHODS

The research design for this study employed a descriptive and inferential method of research.

The respondents were the 2nd year, 3rd year and 4th year AB Economics students of PSU Lingayen Campus enrolled for the 1st Sem, S.Y 2015 – 2016. As per records of the Registrar’s Office, the total number of 2nd to 4th year students was 111 which represents the general population.

The major tool used in the gathering of data needed to achieve the study’s objectives was a survey questionnaire which was designed and made in consultation with the adviser. On the dissemination of the survey questionnaire, the researchers used the face to face interview to the respondents. A web questionnaire was also created where the AB Economics students might just answer the questionnaire

online. The online questionnaire was available for access at www.psuecon.com. Both survey and web questionnaires have four parts which are as follows: Part I describes the socio-economic characteristics of the respondents which provide the necessary data about the profile of the AB Economics students. Part II asks the level of computer and internet literacy of the students in terms of the following general computing skills, file Management, MS Office and PDF, email and internet/online navigation. Part III is about the extent of preparedness of the AB Economics students on the adoption of E-learning. Part IV examines the level of awareness of AB Economics students about E-learning. Part V measures the level of acceptability of the respondents on the adoption of an E-learning. Part VI finds out the perceived problems encountered by AB Economics students on the adoption of E-Learning system.

In pursuing the research problem, the researchers reviewed literature and studies related to preparedness of students on the use of E-learning and those available in the internet were used. After the approval of this research in proposal stage, a letter noted and approved by concerned authorities was prepared to conduct a survey among AB Economics students in PSU Lingayen Campus. The researchers distributed and administered the survey questionnaires to the students.

After the data collection, results were organized, tabulated and statistically analyzed. Data were analyzed with the use of various statistical tools such as frequency counts, percentages, ranking, average weighted mean and Analysis of Variance (ANOVA).

RESULTS AND DISCUSSION

I. Socio-Economic Profile of the AB Economics Students

This section presents the frequency counts and percentage distribution of the socio-economic profile of the students in terms of age, sex, college year level, frequency of browsing internet, websites visited, internet-enabled device owned, and average weekly internet expenses

Table 1.a Frequency and Percentage Distribution of AB Economics Students According to Age

Sex	Frequency	Percentage (%)
17 – 18	28	25.2
19 – 20	60	54.1
19 – 20	60	54.1

21 – 22	17	15.3
23 and above	6	5.4
Total	111	100.0

Table 1.a presents the distribution of the respondents according to their age. The age group with the highest frequency is 19 – 20 years old with 60 respondents (54.1 %) while there are 6 respondents (5.4 %) who are 23 years old and above. This suggests that the majority

of the respondents are 19 – 20 years old which is the most common age group among third year and fourth year AB Economics students in PSU Lingayen.

Table 1.b. Distribution of AB Economics Students According to Sex

Sex	Frequency	Percentage (%)
Male	29	26.1
Female	82	73.9
Total	111	100.0

Table 1.b shows the distribution of AB Economics students according to sex. Majority or 82 respondents (73.9 %) are females and only 29 respondents (26.1%) are males. This means that AB

Economics course is dominated by females in terms of number. This could be also attributed on the premise that population of females is higher than males in PSU Lingayen.

Table 1.c. Distribution of AB Economics Students according to College Year Level

College Year Level	Frequency	Percentage (%)
Second Year	29	26.1
Third Year	40	36.0
Fourth Year	42	37.8
Total	111	100.0

Table 1.c table shows the distribution of the students according to year level. The finding reveals that the year level with the highest frequency is fourth year with 42 students (37.8 %) while there are 29

students (26.1 %) who are in second year. This means that the fourth year AB Economics students have the highest number.

Table 1.d. Distribution of AB Economics Students according to Level of Internet Utilization

College Year Level	Frequency	Percentage (%)
Very High	14	12.6
High	30	27.0
Normal	66	59.5
Low	1	9
Total	111	100.0

Table 1.d shows the distribution of the students according to their level of internet utilization. Based on the data, majority of the students representing 66 or 59.5% have normal level of internet utilization while there is 1 or .9% with low level of internet access.

The finding implies that AB Economics students averagely access the internet which could be valuable for their educational learning, social networking and gaming experience.

Table 1.e. Distribution of AB Economics Students according to Website Visited

Websites Frequency Visited	Frequency	Percentage (%)
Social networking sites (Facebook, twitter, etc.)	67	60.4
Educational sites	30	27.0
Online game sites	4	3.6
Economics sites	10	9.0
Total	111	100.0

Table 1.e shows the distribution of the students according to websites frequently visited. The finding reveals that 67 or 60.4 % of the students are frequently visiting social networking sites (Facebook, twitter, etc.), followed by 30 or 27.0% who are visiting Educational sites (wikepedia etc.). There are 4 or 3.6% who are

visiting online game sites which obtained the lowest percentage. The finding matches with the study of Delos Reyes (2013) wherein he ascertained that most of the college students in Metro Manila frequently visited social networking sites and few accessed educational sites.

Table 1.f. Distribution of AB Economics Students according to Internet-enabled Device/s Owned

Internet device Owned	Frequency	Rank
Desktop Computer	18	4
Notebook Computers (Netbook, Laptop, etc)	41	2
Smartphones	76	1
Tablets	21	3

Table 1.f shows the distribution of the students according to their internet-enabled device/s owned. The finding discloses that most of the owned smartphones, ranked 1 whereas least of the respondents possessed desktop computers, ranked 4. This implies that most of the AB Economics students possessed smartphones and

notebook computers as their internet-enabled devices basically used for internet surfing, chat and message, multimedia (documents, picture, video, songs), among others. This also suggests that there is a particularly high level of sophistication in the use of internet devices among the majority of the students.

Table 1.g. Distribution of AB Economics Students According to Average Weekly Internet Expenses

Weekly Internet Expenses	Frequency	Percentage (%)
Php 0 –50	64	57.7
Php 51 – 100	28	25.2
Php 101 –150	14	12.6
Php 151 – 200	1	.9
Php 201 – 250	2	1.8
Php 251 and above	2	1.8
Total	111	100.0

Table 1.g shows the distribution of the students in terms of their average weekly internet expenses. The finding indicates that the average weekly internet

expenses falls between 0-50 average which got the highest frequency corresponding to 57.7% while the

lowest percentage with 0.9% has weekly internet expenses of 151 – 200.

This means that most of the AB Economics students spend less on internet services supported by their average weekly internet expense of 0 – 50.

II. Computer and Internet Proficiency of AB Economics Students

Table 2. Level of Computer and Internet Proficiency of AB Economics Students

Computer and Internet Proficiency Indicators	Mean	Descriptive equivalent
General computing skills		
Use the basic functions of computer hardware components	3.11	Average
Use help menus to find my questions	3.17	Average
Understand file extensions and difference between file types (e.g. doc, docx, gif, html, ppt, mp3, etc.)	3.30	Average
Start and exit a computer program	3.56	High
Close/minimize/hide windows	3.59	High
Turn on and shut down a computer property	3.77	High
Use the mouse and right-click menu functions	3.55	High
Use keyboard shortcuts	3.28	Average
Average Weighted Mean	3.42	High
File management skills		
Navigate through files and directories (e.g using windows explorer)	3.21	Average
Organize, copy and paste files in directories	3.43	High
Move unwanted files into my recycle bin and delete them permanently from my hard drive	3.23	Average
Delete and rename files	3.38	Average
Move a file from a hard drive to a USB drive	3.30	Average
Use search command to locate a file	3.31	Average
Install a software program	3.25	Average
Use keyboard shortcuts	3.41	High
Average Weighted Mean	3.32	Average
Microsoft office and PDF skills		
Create a basic word document	3.35	Average
Create a basic excel spreadsheet	3.42	High
Create a simple presentation using PowerPoint	3.48	High
Create a PDF (Portable Document Format) file	3.27	Average
Convert office files (word, excel and power point) into PDF	3.02	Average
Average Weighted Mean	3.31	Average
Email Skills		
Create and activate an e-mail account (e.g., Yahoo, Gmail, etc.)	3.47	High
Compose, send, receive, reply to and forward e-mail messages	3.35	Average
Attach/remove documents to/from e-mail messages	3.38	Average
Understand and apply basic Email etiquettes	3.22	Average
Average Weighted Mean	3.36	Average
Online/internet Skills		
Use the browser (Chrome, Internet Explorer, etc.) basic commands to surf the Internet	3.50	High

Use search engines (Google, Yahoo, etc.) to locate desired information from the internet	3.45	High
Download and save files from Web (e.g., text, graphic, PDF)	3.43	High
Fill up or answer online quizzes and tests	3.27	Average
Use social and communication sites (Facebook, Twitter, etc.) online	3.51	High
Understand that copyright restrictions apply to computer software and Internet documents	3.27	Average
Average Weighted Mean	3.41	High

Table 2 shows the distribution of the students in terms of their level of computer and internet proficiency. As can be gleaned from the table, five major indicators are determined to measure the level of computer and internet proficiency of the AB Economics students which include general computing skills, file management skills, Microsoft Office and PDF skills, Email and Internet skills. In terms of general computing skills, students have high level of computer proficiency supported by an average weighted mean of 3.42. In terms of file management skills, students obtained an average weighted mean of 3.32 descriptively rated as average. In terms of office management skills like creating word documents, excel spreadsheets, PowerPoints presentation and PDF files, they have an average level of computer proficiency with an average weighted mean of 3.31. With regards to E-mail skills, students have average proficiency with an average weighted mean of 3.26 which means that they have typical knowledge on creating an email account, composing and replying e-mail messages and attaching documents from e-mails. In account for online/internet skills, students have high internet proficiency represented by an average weighted mean of 3.41 which suggests that they have the usual knowledge of using

internet browsers, search engines, social networking, downloading files, etc. The finding implies that all the participating students have attitudes towards online/internet skills they felt confident in using computers, enjoyed using e-learning in their studies, believed in the benefits of e-learning, and would be interested in studying courses that used e-learning. In particular, students believed strongly that e-learning would give them the opportunity to acquire new knowledge and enhance their learning experiences; students reported moderate enjoyment of using e-learning for studies. Using cross tabulation, it was found out that the mean rating on the level of computer internet proficiency of AB Economics male students (3.39) is higher than that of female students (3.31). Likewise, the mean rating of fourth year students (3.59) is highest among other year levels comparing it to second year (3.18) and third year (3.19). The finding coincides with the study of Mitra (2012) where he concluded that men were more positively predisposed toward computers and have higher level of comfort in use and proficiency than women. Ong & Lai (2006) also claimed that women generally experienced more computer anxiety and a lower degree of perceived usefulness and perceived ease of use than men.

III. Awareness on E-Learning of the AB Economics Students

Table 3 Level of Awareness on E-Learning of the AB Economics Students

Indicators for the Level of Awareness on E-Learning	Mean	Descriptive Equivalent
I am aware that E-learning comprises all forms of electronically supported learning and teaching.	3.08	Moderately Aware
I know that E-learning is likely to be utilized to reference out-of-classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum.	3.11	Moderately Aware
I know that E-learning is essentially the computer and network-enabled transfer of skills and knowledge.	3.21	Moderately Aware

I know that E-learning applications and processes include Web-based learning, computer-based learning, virtual education opportunities and digital collaboration.	3.28	Moderately Aware
I know that E-learning content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM.	3.30	Moderately Aware
I know that E-learning can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and audio.	3.07	Moderately Aware
I know that E-learning allows teachers and curriculum designers to deliver content to students almost instantaneously and evaluate the completed work based upon their preferred grading techniques.	3.27	Moderately Aware
I know that E-learning enables students to have access to courses whenever they like rather than based upon a set schedule.	3.30	Moderately Aware
I know that E-learning enables documents, such as course materials and tests to be uploaded and reused over an infinite period of time.	3.39	Moderately Aware
I know that E-learning gives students the power to track their work, as well as keep an up-to-date calendar of assignments and tests.	3.41	Aware
I know that E-learning can facilitate the online class registration process.	3.40	Moderately Aware
I know that E-learning stores and delivers documents that are essential to the core curriculum.	3.48	Aware
I know that E-learning offers a web interface, in which the instructor and student can interact, via email and discussion forums.	3.15	Moderately Aware
I know that E-learning can create course calendars and class reminders.	3.32	Moderately Aware
I know that E-learning allows for simple and straightforward assessments and testing through quizzes and reinforcement activities to ensure that participants are really absorbing the material.	3.22	Moderately Aware
I know that through E-learning I can access online resources, lectures and other study materials.	3.36	Moderately Aware
I know E-learning allows a mobile learning environment – anywhere, anytime, anyhow.	3.39	Moderately Aware
I know that E-learning is very time efficient as it eliminates the time you would need to spend on travel, introductions and breaks.	3.44	Aware
I know that E-learning offers online discussions or forum which would be an avenue for teachers and students to connect, interact or communicate with each other.	3.36	Moderately Aware
I know that E-learning facilitates greater creativity as ideas, resources, knowledge, understanding and skills, which can be shared easily, regardless of the location.	3.32	Moderately Aware
Average Weighted Mean	3.293	Moderately Aware

Table 3 shows the distribution of the students in terms of their level of awareness about E-learning. The data revealed that among the 20 indicators that determined the level of awareness of students about E-learning, three (3) are descriptively interpreted as aware which include “I know that E-learning stores and delivers documents that are essential to the core curriculum” with a mean of 3.48, “I know that E-learning is very time efficient as it eliminates the time

you would need to spend on travel, introductions and breaks”, with a mean of 3.44 and “I know that E-learning gives students the power to track their work, as well as keep an up-to-date calendar of assignments and tests” with a mean of 3.41. On the other hand, 17 indicators are descriptively rated as moderately aware comprising of such items as “I know that E-learning can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and

audio, with a mean of 3.07, “I am aware that E-learning comprises all forms of electronically supported learning and teaching”, with a mean of 3.08, “I know that E-learning is likely to be utilized to reference out-of-classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum”, with a mean of 3.11, “I know that E-learning offers a web interface, in which the instructor and student can interact, via email and discussion forums”, with a mean of 3.15, among others.

The finding simply suggests that most of the AB Economics students are moderately aware about the e-learning system supported by an over-all average weighted mean of 3.29. Using cross tabulation, it is analyzed that the mean rating on the level of awareness of male students (3.38) is higher than that of female students (3.26). Likewise, the mean rating of third year students (3.45) is highest among other year levels comparing it to fourth year (3.37) and second year (2.96).

IV. Acceptability on the Adoption of E-Learning of AB Economics Students

Table 4. Level of Acceptability on the Adoption of E-Learning of AB Economics Students

Indicators for the Level of Acceptability of Adoption of E-Learning	Mean	Descriptive Equivalent
I agree that E-learning will be useful in my education.	3.44	Accepted
I am willing to use E-learning because I have a really good reason for taking an online course.	3.41	Accepted
I agree that E-learning enables me to accomplish my educational tasks and activities more quickly.	3.45	Accepted
I believe that E-learning makes it easier for me to plan and control my course work.	3.35	Moderately accepted
I agree that using E-learning will improve my academic performance.	3.43	Accepted
I know that E-learning will increase the possibilities of communication with my teacher/s.	3.29	Moderately accepted
I agree that E-learning increases the possibilities of communication with other students	3.33	Moderately accepted
I believe that E-learning encourages me to search for more facts than the traditional methods	3.41	Accepted
I have a confidence in E-learning because it fits my style of learning and studying.	3.38	Moderately accepted
I agree that E-learning will be easy to use and never frustrating and will not require a lot of mental effort.	3.44	Accepted
I believe that E-learning will enhance level of computer and internet proficiency.	3.50	Accepted
I agree that E-learning will improve my social, communication and analytical skills.	3.47	Accepted
I believe that using E-learning improves my prestige among my teachers and other students	3.44	Accepted
I believe that E-learning will be easy to learn and understand	3.41	Accepted
I am willing to e-mail or have discussions with students and teachers through E-learning	3.44	Accepted
Average Weighted Mean	3.413	Accepted

Table 4 presents the distribution of the students in terms of level of acceptability on the adoption of E-Learning. The data disclose that among the 15 indicators that determined the level of acceptability of students about

E-learning, eleven (11) are descriptively interpreted as accepted which include “I believe that E-learning will enhance level of computer and internet proficiency”, with a mean of 3.50, “I agree that E-learning will improve my social, communication and analytical

skills”, with a mean of 3.47, “I agree that E-learning enables me to accomplish my educational tasks and activities more quickly” with a mean of 3.45, “I agree that E-learning will be useful in my education”, “I agree that E-learning will be easy to use and never frustrating and will not require a lot of mental effort” and “I believe that using E-learning improves my prestige among my teachers and other students”, with a mean of 3.44. Moreover, four (4) indicators are descriptively rated as moderately accepted which encompass of “I have a confidence in E-learning because it fits my style of learning and studying, with a mean of 3.38, “I

believe that E-learning makes it easier for me to plan and control my course work”, with a mean of 3.35, “I agree that E-learning increases the possibilities of communication with other students”, with a mean of 3.33, and “I know that E-learning will increase the possibilities of communication with my teacher/s.”, with a mean of 3.29. The finding indicates that most of the AB Economics students are amenable on the acceptance of the adoption of E-learning as an alternative form of learning given by the total average weighted mean of 3.41, descriptively rated as accepted

V. Preparedness on the Adoption of E-Learning of AB Economics Students

Table 5. Extent of Preparedness on the Adoption of E-Learning of AB Economics Students

Extent of Preparedness of AB Economics students	Mean	Descriptive Equivalent
I have the knowledge necessary to use E-learning.	3.21	Moderately Prepared
I am willing to exert an effort time and effort to learn quickly the system and processes of E-learning.	3.43	Prepared
I will take the initiative to exert time and effort to improve my computer and internet literacy.	3.35	Moderately Prepared
I will spend 10-20 hours each week to access online courses via E-learning.	3.25	Moderately Prepared
I am willing to spend for internet service in order to access E-learning.	3.23	Moderately Prepared
I have the willingness and ability to purchase an internet-capable device like laptop, desktop, tablet or smartphone for E-learning access.	3.18	Moderately Prepared
I will acknowledge that E-learning is an essential supplementary form of learning and offers a lot of educational benefits to students.	3.19	Moderately Prepared
I can get technical support from technicians/teachers for whatever concern or query that may arise regarding the use of E-learning	3.12	Moderately Prepared
I will support and assist my teacher/s in the adoption of E-learning as a supplementary form of learning.	3.20	Moderately Prepared
I will create an account or register courses in E-learning.	3.41	Prepared
I am excited and ready to learn from things I hear and see, like lectures, audio recordings and videos which will be embedded in the E-learning courses.	3.30	Moderately Prepared
I will be comfortable with the use of E-learning	3.43	Prepared
I will not be intimidated using the e-learning based courses.	3.17	Moderately Prepared
I will be ready to participate actively in the discussion of E-learning.	3.34	Moderately Prepared
I will acknowledge that there are challenges and problems what will be met by students and learning in adopting E-learning.	3.24	Moderately Prepared
Average Weighted Mean	3.267	Moderately Prepared

Table 5 shows the distribution of the students in terms of their extent of preparedness on the adoption of E-Learning. The data show that among the 15 indicators

that determined the level of preparedness of students on the adoption of E-learning, three (3) are descriptively interpreted as prepared including “I am willing to exert

an effort time and effort to learn quickly the system and processes of E-learning” and “I will be comfortable with the use of E-learning”, with a mean of 3.43 and “I will create an account or register courses in E-learning”, with a mean of 3.41. Moreover, four (12) indicators are descriptively rated as moderately prepared which encompass of “I will take the initiative to exert time and effort to improve my computer and internet literacy”, with a mean of 3.35, “I will be ready to participate actively in the discussion of E-learning.”, with a mean of 3.34, “I am excited and ready to learn from things I hear and see, like lectures, audio recordings and videos which will be embedded in the E-learning courses”, with a mean of 3.30, “I will spend 10-20 hours each week to access online courses via E-learning.”, with a mean of 3.25, among others.

The finding indicates that most of the AB Economics students are moderately prepared on the adoption of E-learning provided by the total average weighted mean of 3.27. This suggests that the students are willing to effort time and effort to learn quickly the system and processes of E-learning, take the initiative to exert time and effort to improve their computer and internet

literacy, amenable to spend 10-20 hours each week to access online courses via E-learning, acknowledge that E-learning is an essential supplementary form of learning and offers a lot of educational benefits to students. Likewise, students are ready to create an account or enroll to e-learning courses, will be comfortable and will not be intimidated using E-learning and will acknowledge I will acknowledge that there are challenges and problems what will be met by students and learning in adopting E-learning.

Using cross tabulation, the level of preparedness on the adoption of E-learning differs considerably between male and female students wherein it is determined that the mean rating of male students (3.42) is higher than that of female students (3.21). This means that female AB Economics students display a substantially higher level of preparedness compared to the male students. Likewise, the mean rating of fourth year students (3.45) is highest among other year levels comparing it to third (3.22) and second year (3.06). This also means that female fourth year students display a significant higher level of preparedness compared to lower year levels.

VI. Significance Difference between Extent of Preparedness of AB Economics Students and their Profile Variables

Table 6. Significance Difference between Extent of Preparedness of AB Economics Students and their Profile Variables

Variable	Indicators	Mean (Level of Preparedness)	F value	Significance Level	Interpretation
AGE	17 - 18	3.1024	1.348	.263	Not Significant
	19 - 20	3.2522			
	21 - 22	3.3961			
	23 and above	3.8111			
SEX	Male	3.4184	1.282	.260	Not Significant
	Female	3.2130			
YEAR LEVEL	second year	3.0621	1.935	.149	Not Significant
	Third year	3.2233			
	Fourth year	3.4492			
LEVEL OF INTERNET UTILIZATION	Very high	2.8905	1.491	.221	Not Significant
	High	3.4511			
	Normal	3.2576			
	Low	3.6000			
	Social networking sites (facebook, twitter,etc.)	3.3015			Not Significant

WEBSITES VISITED	Educational sites (wikipedia etc.)	3.3133	.539	.657	
	Online games sites	2.9500			
	Economics sites	3.0200			
INTERNET-ENABLED DEVICES OWNED	Desktop computer	3.4222	.464	.708	Not Significant
	Notebook computers (netbook, laptop etc.)	3.1987			
	Smartphones	3.2544			
	Tablets	3.5500			
WEEKLY INTERNET EXPENSES	0-50	3.3240	2.658	.026	Significant
	51-100	3.1738			
	101-150	2.8857			
	151-200	3.4000			
	201-250	5.0000			
	251 and above	3.6000			

Table 6 depicts the findings on the significant difference between the extent of preparedness across the profile variables of the AB Economics students using ANOVA. The data disclose that among the seven (7) profile variables analyzed, six were found to have no statistical significant difference with the level of preparedness. This means that age, sex, year level, level of internet utilization, websites visited and

internet-enabled devices are not significantly different with that of level of preparedness of the AB Economics students in adopting E-learning. Meanwhile, one variable which is “Weekly Internet Expenses” was found to have statistically significant difference with the level of preparedness on the adoption of E-learning supported by a significance level of 0.026.

Table 10. Perceived Problems on the Adoption of E-learning of AB Economics Students

PROBLEMS IN THE ADOPTION OF E-LEARNING	Frequency	Rank
Lack of knowledge about E-learning system and processes.	35	5
Limited knowledge of computers	33	6
Lack of internet skill	25	7
Limited computer time	50	3
Limited access to the internet	78	1
Lack of confidence to use technology in E-learning environment	12	8
Costly usage of E-learning through internet access	51	2
Lack of internet-enabled devices such as desktop computer, laptop, tablet, smartphone, etc.	43	4

Table 9 shows the finding on the perceived problems on the adoption of E-learning of AB Economics students. Among the perceived problems considered, the limited access to the internet (ranked 1) is often mentioned as being of particular problem, especially among second year students. Also, 51 of the students indicated that costly usage of E-learning through internet access (rank 2) and a further 50 said they had limited computer time

using the internet caused by insufficient budget. Interestingly, only 12 students revealed that they have lack of confidence to use technology in E-learning environment which underscores the claims made by most students that they are willing and confident to use or accept E-learning. This further shows, by its results, that the problems of lack of knowledge of E-learning and computer skill, limited computer time, limited



access to the internet, costly usage of E-learning through internet access and lack of internet-enabled devices may have a reciprocal effect on the rate or

extent at which preparedness or acceptability on the adoption of E-learning is considered.

CONCLUSION AND RECOMMENDATION

Based on the findings of the study, the researchers arrived at the following conclusions:

1. In view of the socio-economic profile of AB Economics students, most of the them are female, have an age bracket of 18 – 19 years old, possess a normal level of internet utilization and frequency visit social networking sites, owned smartphones as their internet-enabled device and spend less on internet services.
2. AB Economic students have high level of computer and internet literacy in terms of general computing skills and online internet skills.
3. AB Economics students are moderately aware about E-learning system supported by an over-all average weighted mean of 3.29.
4. AB Economics students accept the adoption of E-learning as an alternative form of learning given by the total average weighted mean of 3.41, descriptively rated as accepted.
5. AB Economics students are moderately prepared for the adoption of E-learning. This suggests that students are willing to effort time and effort to learn quickly the system and processes of E-learning, take the initiative to exert time and effort to improve their computer and internet literacy, amenable to spend 10-20 hours each week to access online courses via E-learning, acknowledge that E-learning is an essential supplementary form of learning and offers a lot of educational benefits. Likewise, students are ready to create an account or enroll to e-learning courses, they find E-learning comfortable and will not be intimidated to it and acknowledge that there are challenges and problems to be met using E-learning.
6. Profile variables of the AB Economics students such as age, sex, year level, level of internet utilization, websites visited and internet-enabled devices are found to have no significant difference with that of level of preparedness in adopting E-learning. Interestingly, one variable

which is “Weekly Internet Expenses” was found to be statistically different. Thus, null hypothesis was accepted that there is no significant difference between the extent of preparedness of the AB Economics students in the adoption of E-learning system and their profile variables.

7. Limited access to the internet was considered to be the top problem as perceived by AB Economics students in using E-learning.

The recommendations of the study are as follows:

1. To increase or improve the level of computer and internet literacy especially on MS Office, PDF, file management and Email skills, a seminar or training should be conducted for the AB Economics students. The syllabi for computer courses (Computer 101 and Computer 102) should also be intensified by incorporating more relevant knowledge, information and skills to these subjects to achieve enriched learning experiences of the AB Economics students on computer and internet.

2. Since AB Economics students are moderately aware about E-learning system, a seminar or training should be conducted to enhance and develop awareness on the nature, processes and applications of E-learning system which can be initiated by the AB Economics program.

3. Faculty members of the AB Economics program should encourage and motivate the students the use of E-learning. In order for the students to increase their readiness on the utilization of E-learning, a series of hands-on trainings should be provided to them.

4. Future studies should be conducted such as examining the level of knowledge and literacy on the use of E-learning among AB Economics students.

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