

Assessment of the Use of Internet Facilities among Pre-Service Teachers in University Of Ilorin, Nigeria

Ogunlade, Oyeronke Olufunmilola Phd¹, Fagbola Oluwafunmilayo Faith²,
Ogunlade Amos Akindele Phd³, Amosa Abdulganiyu Alasela⁴

^{1,2,3}Department of Science Education University of Ilorin,

⁴Department of Arts and Social Sciences Education University of Ilorin,

Abstract: *This study assessed the internet facilities among pre-service teachers in University of Ilorin, Ilorin, Nigeria. The use of internet facilities based on gender was also examined. The instrument used was Questionnaire on the assessment of the use of internet facilities among pre-service teachers in the University. All pre-service teachers in faculty of education, university of Ilorin were the population for the study. One hundred and fifty (150) students in 400 level were randomly sampled, 89 were males (59.3%) while 61 were females (40.7%). Frequency counts and percentage were used to answer the three research questions asked in the study. The results showed that; 80% of the respondents had a positive attitude towards the use of internet facilities and they believed that internet facilities could generally provide better learning experiences, 62% agreed that males were more internet literate while 38% disagreed with this submission. Based on the findings, the following recommendations were made, training should be emphasized for pre-service teachers so as to promote effective teaching and learning, female pre-service teachers should be encouraged to be part of change and pre-service teachers should learn to balance their time when it comes to surfing social sites and studying.*

Key words: *Assessment, pre-service teachers and internet facilities.*

Submitted Date 06 June 2013

Accepted Date: 11 June 2013

I. Introduction

1.1 Background of the problem

Technology is the process of using scientific, material and human resources in order to meet human need and purpose. Information Communication Technology (ICT) is the use of information in order to meet human need or purpose including the use of contemporary devices such as the internet. Internet can be defined as a global network of computer that connects one or more people together to share vital information all over the world. To affectively fit in the global arena, organizations and institutions have the internet as a veritable tool (Kahn and Cerf, 1999). According to Onasanya, Shehu, Ogunlade and Adefuye (2010), some pre-service teachers who claim to be computer literates are not aware of the rules guiding the use of internet and this makes them behave any how online. Information and Communication Technologies (ICTs), are increasingly being accepted and integrated in teaching, learning and research agenda in Universities in all the nations of the earth (Hites, 2005).

The purpose of technology in teacher training programs is to provide pre-service teachers capability of integrating computer technologies into the Curriculum and instructional activities in classrooms (Novick, 2003). This training will assist pre-service teachers integrate ICTs more effectively into their teaching. They should also be persuaded to spend time using this technology so that it will be part of them. Internet is free for all and allows individual to access information online if only one has a system, media literacy and smooth flow of network service. There is obvious difference in the use of internet facilities between the male and female pre-service teachers. Most female students have less computer experience on internet and most public cafes have higher population of male than female; majority of female tends to visit social sites like face book, yahoo, tweeter and dating sites whenever they have opportunity to access the internet.

Recent studies have posited that there remains a gender imbalance, despite a significant growth in ICT sector in recent years (Chiu, Lin & Tang, 2005; Hashim, 2008). This gender imbalance has been partly blamed for both the shortage of qualified ICT professionals and the under representation of some segments of the population, mostly females (Trauth & Gowcorft, 2006). Previous studies have stated that there is an urgent need to get women involved in the use of ICTs both as literate users and as professionals. This challenge applies to institutions and nations as well as to students and individuals (Gafen & Straub 1997, Wang, Liu & Jong 2000).

Internet facilities help to connect learners, teachers, educators, scholars, researchers, scientist, artists and industrialists to any individual who enrich learning process. Through internet, students register and do examination online, it gives students greater opportunities or motivation to appreciate, learn perfectly with their

environment. They also learn more on internet which make them have current knowledge about the world around them. Pre-service teachers who can use the internet properly always have more experience in their area of specialization which makes them qualified and competent in their field. Internet is a veritable tool which makes individual fit in the global arena, organization and institutions.

1.2 Statement of the problem

Pre-service teachers who are well trained on ICT are competent and have a high degree of self-efficacy. They also make use this knowledge in integration of instructional purposes. The permeation of the Internet technology and computers into classrooms has also created the opportunities for students to be active learners and allowed instructors to be facilitators (Anderson and Reed, 1998; CHEPS, 2000). The attitude of most pre-service teachers towards the use of internet facilities is not encouraging because majority of the students find pleasure in visiting face book, yahoo, tweeter, YouTube, and various dating cites. They also find time to watch pornographic pictures, play games, chat, watch movies, listen to music, and find friends online.

There is a need for pre-service teachers in Nigeria to be competent in the use of computer, its applications and internet services in order to promote effective teaching and learning. For teachers to continue developing their knowledge and skills in the use of emerging technologies for teaching, teacher training institutions could perhaps design and develop more relevant professional development courses for teachers. Pre-service teachers should not use the internet facilities for entertaining purposes but mostly educational purposes.

1.3 Purpose of the study

The main purpose of this study was to assess the use of internet facilities by the pre-service teachers in University of Ilorin, Ilorin, Nigeria.

Specifically, the present study assessed;

1. Attitude of pre-service teachers toward the use of internet
2. Competence of the pre-service teachers in the use of internet
3. Uses of internet facilities by pre-service teachers based on gender

1.4 Research questions

1. What is the attitude of pre-service teachers towards the use of internet facilities?
2. What is the level of competence of pre-service teachers in the use of internet?
3. How do pre-service teachers make use of internet facilities based on gender?

II. Review of the Related Literature

2.1 Meaning and concept of Internet

The Internet or the World Wide Web is indeed a wonderful and amazing addition in the world. The internet can be known as a kind of global meeting place where people from all parts of the world can come together. It is a service available on the computer, through which everything under the use is now at the fingertips of anyone who has access to the internet. The use of the internet as an educational medium is now rapidly expanding (Liaw, 2004). Information can be collected through internet; a lot of information of different types is sorted on the web server on the internet. This means that billions of websites contain different information in the form of text and pictures. One can easily collect information on every topic of the world. For this purpose, special websites, called search engines are available on the internet to search information on any topic around the world.

Users can search for job online using the internet facilities, most of the organizations or departments around the world advertise their vacancies on the Internet. Also, internet facilities help to promote advertisement online. Nowadays, most of the commercial organizations advertise their products through internet. It is a very cheap and efficient way of advertising products. Communication is easy through the help of internet facilities; one can communicate with the other through internet around the world. Different services are provided on the internet such as chatting, video conferencing, email, internet telephony and others. Internet serves as a market place where social needs and textbooks can be purchased. Along with getting information on the internet, one can also shop online. There are many online stores and sites that can be used to look for products as well as buying them using credit cards (Liaw, 2004).

Computer technologies have been viewed as important educational tools and will continue to enhance the learning process (Anderson, & Reed, 1998). It helps to foster students' interest, promote students' commitment to learning, arouses students' interest and promotes distance learning.

2.2 Gender interaction in the use of internet facilities

Female students have less experience about the internet, but have higher level of confidence in programming and systems technology (Li, Kirkup, & Hodgson 2001). Many have regarded the internet as a technological “boy toy”. The problems of gender disparity in the usage and attitude toward the internet have received considerable interest among researchers. Most findings have revealed that females are at a disadvantage compared to their male counterparts where internet usage is concerned. They have unequal access, a low rate of usage and exhibit negative attitudes toward the Internet (Madell & Muncer, 2004).

Although, the internet has been characterized as male-dominated, recent evidence indicates that gender gap in internet use is rapidly diminishing. If more females are using the internet, then there are specific applications they would prefer which would make them to differ from those of their male counterparts (Novick (2003).

2.3 Disadvantages of internet

Users’ personal information such as name, address and so on can be accessed by other people and this can lead such users to danger and exposure to internet fraudsters. If a credit card is used to shop online, they can hack information relating to such cards and eventually endanger the individual concerned.

Pornography and spamming: This is a very serious issue concerning the internet, especially when it comes to young children. There are thousands of pornographic sites on the internet that can be easily found and can be detrimental to children’s use of the Internet. With unlimited access to a variety of websites and the impediment of needing to enter a brothel physically removed, immoral gratification is just the click of a mouse away from any intending customer (Sackson, 1996). Progress is observable in the fight against Internet pornography (except in few cyber cafes) content filters are downloaded and installed to filter unwanted Internet content (Longe & Longe, 2005).

III. Research Methodology

This section discusses ; method used in conducting the research , research type, sample and sampling techniques, instrumentation, procedure for data collection and data analysis techniques.

3.1 Research type

The study adopted the descriptive method of the survey type. Frequency and simple percentages were used for the analysis.

3.2 Sample and sampling technique

The population for the study was all pre –service teachers of faculty of education. 150 pre-service teachers at 400 level were purposively selected as the sample.

3.3 Instrumentation

The instrument used was a researchers- designed questionnaire, divided into two sections; A and B.

3.4 Procedure for Data Collection

The instruments were administered personally by the researchers to the pre-service teachers. The pre-service teachers were allowed to respond to the questionnaire at their own pace. One hundred and fifty questionnaire forms were administered and collected immediately to avoid misplacement by the respondents.

3.5 Data analysis techniques

The research questions were answered using frequency counts and percentages.

IV. Data Analysis and Results

4.1 Introduction

This section presents the analysis and interpretation of data obtained during the course of this study. Data obtained in respect of research questions were analysed using percentage.

Table 1: Demographic Information of Respondents

GENDER	FREQUENCY	PERCENTAGE %
Male	89	59.3
Female	61	40.7
Total	150	100

The demographic information of the participants is given in table 1. The table indicates that male respondents were 89 in number representing 59.3% of the total sample while female respondents were 61 in number representing 40.7% of the total sample. This shows that all the departments in the faculty of education were fairly represented. The distribution of respondents by departments shows that all the five departments had 30 respondents each, representing 20% each of the total sample since 150 respondents were involved which made up 100% of the total sample.

Research questions

The following research questions were answered as indicated;

Research question one: What is the attitude of pre-service teachers towards the use of internet facilities?

Table 2: Attitude of respondents towards the use of Internet facilities

S/N	ITEMS	SA(%)	A(%)	D(%)	SD(%)
1	Internet enhances students' learning	108(72)	42(28)	-	-
2	Internet creates more information between teachers and students	80(53.3)	61(40.7)	8(5.3)	1(0.7)
3	I learn more from internet than I do from textbooks	60(40)	62(41.3)	25(16.7)	3(2)
4	I always use internet to solve my assignment	67(44.7)	71(47.3)	11(7.3)	1(0.7)
5	I find the use of internet interesting	87(58)	61(40.7)	1(0.7)	1(0.7)
6	Internet gives opportunity to learn more	93(62)	51(34)	6(4)	-
7	I taught myself on how to use internet	54(36)	75(50)	18(12)	3(2)
8	I can do deep web searching using appropriate search engine	56(37.3)	77(51.3)	13(8.7)	4(2.7)
9	I can download files from the internet	81(54)	53(35.3)	14(9.3)	2(1.3)
10	I spend more time on the internet than I do studying my books	12(8)	25(16.7)	72(48)	41(27.3)
11	I consider the use of internet as wasting of resources	12(8)	9(6)	49(32.7)	80(53.3)
12	I browse pornographic sites on the internet	9(6)	13(8.7)	45(30)	83(55.3)
13	I engage in internet fraud	6(4)	6(4)	36(24)	102(68)
14	I spend most of my time chatting on the internet	18(12)	32(21.3)	83(55.3)	17(11.3)
15	I use internet for social sites like face book, twitter, yahoo messenger etc more than I use it for my assignment	64(42.7)	63(42)	22(14.7)	1(0.7)
16	I attended ICT training before I can use the internet properly	9(6)	23(15.3)	73(48.7)	45(30)
17	I have a certificate on ICT training	25(16.7)	32(21.3)	52(34.7)	41(27.3)
18	I am conversant with the rules of internet	32(21.3)	82(54.7)	27(18)	9(6)

Based on the results in table 2, there is every indication that responses to the positive statement (item 1-9) shows that over 80% of respondents had a positive attitude towards the use of internet facilities. It is seen that more respondents believed that internet facilities could generally provide better learning experience.

However, the negative statement (item 10-15) showed that 24.7% of the respondents agreed or strongly agreed that they spent more time on the internet than they did when studying their books while 75.3% disagreed or strongly disagreed. Item 11 shows that 14% of the respondents agreed or strongly agreed that they considered the use of internet as wasting of resources while a majority of the respondents representing 86% disagreed or strongly disagreed on that statement. Item 12 showed that 14.7% of the respondents agreed or strongly agreed that they surfed pornographic sites on the internet while 85.3% of the respondents disagreed or strongly disagreed. Item 13 showed that 8% of respondents agreed or strongly agreed that they engaged in internet fraud while a majority of respondents representing 92% disagreed or strongly disagreed. Item 14 showed that 33.3% of the respondents agreed or strongly agreed that they spent most of their time chatting on the internet while 66.7% of respondents disagreed or strongly disagreed. Item 15 showed that 84.7% of the respondents agreed or strongly agreed that they used internet for social sites like Face book, twitter, yahoo messenger etc. more than they used it for their assignments while 15.3% disagreed or strongly disagreed.

Item 16 showed that 21.3% of the respondents agreed or strongly agreed that they attended ICT training before they could use the internet properly while 78.7% of respondents disagreed or strongly disagreed. This implies that a majority of pre-service teachers did not attend ICT training before they could use the internet. Item 17 showed that 38% of the respondents agreed or strongly agreed that they had a certificate on ICT Training while 62% of the respondents disagreed or strongly disagreed. This means that a majority of pre-service teachers did not have a certificate on ICT training. Finally, item 18 showed that 76% of respondents

agreed or strongly agreed that they are conversant with the rules of internet while a few numbers of respondents representing 24% disagreed or strongly disagreed on that statement. The result on this statement showed that a majority of pre-service teachers are conversant with the rules of internet.

Research Question two: What is the level of competence of pre-service teachers in the use of internet? The analysis related to this question is shown in table 3.

Table 3: Competence of respondents in the use of Internet Facility

S/N	ITEMS	Often	Seldom	Not at all
1	I use application programmes like Microsoft Word, Excel, PowerPoint etc.	76(50.7)	60(40)	14(9.3)
2	I create basic presentation package.	34(22.7)	74(49.3)	42(28)
3	I introduce animation into slides.	40(26.7)	63(42)	47(31.3)
4	I assess internet site via its web Addresses	94(62.7)	48(32)	8(5.3)
5	I download files from the internet.	114(76)	30(20)	6(4)
6	I send and receive email messages.	99(66)	42(28)	9(6)
7	I use web authoring tools.	53(35.3)	75(50)	22(14.7)
8	I use the webcam to communicate via chat on the internet.	42(28)	61(40.7)	47(31.3)
9	I can use programming activities like HTML, PHP, C++, etc.	30(20)	60(40)	60(40)
10	I can use search engines like Google, Mamma, Amazon, devil finder, ask.com, MSN etc. effectively	105(70)	35(23.3)	10(6.7)

Item 1 showed that 50.7% of respondents often used application programmes like Microsoft Word, Excel, PowerPoint etc. 40% of respondents seldom used such application programmes while 9.3% did not use them at all. This implies that majority of pre-service teachers used such application programmes. Item 2 showed that 22.7% of respondents often created basic presentation package. A larger population representing 49.3% of the respondents did not create presentation package. This result showed that most pre-service teachers hardly or ever created basic presentation package. Item 3 showed that 26.7% of the respondents often introduced animation into slides, 42% of respondents seldom introduced animation into slide while 31.3% did not introduce animation into slide. Item 4 showed that 62.7% of the respondents often assessed internet sites via web addresses, 32% of the respondents seldom assessed while 5.3% of the respondents did not. This indicates that most pre-service teachers used web address to assess the internet. Item 5 showed that 76% of the respondents often downloaded files from the internet, 20% seldom did such while 4% did not. This indicates that most pre-service teachers often downloaded files from the internet. Item 6 showed that 66% of the respondents often sent and received email messages, 28% of the respondents hardly sent and received while 6% did not. Item 7 showed that 35.3% of the respondents often used web authoring tools, 50% seldom used such while 14.7% did not. This indicates that an average of the pre-service teachers seldom used web authoring tools. Item 8 showed that 28% of the respondents often used the webcam to communicate via chat on the internet, 40.7% seldom used such while the remaining 31.3% did not. Item 9 revealed that 20% of the respondents often used programming activities like HTML, PHP, C++ etc. while 40% seldom or not used at all.

Finally, item 10 showed that 70% of the respondents often used search engines like Google, mamma, Amazon, devil finder, ask.com, msn etc. effectively. 23.3% of the respondents seldom used search engines like Google, mamma, Amazon, devil finder, ask.com, msn, etc. effectively while 6.7% of the respondents did not. This result shows that majority of pre-service teachers could use search engines effectively.

Research Question three: Is there any difference in the use of internet facilities between male and female pre-service teachers? The analysis related to this question is as shown in table 4.

Table 4: Uses of Internet Facilities by Pre-Service Teachers Based on Gender

S/N	ITEMS	SA(%)	A(%)	D(%)	SD(%)
1	A larger population of male is internet literate than female	42(28)	51(34)	41(27.3)	16(10.7)
2	I think males are more advanced in the use of internet than females.	38(25.3)	42(28)	46(30.7)	24(16)

The distribution of respondents by gender difference revealed that 93 respondents representing 62% of the total sample agreed or strongly agreed that a larger population of male was internet literate than females while 57 respondents representing 38% of the total sample disagreed or strongly disagreed. This result implies that males were more educated in the use of internet than females. Item 2 also revealed that 80 respondents

representing 53.3% of the total sample agreed or strongly agreed that males were more advanced in the use of internet than females while 70 respondents representing 46.7% disagreed or strongly disagreed. Based on this result, males were more conversant and advanced in the use of internet facilities than females. So, it could be concluded that there was a difference between male and female pre-service teachers' capability in the use of internet facilities.

V. Conclusion

The following conclusions were drawn from the study based on the findings;

Pre-service teachers considered the use of internet essential to life. Most of them could not do without being connected to the internet for social reasons while others used it for assignment purposes or gaining more knowledge.

Pre-service teachers neglected having a certificate in ICT. They felt it was not essential or not needed. Some may be of the opinion that they do not need a certificate before they can access the internet properly thereby placing little or no importance.

It is sad to note that some pre-service teachers still consider the use of internet as a waste of time and resources in this era and age of advance technology. Most pre-service teachers have frequent access to the internet which has greatly improved their competence in the use of internet.

Pre-service teachers from science education are often more competent in the use of internet facilities than other departments in Faculty of Education.

VI. Recommendations

The following recommendations were made on the basis of the findings;

Pre-service teachers should learn to balance their time when it comes to surfing the internet for social sites and reading their books since a large number tend to spend most of their time chatting away instead of focusing on their academics.

Institutions should make ICT a core course for pre-service teachers so as to produce more competence on ICT.

Issuance of certificate on ICT competence should be taken as a priority. This will serve as a back-up for the degree certificate of pre-service teachers. Female pre-service teachers should erase their notion they have that internet is male domineering. It is not logical to just assume that males are more advanced in the use of internet than females.

The idea that internet is a waste of resources should be dropped because knowledge is power, internet is an advanced way of acquiring knowledge and digging further for more.

Government or institutions should provide suitable ICT training environments and equipments for better learning. The environment is an important factor because it helps an individual to realise his/her potentials.

References

- [1]. R.E. Kahn, & V.G Cerf, (1999): *Internet as a New Medium* (Second edition) New York:
- [2]. S.A Onasanya, R.A Shehu, O.O Ogunalde, and A.L Adefuye, (2010). *Teachers Awareness and Extent of Utilization of Information Technologies for Effective Science and Health Education in Nigeria*.
- [3]. M. Hites, (2005): *Information and Communication Technologies*. New Mexico State University. Retrieved May 14, 2008 from, <http://unoproject.nmsu.edu>.
- [4]. S.L Novick, (2003). *The relationship between computer technology self efficacy and intentions to integrate computer technology in the classroom: factors of influence for women in a teacher preparation program*. Dissertation Abstracts International, 116 (UMI No. 3110790).
- [5]. Y.B Chiu, C.P Lin, & L.L Tang, (2005): *Gender differs: assessing a model of online purchase intentions in e-tail service*. Retrieved from <http://www.emeraldinsight.com/Insight/viewContentItem.do?contentType=Article&contentId=1523880>. *International Journal of Service Industry management*, 16(5), pp 416–435.
- [6]. E.M Trauth, & D. Howcroft, (2006). *Critical empirical research in IS: an example of gender and the IT workforce*. *Information technology & people*, 19(3), pp 272-292.
- [7]. D.Gafen, & D.Straub, (1997): *Gender Differences in the Perception and Use of E-mail An extension of the Technology Acceptance Model*. *MIS Quarterly*, 21(4), pp 389-400.
- [8]. D.K Anderson, and W.M Reed, (1998): *The effects of Internet Instruction, Prior Computer Experience, and Learning*.
- [9]. S.S Liaw, (2002): *An internet survey for perceptions of computers and the world wide web: relationship, prediction, and differences*. *Computers in human behaviour*, 18(1), pp 17-35.
- [10]. N.Li, G.Kirkup, & B. Hodgson, (2001). *Cross-cultural comparison of women students' attitudes toward the Internet and usage: China and the United Kingdom*. *Cyberpsychology & behaviour*, 4(3), pp 415 – 426.
- [11]. D. Madell, & S. Muncer, (2004). *Gender differences in the use of the internet b English secondary school children*. *Social psychology of education* 7, pp 229-251.
- [12]. M. Sackson, (1996): *Computer Ethics: Are students concerned*. First annual Ethics conference. Available online at
- [13]. <http://www.maths.luc.edu/ethics96/papers/sackso>
- [14]. O.B Longe & F.A Longe (2005): *The Nigerian web content: combating the pornographic malaise using content filters*. *Journal of Information technology impact*, Vol. 5, No 2, pp. 59-64,
- [15].