

# **Educational Challenges and Prospects of Using Internet among Library and Information Science Students of Delta State University, Abraka and Ambrose Ali University, Ekpoma in Nigeria**

**Odede Israel**

**Enakerakpo Edesiri**

*Department of Library & Information Science,*

*Delta State University, Abraka*

*E-mail: israeldede@yahoo.com*

## **ABSTRACT**

*The aim of this study is to analyze the educational challenges and prospects of using internet among library and information science students. From the population, 238 undergraduates in the Department of Library and Information Science, Delta State University, Abraka, and Ambrose Ali University, Ekpoma were selected randomly as sample size for the study. A well structured questionnaire was distributed among the 238 undergraduates. The population for this study is 1190. This consists of all full-time undergraduate students in the Department of Library and Information Science, Delta State University Abraka and Ambrose Ali University, Ekpoma. This study employed descriptive statistics such as percentages and frequencies as well as mean to analyze the data. The study reveals that the undergraduates use the internet to access a wide range of information resources, to search for specific information as well as to complement a lecture and gain more knowledge. Responses from the undergraduates also show that slow internet access speed, erratic power supply and too long time to view/download web pages are the major problems encountered by them while using the internet. Therefore, it is recommended among other things that these challenges can be over come through different mechanism such as the purchase of upgraded version of modem by undergraduates which will help to overcome the problem of slow internet access speed.*

**Keywords:** *Educational Prospects, Challenges, Use of Internet, Library and Information Science Students*

## **INTRODUCTION**

The Internet has become a universal library where books, journals, articles and other materials can be sourced right within the confines of individual's homes in any part of the globe. For this reason, the internet has limitless potential of propelling higher education to greater heights as the world drifts into a technology-driven entity in this century. On the other hand, Jagboro (2003) describes the internet as a rich, multi-layered, complex and ever- changing textual environment. Today, the Internet plays a vital role in the teaching and learning process. Students feel more dependent on the Internet for their class assignments and for the latest information of their subject areas than conventional resources of information. Kumar and Kaur (2006) note that students use the Internet mainly for educational purposes rather than for entertainment. Levin (2003) states that the internet as

a new invented technology holds the greater promise humanity has known for learning and universal access to quality education. It allows students to broaden their academic experience, access important information and communicate to others within the academic community. Robinson (2005) notes that the internet can be used as a supplement to traditional instructional methods, to complement a lecture; instructors may ask students to find specified web sites to gain more knowledge about a particular topic. An instructor may also ask students to search the internet for information on services offered in a particular location. In preparation for a class topic such as diversity, students may be asked to search the internet to learn about different ethnic groups or populations at risk. Gray (1999) states that the Internet is used by students for many things such as looking up information on event, conduct literature searches, communicate with other people, as well as search for sports and game information. The internet may also be used to replace the traditional classroom lecture. A number of courses are being developed in which portions of the course or the entire course were offered via the internet. The instructor may place course notes on web pages, may create a video recording of a live lecture for viewing on the internet, or use combinations of these ideas. Forsyth (1998) discusses several methods of preparing courses for the internet including facilitating the use of video clips on web pages as well as the use of forms and other graphics on web pages.

The internet is now widely used as a medium of communication among researchers and students in higher institutions. For instance, Wilkinson, Harries, Thelwall and Prince (2003) report that most of the links between universities home pages were associated with information on research or education. Hence, education today no longer begins and ends within the four walls of schools and universities. In the same vein, Chavez (1997) opines that the internet and computer usage have impacted positively on critical thinking, problem solving, prompt feedback and networking. The strength of internet lies on the unprecedented growth of its network world wide and its ability to connect computers and several individuals without the barrier of geographical space. The use of the internet in education allows a wide range of international resources to be accessed. Resources can be very well organized on the internet, which allow for easy information access and exchange (Hicks, 2002).

Students and teachers alike use the web for academic purposes. The internet allows students and teachers to exchange greetings, engage in intellectual discourse, conduct meetings, share knowledge, offer academic support, brainstorm ideas, learn about other cultures and otherwise broaden their mental horizon (Baker, 2000). The internet provides an activation of sight, sound, and cognitive reasoning, engaging students as active learners (Baker, 2000). Through the internet, many different activities can be assigned to the students, which will enhance their education (Hicks, 2002). One of the most basic uses of the internet by students is to search for sources and information to complete course assignments. The internet's ability to provide students quick access to government documents, scholarly listservs, and databases located at geographically-removed institutions makes it a valuable information source for students (Browne, Freeman and Williamson, 2000). Anything from having discussions with foreign students to research about the universe is possible. Hicks (2002) concludes that the internet is a double-edged sword, as students can access any

educational data-base; learn about any country, they can also be subjected to perverse and deviant topics. Faculty can use the internet infrastructure to improve and supplement traditional courses and degree programs. Library holdings can be digitized and made available both on and off campus. Guernsey (2002) notes that universities in New York routinely provide internet connections in residents' rooms, a circumstance that brings together the most powerful predictors of greater use, access, and education. Mathew and Schrum (2003) in a random survey of 364 students in an Australia university on internet use revealed that students use the internet for communicating with the professors through e-mails by asking for clarification or reporting information, e-mailing papers, and getting feedback. Secondly, they use the internet to get materials (web links, notes, practice, quizzes, hints for test among others) from professional websites, check grades, and access resources from WebCT. A survey of a large Australian university by the Council of Australian University Librarians (CAUL) (2001) reveals that 88% students use the Internet for course related researches. In a related survey, NCES (2001) in the U.S. found that 715 of online students said they relied mostly on internet sources for the last big project they did for school and 345 of online young people aged 12-17 downloaded study aides from the internet (Lenhart, Rainie and Lewis, 2001).

Mashra, Yadav and Bisht (2005) conducted a study on internet utilization pattern of undergraduate students in the College of Agriculture and Technology, Pantnagar, observe that 61.5% of the male respondents and 51.6% of the females used the internet for the purpose of preparing assignments. Papastergious and Solomonidou (2005) state that a study conducted among high school students in Greece to find out the gender issue on use of the internet and favourite activities revealed that the majority of the students, 73 out of 124 students (58%), searched the web for information about school courses, while fewer of them engaged in communication activities via chat, e-mail or video conferencing and in web page creation. A research on campus internet used by Korte and Husing (2007) shows that electronic mail and World Wide Web browsing were the most often used internet applications. Ebersole (2000) in his study reports that respondents to the internet usage among undergraduate students gave the following reasons for using the internet:

Research and learning	52%
Communicate with other people	7%
Access to material otherwise unavailable	5%
Find something exciting fun	8%
Finding something to do when bored	5%
Sports and game information	1%

Considering the use of internet for learning in the UK, the internet is overwhelmingly used in ways that relate directly, or indirectly, to learning. Some 90% of those who use the internet daily or weekly do so to do school work and 94% use it as a research tool for obtaining academic information (Livingstone and Bober, 2006.) In Canada teenagers are reported to spend 2.4 hours per week of their time online on activities explicitly related to learning, such as researching information from school projects. Levin and Arafteh (2002) conducted interviews with American teenagers and found that the internet was used for a

wide range of education-related purposes, from research, to corresponding with teachers and classmates about school projects. In another study based on a review of literature by Kumar and Kaur (2006), it was revealed that students are the most frequent users of the internet. They used the internet mainly for educational purposes rather than for entertainment. Consequently, a number of universities in Nigeria are now making frantic efforts to improve on their ICT infrastructure. Therefore, online learning, using ICT and e-learning, have become the norm across tertiary educational institutions where students have been identified as stakeholders in the development and implementation of online learning.

### **Challenges Encountered by Undergraduates while using the Internet**

With the numerous benefit associated with the educational uses of the internet, certain factors have been identified as problems associated with the educational uses of the internet by undergraduates. Chapman (2010) states that problems encountered by students when searching the internet fall into two basic types:

#### **Skills-based problems**

- Retrieving too much information and retrieving too much irrelevant information
- Frustration with unsatisfactory results.
- Inability to identify and select authorized information.

These problems reflect a lack of ability to limit searches and filter information. They are the results of only being aware of a limited range of searching and coping strategies, due to lack of awareness of appropriate selection criteria to identify suitable information.

#### **Technological-based problems**

- Volatility of sites, missing web pages and changed URLs
- Slow modem speed
- Older versions of web browsers
- Problems due to accidents with cables.

When modem speed is slow, loading web pages and other files can be very slow or fail to occur. Technological problems due to older versions of hardware and software can also be a barrier to students accessing vital information. Unforeseen connectivity problems sometimes occur which can have a major impact on the achievement of deadlines and over which the user has no control. Kumar and Kaur (2006) state that using the internet is not free from problems, the barriers or problems encountered while using the internet mainly come from five factors: slowness of network communication or slow access speed; it takes too long to view Web pages/download web pages; difficulty in finding relevant information; overload of information on the Internet; and the privacy problems. A survey carried out on Internet Use by Teachers and Students in Engineering Colleges of Punjab, Haryana, and Himachal Pradesh States of India by Kumar and Kaur, in 2006 shows that 1,203 (75 percent) respondents face the problem of slow internet access speed which takes a lot of their slot time to retrieve the relevant information. Twenty four percent of the respondents are of the opinion that it takes too long to view Web pages/ download pages. Three hundred and forty seven (21.6 percent) respondents find it difficult to get the relevant information from the internet. Three hundred and twenty seven (20.4 percent) respondents

report that they face the problem of overload of information on the internet. Other respondents 278 (17.3 percent) face the privacy problem on the internet. Robinson (2005) states that despite the problems encountered by students while using the internet for academic purposes, the internet still remain the most powerful vehicle for providing access to unlimited information and such problems can be resolved within a matter of time. He further states that slow internet access speed can be overcome by increasing the bandwidth. Berkley (2000) also notes that orientation training programme for students at regular interval will help to improve their excellence or proficiency in the use of the internet for academic purposes thereby reducing problems encountered by them while using the internet for academic purposes. The main aim of this study is to assess students' educational purposes of using the internet and to investigate the challenges faced by students while using the internet for educational purposes.

## **METHOD**

The study employed a descriptive survey research design, and used a questionnaire for data collection. The population for this study is 1190. This consists of all full-time undergraduate students in the Department of Library and Information Science, Delta State University Abraka and Ambrose Ali University, Ekpoma. The questionnaire was administered to a sample size of two hundred and thirty-eight respondents randomly selected from the two universities. The questionnaire contained items which investigated educational challenges and prospects on the use of internet among library and information science students. All the items were in Likert-format with responses ranging from strongly agree to strongly disagree. This research employed statistical tools such as simple percentage and frequency counts as well as mean to analyze the data.

## **RESULTS AND DISCUSSION**

Table 1 shows that 64.7% of the respondents are female while 35.3% are male. Table 2 shows that majority 144 (60.5%) of the respondents are from Delta State University, Abraka. While 94 (39.5%) of the respondents are from Ambrose Ali University, Ekpoma. Findings revealed that the internet as a new invention holds a lot of educational prospects for young generations. Table 3 with a statistic mean of 2.63 revealed that undergraduates of Library and Information Science Departments in Delta and Edo States use the Internet for various educational purposes. This is because the statistic mean is above the acceptance point of 2.00. The finding revealed that 220 (92.4%) of the respondents use the internet to access a wide range of information resources. Also, 203 (85.3%) of the respondents use the internet to search for specific information. With regard to complementing lecture, 197 (82.8%) of the respondents agreed that they use the internet to complement a lecture and gain more knowledge. It could be deduced from the findings that the internet is a universal library where students can access wide range of information resources, search for specific information and complemente lecture notes. This is in line with Levin (2003) who notes that the internet as a new invented technology holds the greater promise humanity has known for learning and universal access to quality education. It can be inferred from table

4 that using the internet is not free from challenges. The challenges encountered while using the internet by undergraduates of Library and Information Science Departments in Delta and Edo States are mainly slow internet access speed, erratic power supply and too long time to view/download web pages. One hundred and ninety nine (83.6%) respondents indicated that one of the major challenges encountered while using the internet is slow internet access speed. This is in line with Kumar and Kaur (2006) noting that slow internet access is one of the 5 major challenges encountered by students while using the internet. While more than half of the respondents with 187 (78.6%) responses agreed that erratic power supply is another major problem encountered while using the internet.

**Table 1:** Gender distribution of respondents

	<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Valid	Male	84	35.3
	Female	154	64.7
	Total	238	100.0

*Source:* Student's statistics for 2012/2013 academic session (HOD' Office)

**Table 2:** Institutional data

	<b>Institution</b>	<b>Frequency</b>	<b>Percentage</b>
Valid	AAU Ekpoma,	94	39.5
	DELSU, Abraka	144	60.5
	Total	238	100.0

*Source:* Student's statistics for 2012/2013 academic session (HOD' Office)

**Table 3:** Students' Educational purposes for using the internet

<b>Educational Purposes for using the Internet Responses</b>	<b>Agree</b>		<b>Disagree</b>		<b>Undecided</b>		<b>Total</b>		<b>Statistic Mean</b>
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	
I often use the internet to access wide range of information resources	220	92.4	15	6.3	3	1.3	238	100	2.63
I often use the internet to engage intellectual discourse with my lecturers.	113	47.5	104	43.7	19	8.0	236	99.2	
I often use the internet to complement a lecture and gain more knowledge.	197	82.8	30	12.6	10	4.2	237	99.6	
I often use the internet to view video recording of a live lecture	98	41.2	120	50.4	14	5.9	232	97.5	
I often use the internet to search for specific information	203	85.3	21	8.8	5	2.1	238	100	
I often use the internet to send e-mails to ask my lecturers questions or for explanations.	94	39.5	121	50.8	17	7.1	232	97.5	
I often use the internet for information development and to enhance easy communication globally.	192	80.7	30	12.6	14	5.9	236	99.2	

*Source:* Survey, 2013

**Table 4:** Challenges encountered by undergraduates while using the internet

	Agree		Disagree		Undecided		Total	
	No.	%	No.	%	No.	%	No.	%
Slow internet access speed	199	83.6	31	13.0	5	2.1	235	98.7
It takes too long to view/download web pages	175	73.5	46	19.3	16	6.7	237	99.6
Difficulty in finding relevant information	126	52.9	89	37.4	16	6.7	231	97.1
Overload of information on the internet	151	63.4	68	28.6	16	6.7	235	98.7
Subscription fees	165	69.3	52	21.8	17	7.1	234	98.3
Volatility of sites, missing web pages and changed URLs	121	50.8	75	31.5	36	15.1	232	97.5
Problems due to accidents with cables	134	56.3	64	26.9	36	15.1	234	98.3
Older versions of web browsers	133	55.9	80	33.6	21	8.8	234	98.3
Inability to identify and select relevant information	131	55.0	90	37.8	15	6.3	236	99.2
Erratic power supply	187	78.6	37	15.5	14	5.9	238	100

**Source:** Survey, 2013

## CONCLUSION

The use of the internet by undergraduates for educational purposes is on the increase because it has emerged as the single most powerful vehicle for providing access to unlimited information. For most undergraduates, the internet has become the most effective tool that has changed the way they seek for information and interact in the academic world; hence, the educational prospects of the internet cannot be over emphasized. The study showed that majority of the students make use of the internet for educational purposes, such as to access a wide range of information resources, to search for specific information as well as to complement a lecture and gain more knowledge. The study also revealed that the use of the internet is not free from problems or challenges as responses from the undergraduates show that slow internet access speed, erratic power supply and too long time to view/download web pages are the major problems encountered by them while using the internet. These challenges can be over come through different mechanism such as the purchase of upgraded version of modem by undergraduates which will help to overcome the problem of slow internet access speed. Also, increasing the Bandwidth by service providers will solve the problem of slow internet access speed. On the issue of erratic power supply, government and universities management should ensure constant electricity supply to enable students make maximum use of the internet.

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