Assessment of Internet Usage among Undergraduate Students of Shehu Shagari College of Education Sokoto, Sokoto State Nigeria

Bashiru Aliyu Gada & Nasiru Muhammad Sani

Department of Curriculum and Instruction, School of General Education, Shehu Shagari College of Education, P.M.B. 2129 Sokoto, Sokoto State, Nigeria

Abstract

This research work focuses on using the Internet for academic purposes by undergraduate students in the Shehu Shagari College of Education, Sokoto, Sokoto State. Total sample sizes of 335 undergraduate students were drawn from the total population of the study. The instrument of data collection was a IUSQ. The data generated through a five rating structured questionnaire were analyzed, using chi-square and test analyses to test null hypotheses 1 to 2 respectively, with the aid of the SPSS 20.0 version. The findings of the study revealed that: Academic and social media constitutes the major purpose of using the internet with the undergraduate students, daily, weekly and monthly usages of internet constitute the frequency of using internets by the undergraduate students. The study, in its conclusion highlighted significant positive effect of using the internet for academic purposes by the undergraduate students of the Shehu Shagari College of Education Sokoto. Some of the recommendations made were (i) Sokoto state quality assurance department should be organized with a view of helping teachers to develop experience with the best use of internet materials. (ii) Head of departments should be mandated to ensure good school climate that will help to increase internet use through training, workshops and seminars for Lecturers and students.

Keywords: Internet, Internet use; Academic purposes and Undergraduate Students

Corresponding Author: Bashiru Aliyu Gada
Background to the Study

The use of the Internet is now popular among undergraduate students. The Internet offers many benefits which include access to information 24/7, it enables one to work from any location, availability and accessibility of diverse resources that one cannot easily find in the library, up-to-date information, faster and more convenient than the library. Internet is a global mechanism that enables transfer of information to computers and other numerous devices. Internet was established in the early 1960s by the U.S. Department of Defense (Schneider, Evans, & Pinard, 2006), primarily for military purposes. Since then, the continual improvement of the Internet technology has provided an extraordinary level of public accessibility to a wide range of forms of communication, e.g. intra-organizational and inter-organizational email; data storage, management and transfer; social networks like Facebook; text messaging such as Twitter, lectures, research and so forth (Salako and Tiamiyu, 2007).

The internet is widely used by students in institutions of higher education to seek relevant information and materials to complete their assignments or projects. Besides that, most libraries in universities and colleges also subscribe to online journal databases, online books and other academic resources for their students' use. Clearly, the Internet plays a vital role in the lives of students. Nevertheless, the amount of time spent online should be utilized productively. Though, it has some drawback as privacy problem, difficult to search and to find relevant information. Yet, it is more informative, relatively fast and accessible 24 hours a day (Adeya and Oyelaran-Oyeyinka, 2002).

Internet has a wide base that allows access to an enormous range of research information either as full publications, reports, summaries or abstracts (Penny, 2006). The use of the Internet (if maximized) plays a major role in helping undergraduate researchers' access large number of materials from different parts of the world (Ifeoma, 2010). With its advent, lecturers and students can work together without physical interaction between each other and achieve the same objective with that of traditional way of studying in higher institution. Lecturers exchange ideas and communicate effectively since teaching, learning and research is now made easy with the Internet.

For the developing countries like Nigeria to grow and attain its economic and social status, such country must be fully ready to strengthen and empowering its academic institutions, both in science and technological capacity. Hence, the students in their respective field will need an easy, reliable and interactive means of accessing and retrieving information without wasting much time. While the use of this Internet is greatly depends on some associated factors such as purposes, students experience, locations, Internet facilities and services available, among others on academic pursue of the students in their institutions. The use of the Internet has become a central part of the developed and of developing societies around the world. Approximately 29.1 percent of the Nigeria population uses the Internet on a regular basis (Internet World Stats, 2012). Internet appearance in higher education was used as a tool for researchers to communicate and share project data (Jagboro, 2004).

Despite the growing number of Internet usage, Students and lecturers maintain their smart phones and nearby cafe for browsing and networking, contributing to ineffective teaching and learning due to majority of students have no access to free Internet facilities and services and cannot afford buying Smartphone for browsing and downloading academic stuffs and for conducting assignment rather copying assignments from friends (Guidance and Counseling...
Studies in relation to this area have been carried out in different areas such as Internet Access and use among undergraduate students of Bowen University Iwo, Osun State, Nigeria, by Aderonke O. (2013). Assessment of Internet Awareness and use by the Undergraduate students of College of Agriculture and Science Education at Michael Okpara University of Agriculture Umudike by Amooge Dorathy (2016) and others. Therefore, this study is meant to address the problem in this particular area.

However, Shehu Shagari College of Education Sokoto, began with the establishment of a wireless cloud network funded by the Nigerian Communication Commission (NCC) in 2015 which provides 5megabites network service for the entire college. Such service, though commendable for the beginning, but considered grossly insufficient to the college. The network, which is tagged Shehu Shagari College of Education Management Information System (SSCOE MIS) Cloud with one Base Station is expected to serve the five schools in the college, but considering the shortage of power supply without any other tentative alternative in place, coupled with an inadequate subscription by the NCC makes it difficult if not impossible for the students to have access to internet facilities.

**Research objective**
The aim of this study was to assess the level of using the Internet for academic purposes by undergraduate students in the Shehu Shagari College of Education Sokoto.

**Research Questions**
The following questions were formulated to give direction to the study:

1. What is the frequency of internet use among undergraduate students?
2. What is the purpose of Internet use by undergraduate students?
3. Is there any academic purposes of Internet use among undergraduate students?
4. Is there any constraints of internet use by undergraduate students?

**Research Hypotheses**

Ho1: There is no statistical significant academic purpose of internet use among undergraduate students

Ho2: There is no statistical significant difference between the purposes of internet use by undergraduate students

**Literature Review**

Internet resources were studied by several researchers across the globe and Africa. Many studies have found out that Internet use is beneficial to undergraduate students, among them is Hong, Ridzuan and Kuek, (2003) who found out that most students had positive attitudes towards using the internet for learning. A study on internet access and use by undergraduate students of Nigerian University by Ani (2010) shows that internet is extensively used by undergraduate students in Nigerian University. Also, Omotayo (2006) findings show that 89.9% of the students in Obafemi Awolowo University, Ife are using the internet. Awoleye, Siyanbola and Oladipo (2008) study also shows that about 92% of undergraduate students have embraced the internet and are using it consistently.

Similarly, Kaur (2000) surveyed the use of Internet facility at the Guru Nanak Dev. University, Amritsar. The result of the study further indicated that more than two-third of the respondents confirmed Internet were time saving, easy to use, more informative and more preferred.
Siyanbola and Oladapo (2008) used for information development, enhances easy communication, improves academic performance, used as a researched tool, provides solution to the assignments, gives information on entertainment & education, and a source of scholarship. Another study on internet access and use by undergraduate students of Nigerian University by Ani (2010) shows that internet is extensively used by undergraduate students in Nigerian University. Also, Omotayo (2006) findings show that 89.9% of the students in Obafemi Awolowo University, Ife are using the internet.

Salaam and Adegbore (2010) discovered that Internet facilities are available in all private university studies in Ogun State, Nigeria. No restriction is placed on students Internet access and use by the university administration as opposed to that of Salaam (2003) who noted from its findings that excels where restricted to staff only in Nigerian university libraries. Jagboro (2003) study on internet usage in Obafemi Awolowo University, the result shows that 53.42% of students used the internet for research materials and 39.71% for course material. Similarly, Kumar and Kaur study reveals that 69.4% use the internet mainly for educational purposes and 34.7% use internet for entertainment purposes.

According to Jones and Madden (2002), the first Pew internet project was conducted in 2000 and it found that 64% of the students who participated in the study used the internet as an essential aid outside the classroom to browse the WWW. The second Pew Internet Project, which was conducted in 2002, showed that 78% of the students who participated in the study did online searches for their research and homework (Levin, Arateh, Lenhart & Rainie 2002). They also communicated via the internet with other students to share information. The third Pew Internet Project was conducted in 2006. Horrigan (2006) found that the internet had indeed become a primary information resource for students and that students were increasingly using the internet for research. The fourth Pew Internet Project, whose research results were released at the end of 2007 (Estabrook, Witt & Rainie 2007), was conducted among mostly college students. The study found that the students aged 18 to 20 years used libraries due to the availability of computers where they could access high-speed internet and wireless services to find help in solving problems and to satisfy learning outcomes in terms of obtaining information.

Constraints to use of the internet have also been identified in many studies. Irregular power supply, higher cost of internet access, lack of time, slow access speed, etc has been a major constraint. For example, Bankole and Babalola finding shows slowness of the server as the major constraint, Fasae and Aladeniyi found slow access speed with 96% respondent. Kumar and Kaur also found that the delay in retrieving relevant information is the major problems faced by 69.4% of the respondents.

Material and Methods
This section presents the research design, population of the study, sample size, procedure for data collection, research instruments, the validity, and reliability of the instrument and data analyses.

Research Design
The study attempts to examine the internet access and use by undergraduate students of the Shehu Shagari College of Education in Sokoto State. The study employed the descriptive survey research design. Best(2007) reported that the descriptive research method enables the
researcher to obtain the opinion of the representative sample of its target population so as to be able to infer the perception of the entire population. It may be qualitative or quantitative in verbal or in the mathematical form of expression; such studies are factual and hence supply information.

**Population**
The total population of this study comprised of all the 100 to 400 levels both A.B.U. And UDUS Affiliated students of the Shehu Shagari College of Education Sokoto, Sokoto State. This amounted to 2,297 students.

**Sample and Sampling Techniques**
The sample of 335 students was drawn from the total population of 2,297 students using Research Adviser (2006). The table 1 below presents the sampling procedure of respondents for the study:

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Population</th>
<th>Sample Size</th>
<th>Sampling technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students UDU Sokoto</td>
<td>1533</td>
<td>168</td>
<td>Stratified Random Sampling</td>
</tr>
<tr>
<td>Students ABU Zaria</td>
<td>764</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2297</strong></td>
<td><strong>336</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source**: Pilot Study, (2016)

**Research Instruments**
For the purpose of this study, the following questionnaires were employed to extract relevant information from the respondents. The instruments were Self-designed Questionnaire tag: Students Internet usage Questionnaire. (SIUQ)

**Data Collection Method and Instrumentation**
The questionnaires were administered with the help of another member who served as a research core author. Everything was done in classroom situations and supervision was strict to ensure all questionnaires were returned and answered. This also guarantees a high percentage return rate of the questionnaire.

**Validity of the instruments**
To establish the validity, the instruments were subjected to the scrutiny of two experts who evaluated the relevance of each item in the instruments to the objectives. The senior researchers or experts in the field of education was to rate each item on a scale. Their recommendations were used to finally modify questions and therefore focused the tools so as to have the ability to solicit the expected data. The content validity index (CVI) was then computed with the formula;
Reliability of the instruments
Reliability refers to the consistence of the instrument in measuring what was intended to measure (Amin, 2005). A pre-test was conducted after establishing the validity. Twenty respondents from undergraduate students were used in the pre-test to answer the questionnaire. Their responses were computed and analyzed using statistical package for social science (SPSS) software. The results were presented in tabular format. Amin (2005) and Chepkilot (2005) explain that if the value of the Alpha cronbach coefficient obtained were greater than 0.7 then the instrument was reliable. After the analysis an Alpha of 0.872 was obtained as reliability for the whole instrument. This reflected that the instrument was reliable (Bashir, 2017).

Also the reliability for the different constructs of the instrument was computed, and the results are in table 2 below;

Table 2: Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.872</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: Field data (2017)

Method of Data Analysis
Data were analyzed using descriptive statistics, frequency counts, simple percentage, mean and standard deviation presented in tables. Chi-square analysis was used to test the hypothesis of the study with the aid Special Package for Social Science SPSS version 20.0. The mean interpretation was Less than 2.5 mean scored = negative/low level of internet use and more than 2.5 mean scored is positive/high of internet use.

Results and Discussion
The study was carried out in Sokoto State, The data have been collected from undergraduate students in the Shehu Shagari College of Education using Questionnaire guide; about 335 respondents were successfully collected. The data collected was processed with SPSS software to produce the frequencies of the variables. The Chi-squared analyses were employed to find out if there is a statistical significant academic purpose of internet use among undergraduate students while the t-test was used to find out if there is a statistical significant difference between the purposes of internet use among undergraduate students.
Frequency of Using Internets

Source: Field data (2017)

Fig. 1 Frequency of Using Internets

Results in fig 1 shows the frequency of using internets, majority of the respondents 53.73% said monthly, weekly with 19.70%, daily with 19.40%, while 7.6% said never used internet. This implies that daily, weekly and monthly uses of internet constituted the frequency of using internets by the undergraduate students in Shehu Shagari College of Education Sokoto.

Purpose of Using Internets

Source: Field data (2017)

Fig. 2 Purpose of Using Internets
It can be noted from fig 2 that the majority of the respondents, 20.60% said academic activities is the purpose of using the Internets, 23.6% said social media, 13.73% said others, 12.84% said sport activities, 12.54% said newspaper, 6.57% said entertainment and the least internet banking with 6.27%. This implies that academic and social media are the major purpose of using the internet by the undergraduate students in the Shehu Shagari College of Education Sokoto.

Table 3: Academic Purposes of Using Internet

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I seek information from the Internet for learning activities</td>
<td>3.32</td>
<td>1.164</td>
</tr>
<tr>
<td>I search for materials from the Internet to complete my</td>
<td>3.93</td>
<td>1.081</td>
</tr>
<tr>
<td>Assignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I inform my friends concerning useful websites related with</td>
<td>2.76</td>
<td>1.383</td>
</tr>
<tr>
<td>the courses taken.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use email to communicate with my lecturers.</td>
<td>3.42</td>
<td>1.468</td>
</tr>
<tr>
<td>I exchange e-mails with my colleagues to discuss matters</td>
<td>3.45</td>
<td>1.301</td>
</tr>
<tr>
<td>related with my academic work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use the Internet as the main source of information for my</td>
<td>4.04</td>
<td>1.293</td>
</tr>
<tr>
<td>studies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I seek the latest information online to enhance my knowledge.</td>
<td>3.69</td>
<td>1.476</td>
</tr>
<tr>
<td>I access the library website to search for academic books.</td>
<td>4.22</td>
<td>.917</td>
</tr>
<tr>
<td>I use internet forums to exchange opinions on academic</td>
<td>3.42</td>
<td>1.621</td>
</tr>
<tr>
<td>matters with my friends.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use internet to receive video lectures.</td>
<td>3.27</td>
<td>1.932</td>
</tr>
<tr>
<td>Total mean scored</td>
<td>3.5519</td>
<td>.60620</td>
</tr>
</tbody>
</table>

Source: Field data (2017)

Table 3 highlights the academic purposes of using the internets. The result showed that there is a high effect of using internet for academic purposes (with overall mean of 3.55 and SD of .606). This indicates that undergraduate students seek information from the Internet for learning activities, searching academic books and exchange of opinions on academic matters.

Table 4: Constraints of Internet Use

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of network skills</td>
<td>3.36</td>
<td>1.526</td>
</tr>
<tr>
<td>slow internet connection</td>
<td>2.27</td>
<td>1.299</td>
</tr>
<tr>
<td>inadequate network computers</td>
<td>3.13</td>
<td>1.314</td>
</tr>
<tr>
<td>inadequate opening hours of the computer laboratory</td>
<td>3.36</td>
<td>1.526</td>
</tr>
<tr>
<td>lack of access to internet at low cost</td>
<td>3.88</td>
<td>1.372</td>
</tr>
<tr>
<td>few computers in the internet laboratory</td>
<td>3.16</td>
<td>1.665</td>
</tr>
<tr>
<td>lack of power supply</td>
<td>4.50</td>
<td>.594</td>
</tr>
<tr>
<td>Lecturers unwillingness to help</td>
<td>4.55</td>
<td>.498</td>
</tr>
<tr>
<td>inadequate assignment</td>
<td>3.21</td>
<td>1.527</td>
</tr>
<tr>
<td>Inadequate wireless network/Cafes</td>
<td>3.93</td>
<td>1.321</td>
</tr>
<tr>
<td>Total Mean Scored</td>
<td>3.53</td>
<td>.49835</td>
</tr>
</tbody>
</table>

Source: Field data (2017)
Table 3 highlights the problems of using the internets. The result showed that there is a high problem of using the internet (with the overall mean of 3.53 and SD of .498). This indicates that there are lacks of wireless network, few computers in the internet laboratory and lecturers unwillingness to help.

**Analysis of Research Hypothesis**

In order to test the hypotheses, data were analyzed by using chi-squared. Chi-square analyses was employed to find out if there is a statistical significant academic purpose of internet use among undergraduate students while the t-test was used to find out if there is a statistical significant difference between the purposes of internet use among undergraduate students.

**Ho1:** There is no significant academic purpose of internet use among undergraduate students

**Table 4 Chi-Square Tests showing academic purpose of internet use among undergraduate students**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>164.177a</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>208.021</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.350</td>
<td>1</td>
<td>.245</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>335</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square Tests is not significant at the 0.05 level (2-tailed).

Results presented in table 4 showed the Chi-square value showing the significant of academic purpose of internet use among undergraduate students as 164.177 considering the P-value = 0.000 > 0.05, indicating there is significant academic purpose of internet use among undergraduate students. Therefore, the null hypothesis which state there is no significant academic purpose of internet use among undergraduate students is rejected and the alternative hypothesis is accepted, Hence, it is concluded that there is a significant academic purpose of internet use among undergraduate students in Shehu Shagari College of Education Sokoto.

**Ho2:** There is no significant difference between purposes of internet use among undergraduate students

<table>
<thead>
<tr>
<th>Purpose of Using Internet</th>
<th>Test Value = 0</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>40.758</td>
<td>334</td>
<td>.000</td>
<td>4.158</td>
<td>3.96 to 4.36</td>
</tr>
</tbody>
</table>

**. T-test is significant at the 0.01 level (2-tailed).**

Results presented in table 4 showed the t-test value showing the differences between academic purposes of internet use among undergraduate students in 40.758 considering the P-value = 0.000 > 0.05, indicating there is significant differences between academic purposes of internet use among undergraduate students.
use among undergraduate students. Therefore, the null hypothesis which state there is no differences between academic purposes of internet use among undergraduate students is rejected and the alternative hypothesis is accepted, Hence, it is concluded that there is a significant difference between academic purposes of internet use among undergraduate students in the Shehu Shagari College of Education Sokoto.

Summary of Major Findings
The following are the findings from the analysis of data.

1. Academic and social media constitutes the major purpose of using the internet by the undergraduate students in the Shehu Shagari College of Education Sokoto.
2. Daily, weekly and monthly uses of internet constituted the frequency of using internets by the undergraduate students in the Shehu Shagari College of Education Sokoto.
3. There was a high effect of using the internet for academic purposes and undergraduate students seek information from the Internet for learning activities, searching academic books and exchange of opinions on academic matters.
4. There was a higher problem of using internet and lacks of wireless network, few computers in the internet laboratory and lecturer's unwillingness to help constituted the major problems.
5. There is a significant academic purpose of internet use among undergraduate students in the Shehu Shagari College of Education Sokoto.
6. It is concluded that there is a significant difference between academic purposes of internet use among undergraduate students in the Shehu Shagari College of Education Sokoto.

Conclusion
Based On the findings of this study, it was concluded that there was a higher problem of using internet and lacks of wireless network, few computers in the internet laboratory and lecturers unwillingness to help constituted the major problems. Students in Shehu Shagari College of Education Sokoto.

Recommendation
Following the findings and conclusions from this study the following recommendations were made:

1) Sokoto state quality assurance department should be organized with the view of helping teachers to develop experience with the best use of internets materials.
2) Head of department should be assigned a constitutional role to ensure a good school climate that will help to increase internet use through trainings, workshops and seminars for Lecturers and students.
3) In order to improve on the academic standards of the school, instructional supervisors should devise more ways of creating wireless network and maintaining it.
References


Al-Ansari, H. (2006). Internet use by the faculty members of Kuwait University. Emerald Group Publishing Limited. The Electronic Library, 24(6), 791-8


Alkhezzi, F. A. (2002). Internet use of graduate and undergraduate students in the college of education at Kuwait University. PhD project, University of Colorado.


