

Internet Services Utilization Practices of Undergraduates Students in University of Nigeria, Nsukka and Enugu State University of Science Technology

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Abstract

This article reports a survey on the level of usage of internet by the undergraduates of faculty of Engineering of university of Nigeria Nsukka and Enugu state University of science and Technology, Enugu. The study surveyed 246 students of these institutions.. Data were collected by using a structured questionnaire and follow- up interviews with the participants Data were analyzed using frequencies and percentage. The response rate was 71.9 percent. Result indicated that the vast majority of respondents access internet from the library. Most indicated that they used internet for checking their mails, class assignments and social networking. The majority of the participants used internet resources to keep in touch with old friends and for technical reports. A good number indicated that e-mail is the most preferred internet services. Majority are fully satisfied with internet services. The barriers identified among others include insufficient bandwidth, slow speed, information overload etc. It is recommended that internet services should be extended to residential areas and hostels by increasing the bandwidth among others.

Keywords : Students, Engineering, Services, Utilization, Internet.

Introduction

Internet has grown popular among University students. According to internet world stats (2011), there is an estimated 2,267,233,742 internet users in the world. Most of these numbers are students. The internet is acknowledged globally as a technology dominated by young people, and particularly students who are more inclined to exploit internet

resources for education, social interaction and entertainment. (Ramali, 2011; Salako and Tiamiyu cited by Fassae, Aladeniyi, 2012). Not only can they communicate with international students, many students prepare course assignments, make study notes, tutor themselves with specialized multimedia, and process data for research project. Most exchange e-mails with faculty, peers

and remote experts. They keep up to date in their fields on the internet, accessing newsgroups, bulletin boards, listservs, and web sites posted by professional organizations. (Bashir, Mahmood, Shafique, 2013). Internet is a powerful tool for assisting students and their lecturers conduct research. Going to a library and searching through a card catalogue by hand can be laborious and inefficient compared to searching for the same information on a computer (Deore, 2012). Other benefits of internet to students are that "students also use the internet for social communication with increasing frequency: with the advent of social networking sites like Friendster, MySpace, and Facebook, and chat technologies like instant messaging (IM), many college students "build and form social relationships online (Mcmilliam and Marrison cited in Jones, Johnson - Yak, miller Maler, Perez, 2009).

Most Higher institutions in the world and Nigeria in particular have establish internet facilities in their campuses thus making it possible for their faculty members ,students and other researchers to access current and past information through the internet. The University of Nigeria in 2009 established internet facilities on both Nsukka and Enugu campuses of the university with access points in various places on the campuses. These include the main library, student's hostels, offices, residential areas within the university. The students are encouraged to use internet for their academic activities. The library has

computer laboratories where students can access information through the internet. In addition, e-library facilities are available within the library premises; this is made possible with the collaboration of the Mobile Telecommunication Network (MTN). The University of Nigeria Library is currently working to make most of their collections available electronically. This project is expected to make library materials available online via the internet. Similarly, the temporary campus of Enugu State University of Science and Technology (ESUT) has information and communication centre since 2009 where students could access information through the internet. However, internet is only available at the temporary campus university blocks. At the permanent site of the University at Agbani, internet is only available at the staff offices.

Increased use of the internet by students like most other technology has its own positive and negative aspects. With the availability of internet, millions of people are now linked. Information is available in every corner of the world including remote areas. Internet offers many other things that are noticeably unique. For example the currency of the information distinguishes it from the print material. Other services offered include variety of media such as rare books, video, audio, graphics and collection of arts in digital forms, as well as numerous manuscripts. The result of frequent internet use, particularly among university

students, has become a highly controversial issue (Ramli, 2011, Rotsztein, 2003, Thompson, 2003, Kandell, 1998.). Writing on the perception of internet by students, Reyes (2005) argues that “the internet and its search engines have created expectations that digital content is seamless and accessible. Students anticipated all searches to directly connect them to relevant content. The historic library organization of bound indexes and card catalogs that necessitated a two step process is no longer recognized by many library customers, when it is recognized, it is often not preferred”. No doubt internet is affecting the students’ academic activities negatively. Most students depends more on the information they got from the web for their class assignments without first evaluating the content. Writing on the need for the teaching of information literacy, Zhang cited by Gradstein (2007) argues “that despite the ready availability of information in electronic format, people experience difficulty accessing it and navigating in a networked environment and in light of the information explosion there is a clear need of some kind of training on information literacy”. Another striking example is Rambli (2011) description of how students’ plagiarized .He noted that the abundance of information in the internet has led to an increased number of web cheaters among students. They simple use “cut and paste’ and excel’ methods for their class assignment. In their own view,

McBride and Dickstein cited in Thompson (2003) argues that “what has really changed with the advent of the web is that students no longer get most of their information for class assignments from reputable print sources in the library. On the web, scholarly resources, unfounded claims, and advertising are all mixed up together, and librarians have not assessed the information’s reliability before student use it for assignment.”

Knur and Manhas (2008) presented the results of a survey on use of internet services and resources in the engineering colleges of Punjab and Haryana (India) .They found that more than 60 percent of the respondents used the internet services and resources daily, the majority of the respondents (75%) of the respondents used the internet mainly for educational purposes and over 80% of the surveyors browsed information from the internet., over 70% faced problems of slow internet access speed, which uses a lot of their slot time in order to retrieve relevant information among others. Hong, Ridzuan, Kuek (2003) conducted a case study of students attitudes toward the use of internet for learning at a university in Malaysia. Analysis of the data indicated that students had positive attitudes toward using the internet as a tool, adequate basic knowledge of internet and they viewed the learning environment as supportive of using the internet for learning. Salaam and Adegboire (2010) conducted a survey regarding the internet access and use by students of

private Universities in Ogun State, Nigeria. The study showed that internet facilities are available in all the private Universities studied and that students paid for the internet services, there is no restrictions in the use of internet by students, irregular power supply is a problem and that search engines are the most used internet tools among other findings. Fasae and Aladeniyi (2012) surveyed 210 students of faculty of sciences in two Nigerian Universities. The survey revealed that 89% of the science students use the internet for educational, while only 58% uses it for entertainment purposes. On internet resources journal has the highest responses of 83%, while projects recorded the lowest response rates of 35%, e-mail with 100% was the internet services mostly used Safdar, Mahmood, Qutab (2010). Conducted a study at the leadership colleges Network, which indicated that students with access to the internet at home did not have any significant difference with those without internet at home, and that students believed that internet is a tool for teaching and training. Lumbano, Nawe (2004) did a case study of internet use by students of the University of Dares Salaam. The results of the study showed that the level of students' access to the internet is low. This could be attributed to the fact that computers with internet facilities were inadequate. The survey also revealed that the students who had access to the internet were not using it effectively. The result of the study also indicated that the students

use it mainly for communication with friends and relatives more than for academic purposes. Jones, Johnson-Yale, Millermaier and Perez (2009) surveyed US college students use of the internet. The survey showed that although 93% reported having used computers (not just for internet use) for at least six years. It is for the respondents a technology that is as commonplace and unexceptional as the microwave or television. Three quarters (76%) own a computer, while mere three percent do not own a computer the survey also reported that half (50%) of the college students used e-mail the most while online, college students also reported much interested in blogging than the general US population of internet users. One-third (33 percent) of students reported keeping a blog compared to eight percent of US internet user, all the respondents were using the internet frequently because all facilities provided were connection to the internet. It was revealed that the researchers of the university were getting quality information through the internet. Fifty-five percent of the respondents searched for scientific information. In view of the above, the study sought to examine the use of internet by undergraduate students of faculty of engineering, UNN and ESUT both Universities are located at Enugu state Nigeria. The study includes only the undergraduate students of faculties of Engineering in UNN and Enugu state university of science and technology (ESUT) engaged in degree programmes.

Objectives of the Study

The main objective of the study is to investigate the level of usage of internet services by the undergraduates of faculties of Engineering, UNN and, ESU

The specific objectives are to:

- (1) determine the frequency of students' utilization of various internet locations on the campuses;
- (2) identify sources of internet skill acquisition for students;
- (3) determine various internet services utilized by the students;
- (4) determine reasons for use of internet by students;
- (5) determine benefits derived from internet by students;
- (6) determine the extent of satisfaction students obtain from their internet utilization;
- (7) determine students' view on possibility of replacement of library services with internet;
- (8) identify search engines use by students;
- (9) determine problems students' encounter with internet utilization.

Methodology

Area of Study: The study was carried out at the faculties of Engineering, University of Nigeria, Nsukka (UNN), and Enugu State University of Science and Technology (ESUT).

Design of the Study: The survey design was used to obtain appropriate data for the study.

Population of the Study: The population of the study consisted of all the Engineering students of the two

universities under study. The population consists of 1628 students of UNN and 5220 students from ESUT.

Distribution of Population: In the department of Agric and Bio-resources Engineering, 137 students were from UNN while 600 students were from ESUT respectively. In the department of Civil Engineering, 257 students were from UNN while 460 students were from ESUT. From the Department of Electrical Engineering 258 students were from UNN, while 750 were from ESUT. Similarly, from the Department of Electronic Engineering 475 students were from UNN, while none was from ESUT. In the department of Mechanical Engineering 377 students were from UNN, 620 students were from ESUT. From the department of Metrological and material Engineering there were 1144 students, out of these 124 were from UNN while 1020 were from ESUT. From Chemical Engineering Department, all the 470 students were from the ESUT. Finally, from Computer Engineering, 1628 students were from ESUT, while UNN has none. (Sources: University of Nigeria (UNN) 2011/2012 annual statistics Academic planning, Faculty of engineering, Enugu State University of Science and Technology Enugu (ESUT). Note: ESUT has a combined department of electrical and electronics).

Sample for the Study: All the Engineering departments under study were personally visited by the researchers to collect data from the respondents. In selecting the subjects for the study, 5 percent of the students were taken from each of the departments. The decision was in

agreement with Nwana's (2005) postulation that "if the population for a study is a few hundred, a 40 percent or more samples will do; if many hundred, a 20 percent sample will do and if several thousands, a 5 percent of fewer samples will do". A total sample of 342 was taken for the study. The sample of students was randomly selected from each department. 37 surveyors were selected from 7 Engineering departments in ESUT making it a total of 261, and for UNN, 14 respondents were sampled per department and this came to a total of 81, and the grand total for the two institutions was 342. Thus, 342 questionnaires were randomly distributed among engineering students of the two institutions. A total of 246 were usable, resulting in response rate of 71.9 percent.

Instrument for Data Collection: Questionnaires was used to collect data for the study. The respondents were in addition interviewed to fill in any possible gaps in their response. The preliminary list of the instrument was face validated by two experts in library and information science. These experts were requested to critically examine the instruments. All the items in the list were selected with some modification.

Data Collection and Analysis Techniques: A total of 326 copies of the instrument were distributed to the

respondents by hand. A total of 246 copies were returned. Data were analyzed using frequencies and percentage.

Results

The following findings were made

1. Utilization of internet locations by students: Many of the respondents (students) 85 (.34.5%) access the internet from the library, while 83 (34%) access it from their departments. Some of the respondents, 32 (13%) stated that they used the internet from their homes. It was also found that 46(19%) access the internet from other places such as cyber cafes.

2.Sources of internet skills: The majority of the respondents 48 (42%) reported that they learned how to use the internet from guidance, or friends, and colleagues, while 34 (29.5%) of the respondents acquired internet skills via correspondence courses. some of the respondent 106 (16.15%) of the respondents got internet skills by trials and error method. Only 28 (12.4%) of the respondents acquired the skill through programme and courses organized and taught by the university.

3.Various internet services utilized by students

Table 1: Percentage responses on the various internet services used by students

Services	Frequency (%)
E-mail	246 (100%)
World Wide Web	236 (95.9 %)
Search engine (Yahoo, Google etc	201 (81.7%)
Charting	163 (65.4%)
Bulletin Board Services (BBS)	54 (21.9%)
Indexes/ Abstracts	96 (39.2%)
Bibliographies	89 (36%)
Archive	60 (24.8%)
File Transfer Protocol (FTP)	34 (13.8%)

Data presented in Table 1 shows that one of the most important findings of this study has been the discovery of the most popular internet services with 246 (100%) chooses e-mail as the most popular services, it was followed by World wide web with 236 (95.9%), and also followed by search engine

with 201 (81.7%), next was charting, with 163 (65.4%). Others were indexes/abstracts 96 (39.2%), and bibliographies, 89 (36 %), Archive 60 (24.8%) and file transfer protocol, 34 (13.8%).

4. *Reasons for use of internet by students*

Table 2: Percentage Responses on reasons for use of internet services by students

Purpose	Frequency (%)
Research	156 (63.4%)
Checking of e-mail	196 (79%)
Online courses	23 (9.3%)
Entertainment	136 (55.2%)
Educational	193 (78.4%)
Class assignment	225 (91.4%)
Social networking	202(82.1%)

Table 2 shows that the majority of the respondents, 225 (i.e. 91.4%) used internet for class assignment. While 202 (82.1%) percent of them admitted that they used internet mainly for social networking, e- mails. Similarly the study indicated that a good number of the respondents, 193 (78.4%) also used it for educational

purposes and 156 (63.4%) used it for research, while136 (55.2%) agreed that they used it for entertainment. The least number of the respondents, 23 (9.3%) used the internet for online courses.

5. *Benefits of internet to students*

Table3:Percentage Responses on benefits of internet

Benefits	Frequency (%)
Collaborating with other students	206 (83.7%)
Assist in research and learning	226 (91.8%)
Collection of resources	196 (79.6%)
Entertainment	216 (87.8%)
Learning about new things	236 (95.9%)
Keep up to date on current issues	239 (97.1%)
Research update	241 (97.9%)
Socialization	233 (95.7%)

Table 3 shows, that 246 (100%) of the respondents indicated that internet are mostly beneficial for currency of information, equally, 246 (100%) indicated that internet is mostly beneficial because it can be accessed from different locations, similarly, 246 (100%) indicated that it is time saving, 241 (97.9) agree that it helps for research update, 239 (97.1%) keep up to date on current issues, on the other hand, 236, (95.9%) indicated that it is mostly used for learning new things, while 233 (94.7%) agree that it is used for socialization, while 226 (91.8%) showed that it is used to assist in research and learning, 206 (87.8%) indicated that it is mostly used for collaborating with other students. However 212 (86.2%) indicated that it is mostly beneficial for keeping in touch with friends However, only 196 (79.6%) indicated that it is mostly beneficial for collection of resources.

6. Extent of students Satisfaction with Internet Services:

The respondents provided variety of information on their level of satisfaction to internet services. 186 (75.6) of them are fully satisfied with internet services, while 39 (16.0%) are partially satisfied, 12 (5%) are not satisfied and only 12 (3.6%) indicated no comment.

7. Replacement of Library Services with Internet: Finding shows that the majority of the respondents 231 (94%) were of the opinion that the internet will not replace library services, while only 15 (6%) agreed otherwise.

8. Search Engines Used by the Respondents: Report indicates that Google.com and Yahoo.com are the most favorite search engines used by the respondents. This is confirmed by 246 (100%) and 215 (87.3%) of the respondents respectively.

Table 4: Problems of Internet Use by the Respondents Percentage response on problem encounter by internet use by students

Problems	Frequency (%)
Bandwidth problem	214 (86%)
irrelevant information	201 (82%)
Slow speed	246 (100%)
Intrusive advertising	176 (71.5%)

Copyright issues	196 (80%)
Privacy problem	161 (65.4%)
Information overload	199 (80.8%)

Despite its advantages and promises, internet services are being budged by numerous constraints. Table 4 exhibits that the respondent identified problems related to internet use as follows slow speed 246 (100%), availability of information 201 (82%). Bandwidth problem, 198 (86%), copyright issues, 198 (80%) information overload, 199 (80.8%) while the least numbers of respondents indicated privacy 161 (65.4%).

Discussion of Findings

The findings pertaining to the internet services utilization practices of undergraduate students in UNN and ESUT reveals clearly that internet services are embedded in the vast majority of students' lives. They use internet so frequently for their academic and communication activities. The study in table1 found the various internet services used by the respondents. They include among others e-mails, World Wide Web, search engines, Bulletin Board Services. To support this kaur and, Manhas (2008) found that among internet services, e-mail, Browsing the www, search engines are the major uses of the internet by students.

It is clear from the results in Table 2 that the majority of the respondents use internet on daily bases for various academics activities. This is also in line with the findings by Kaur and Manhas

(2008) when it noted that the internet provides a wealth of information on any subject field. Teachers and students are using the internet increasingly and it occupies an important place among various information sources.

Table 3 indicated that the information available on the internet is of much beneficial to students. The students have been able to keep themselves abreast with current information on every subject. No doubt the instant access and availability of the latest information online had led to increased dependency on internet. The internet revolution has given use more options and choices. The combination of internet with the traditional library services will benefit users in getting the right information at the right time.

Finally in Table 4, the study identified various barriers that affects internet use by the respondents. They include: slowness to access, alleviant information, and insufficient bandwidth. This is confirmed by Nigeria internet usage and telecommunication Report (2012) when it noted that Nigeria's internet sector has been hindered by the country's underdeveloped and unreliable fixed-line infrastructure among other.

Conclusion

The findings of the study indicated that students have become increasingly dependent on information resources from internet. Traditionally, the university via the library has provided an infrastructure and a range of tool to expose data and enable access to variety of recourse, the lack of an all-round appreciation of pedagogy by the university in supporting information access via the internet is seen as a critical limiting factor. Recent research indicated that university students in developing countries do not get fully explore or exploit the potentials that internet could bring to developing of one-self and new ways of learning. Internet provides a channel through which knowledge is shared and appropriate resources made at low cost. Ultimately, the investigators concluded that the lack of internet facilities particularly low bandwidth and epileptic power supply are the major obstacle to internet use in these institutions .Given these real challenges, it is important that a best practice method of providing internet facilities is made if the ultimate aim is to have students who could compete with others in developed world.

Recommendations

Based on the findings of this study it is recommended that.

1. Internet facilities provided in the universities should be extended to the residential areas and hostels

2. Bandwidth should be increased so as to cover more areas.
3. Internet use should be part of fresh student's orientation.
4. Computers for accessing internet should be made available at the library for students who could not afford one.

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