Problems of Internet Utilization by Students in Benue State University, Makurdi, Benue State-Nigeria

Nicholas Mfangu Tyonum
Benue State University Library, Makurdi, Nigeria
Hungwa Shidi
Ministry of Information, Makurdi, Nigeria

Abstract:
This paper examined the problems of utilizing Internet by undergraduate students in Benue State University, Makurdi. It also looked at the strategies that could be employed in order to improve undergraduate students' utilization of the Internet. Structured questionnaire was used to elicit responses from 340 undergraduate students who formed the sample population. Findings showed Internet facilities are available in Benue State University, but the number is inadequate; students utilize Internet resources, mainly for education and research purposes; erratic power supply, slow speed, high cost of access/printing, inadequate number of computers and lack of skills are the problems undergraduate students faced in utilizing the Internet. Further findings showed that an alternative source of power, subscription to bigger bandwidth, reduction in cost of access/printing, provision of more computer education/training to the students will help solve the problems undergraduate students encounter in their attempt to utilize the Internet.

Key words: Assessment; Internet Usage; Undergraduate Students

1. Introduction

The Internet is a worldwide collection of computer networks linked together by telephone systems (Ape, 2008). It is also a network of networks in which users at any one computer location can if granted the permission or access, get information from any other computer and sometimes talk directly to users at other computers.

The most widely used part of the Internet is the World Wide Web (WWW) sometimes called the net or web. The web grants access to millions of pages of information. Web browsing is done with a number of web browsers including Internet Explorer, Mozilla Firefox, and Google Chrome among others.

Access to the Internet is becoming everywhere in institutions of higher education. This has been particularly true of countries in the developed world and is becoming true of developing countries as well. Most colleges and universities in developed countries make access to the Internet as easy and transparent as access to phone lines (Mitra, Willyyard, Platt and Parson, 2005). Furthermore, students coming out of the high school systems in those countries are increasingly aware of the opportunities offered by the Internet and are often frequent Internet users prior to entering a university (Mitra, 2003).

The Internet, no doubt, have the capacity of promoting research activities, increasing the speed of searching for documents, easing transfer of information, etc. However, interaction with the students of the university as well as personal observation indicates that, the students of Benue State University are yet to derive maximum benefits from Internet facilities provided for them by the institution. What then are the problems associated with the students' utilization of Internet in Benue State University and how can such problems be solved?

2. Literature Review

Availability of Internet services is the presence of online information services to users. Globally, Asemi (2005) conducted a study at Medical University of Isfahan and found that all the faculties at the university had Internet connectivity and that the university library provides access to databases and online journals to students and staff.

Another study by Manhas (2008) indicated that Baba Farid University of Health Sciences, India enjoys heavy Internet services and that majority of students accessed it from the university workplace. Similararly, Parameshwar (2009) submits that Gulbarga University Library also had full Internet services and access to it is free by all students.

In Nigeria, Aguolu and Aguolu, (2002) stated that some universities are in the process of installing computer/Internet services while others have already hooked their computers on the Internet. Also, a study by Idegayan-Ose, Okosun, Eruanga and Ojo-Igbinoba, (2005) showed that there is insufficient availability of Internet services at Benson Idoha University Library since only 22 computers are fully connected to the Internet using V – Sat.

Commenting on the availability of Internet services, Ezeji (2007) stated that Internet services at the University of Nigeria, Nsukka are very adequate. According to him the university has a total of five hundred computers which are networked.

Several reasons could be advanced for students' use of Internet services in universities. For instance, Adomi, Omodeko and Otodo (2004) stated that students have access to the Internet to supplement notes given by lecturers, complete class assignments, write projects and communicate via e-mail with parents and friends. Similarly, Asemi (2005) opined that students use Internet to access online journals and dissertations as well as communicate through e-mail and other tools. In the words of Ajuwon (2006) students sought Internet information for academic purposes. Contributing, Ojedokum and Owolabi (2003) said, students, lecturers and researchers alike use the Internet to access academic materials for learning, teaching and research purposes. In another study, Tella (2007) observed that undergraduate students use Internet for the purpose of obtaining course related information. On his part, Dike (2000) stated that one of the reasons students prefer Internet resources is because it provides instant access to information from a multiple of choices, and this motivates them to learn. This has overcome time and distance barriers. Lending a voice on the subject, Parameshwar (2009) asserts that students' purpose for Internet usage include research, education, entertainment and communication.

Despite the tremendous potentials of the Internet facility, it has brought new challenges that must be overcome in order to increase effectiveness and efficiency in services delivery (Emmanuel and Sife, 2008). According to Deines-Jones (1998), some of the problems that affect students' use of Internet services in universities rest on the knowledge that every advance in web and Internet technology presents a new challenge for students.

Emphasizing some problems associated with Internet usage by students as they affect Nigeria and other developing countries, Chafe (2002) included computer unavailability, lack of Internet accessibility and training, computer anxiety, computer unfamiliarity of both teachers and students and some financial obligations.

In addition to the above, Jensen (2004) observed that a major hindrance to Internet connectivity on the African continent has been identified to be poor communication infrastructure, which he stated that over half of African countries have developed some form of low-cost-dial-up store and e-mail services with a gateway to the Internet. This he maintained that many organizations and educational institutions are still labouring to achieve connectivity to enhance their corporate productivity and objectives.

Ogbonna (2003) noted that the funding of higher education in Nigeria has been comparatively poor and witnessing the worse financial allocation in many years. Reiterating this assertion, Okiy (1998) noted that the overriding obstacle of full Internet presence in Nigeria is lukewarm attitude of the Federal Government, which places computer and Internet services at the lowest priority level.

Enumerating some challenges of students' use of Internet services, Agoulu and Agoulu (2002) emphasized that the attendant features of underdevelopment, such as power failure, machine breakdown, lack of and high cost of spare parts and technicians, intermittently stall the performance of modern gadgets of information storage transfer. These problems hinder students' use of Internet/ computer services. Momani (2003) in his study summarized the obstacles of utilizing the Internet to include; lack of time, lack of access, lack of speed, lack of training, and lack of university support.

For some time now, people have wondered what strategies could be adopted in overcoming the challenges of students' Internet usage in universities. Farmer in Tyonum (2011) hinted that the ideal model for improving information use for students in universities include; training in skills, networking the library catalogue and providing Internet access. Viewed from another angle, Ness (1997) stressed the importance of connecting libraries and schools to information superhighway so that all students can use Internet services. Al-Ansari (2006) stressed that university authorities should improve on the acquisition and connectivity of Internet services in their libraries to enhance effective learning and research.

Coming down to universities, Oyedeji in Tyonum (2011) believes that it is high time the universities designed a course in computer use. He said, such a course should be made compulsory for all students irrespective of course of specialization. This, according to Nilsen (1997) could be done by libraries having to develop ways of identifying, describing and referring students to electronic resources. On his part, Agu (2003) believes that students need to acquire skills like ability to access information using the best search engines, collaboration, communication and complex reasoning in order to use computer services effectively.

In the eyes of Uzoikwe (1998), concrete plans and steps must be taken to make Internet and computer services available to all libraries. She added that in the case of National Electric Power and Telecommunication providers, one should hope that the privatization exercise would give way to effective power supply and telecommunication services. This is because without regular supply, the aim of installing and providing computer services would be defeated, while without effective and efficient telecommunication services, the idea of online connection of libraries cannot be achieved. Contributing on the issue, Ogbonna (2003) stated that good governance, eradication of corruption, economic growth of the nation and adequate funding of institutions of higher learning will go a long way in improving students' use of Internet /computer services. Viewed from another perspective, Momani (2003) recommends reduction in the cost of access, printing, university support among others to enhance effective utilization of Internet services to all categories of undergraduates who could use them.

3. Objectives
The general objective of this study is to assess the level of Internet Usage by Undergraduate Students in Benue State University, Makurdi.

Specifically, the study will attempt to:
- Determine the availability of Internet services in Benue State University, Makurdi.
- Determine the purpose of Internet usage by undergraduate students of Benue state University.
- Determine the problems associated with the Internet usage by undergraduate students in Benue State University.
- Determine strategies that will be adopted to overcome these problems.

4. Research Questions
- What Internet services are available in Benue State University, Makurdi?
- For what purpose do the undergraduate students use the Internet?
- What problems do the students encounter in the Internet usage in Benue State University?
- What strategies can be adopted in overcoming problems associated with Internet usage in Benue State University?

5. Methodology
This study was carried out in Benue State University, Makurdi with particular reference to the undergraduate students. Descriptive survey was used to study 16,931 registered regular undergraduate students of Benue State University. The population represents the figure for the 7 faculties in the university. Using 5% of the undergraduate students' population as recommended by Glenn (2009), the researchers were able to arrive at 340 respondents for the study. Data was collected from the 322 undergraduate students that completed correctly and returned the structured questionnaire. The instrument was validated by three academic librarians with the University Library, Benue State University, Makurdi and a senior lecturer in the Department of Educational Foundations of the same university. Data was collected personally by the researchers. Frequency counts and simple percentages were used to analyze data in answer to research questions.

6. Presentation and Discussion
The data collected for this study was presented in tables and analyzed using frequencies and percentages. The presentation and analysis were based on the two research questions formulated for the study.

6.1. Availability of Internet Facilities

	A		D		UD		Total	
Responses	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Yes	322	100	-	0.00	-	0.00	322	100
No	-	0.00	-	0.00	-	0.00	-	0.00

Table 1: Availability of Internet facilities
Source: Field Survey, 2010. N=322

Results in table 1 indicates that Internet facilities are available in Benue State University with all the 322 (100%) responding in favour of the item. Responses from the study regarding awareness and availability of Internet facilities in Benue State University indicated that, students have knowledge of the Internet and are also aware of their availability in the university. However, majority of them visit Internet cafes for Internet services. This agreed with Ajuwon (2005) who reported that the University College Hospital, Ibadan has adequate Internet services but only 24% of the students accessed it at the university. This is because, students are not satisfied with Internet services offered by the university. For instance, lack of assistance from IT operators, irregular subscription to e-journals and erratic power supply among other issues could be frustrating.

6.2. Purpose of Students' Internet Usage

	A		D		UD		Total	
Items	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Research	212	65.84	74	22.98	36	11.18	322	100
Education	254	78.88	58	18.01	10	3.11	322	100
Entertainment	150	46.58	98	30.34	74	22.98	322	100
Communication	138	42.86	120	37.27	64	19.88	322	100

Table 2: Purpose of students' Internet usage
Source: Field Survey, 2010. N=322

The response rate in table 2 indicates that majority of the respondents 254 (78.88%) use Internet for educational purposes, 212 (65.84%) for research and 75(46.55%) for entertainment. While 138 (42.86%) agree using it for communication purposes.
The findings also indicated that students use Internet for the purpose of education, research, entertainment and communication. This perhaps is because students are becoming aware of the opportunities offered by the Internet in education, research, entertainment and communication. They browse the Internet to supplement notes given by lecturers, complete class assignments, write projects and communicate via e-mail with parents and friends (Adomi, Omodeko & Otolo, 2004) observed. Interestingly, Parameshwar (2009) identified students' purpose for Internet usage to include- research, education, entertainment and communication.

6.3. Problems of Internet Usage

Items	A		D		UD		Total	
	No.	%	No.	%	No.	%	No.	%
Inadequate number of computers	240	74.53	78	24.22	4	01.24	322	100
Lack of computer skills	194	60.25	86	26.71	42	13.04	322	100
Slow speed	258	80.12	104	16.15	12	03.73	322	100
Information junk	168	52.17	100	31.06	54	16.77	322	100
Downloading problem	214	66.46	28	08.70	80	24.84	322	100
Irrelevant information	164	50.93	72	22.36	86	26.71	322	100
Lack of assistant from IT staff	146	45.34	102	31.68	74	22.98	322	100
High cost of access/printing	256	79.50	58	18.01	8	02.48	322	100
Inadequate power supply	288	89.44	32	10.56	-	0.00	322	100
Any other problem	24	7.45	-	0.00	298	92.55	322	100

Table 3: Problems associated with Internet usage.
Source: Field Survey, 2010. N=322

Results from table 3 indicated that one of the greatest problems students encounter in using the Internet is inadequate power supply with frequency score of 288 (89.44%). Slow speed is next with 258 (80.12%) and is closely followed by high cost of access/printing with 256 (79.50%). Inadequate number of computers has 240 (74.53%) and is followed by downloading problem with 214 (66.46%). Other problems include lack of computer skills with 194 (60.25%), information junk with 168 (52.17%), irrelevant information with 164 (50.93%), and lack of assistance from IT staff with 146 (45.34%), while any other problem has only 24 (7.45%) responses. This collaborates Agoulu and Agoulu (2002) and Momani (2003) when they enumerated the problems of Internet utilization to include poor and inadequate telecommunication facilities, poor level of computer literacy among Nigerian students and library Staff, poor computer facility, poor level of Internet services and ignorance of policy-makers on the power of ICT for economic and industrial development of a nation. The fact that, Benue state is yet to be connected to 330 KVA electricity source is a probable reason why poor and inadequate supply of electricity seem to be the greatest problem.

6.4. Strategies to Overcome Problems of Internet Usage

Items	A		D		UD		Total	
	No.	%	No.	%	No.	%	No.	%
More computers be provided	260	80.75	44	13.66	18	05.59	322	100
Students be given more computer education/training	264	81.99	36	11.18	22	06.83	322	100
Subscription to more bandwidth	192	59.63	102	31.68	28	08.69	322	100
Regular maintenance of computers	230	71.43	54	16.77	38	11.80	322	100
Information on the net be well organized and presented	206	63.98	98	30.43	18	05.59	322	100

IT staff be professionally trained	170	52.80	100	31.06	52	16.14	322	100
Cost of access/printing be reduced	278	86.34	28	08.69	16	04.97	322	100
Alternative source of power be provided	292	90.68	6	01.87	14	07.45	322	100

Table 4: Strategies to overcome the identified problems
Source: Field Survey, 2010.

Results in table 4 showed that students are in dire need of an alternative source of power supply with 292 (90.68%) responses, and is closely followed by reduction in cost of access/ printing with 278 (86.34%). They also indicated that there is need to give students more computer education/training with 264 (81.99%) and that more computers be provided with 260 (80.75%) responses. They also reported that regular maintenance of computers be carried out with 230 (71.43%), and that information in the Internet be more organized and presented with 206 (63.98%). Respondents also indicate with 192 (59.63%) that subscription to more bandwidth be made and that IT staff be given more professional training with 170 (52.80%) responses.

These findings are in line with Uziokwe (1998) who maintained that without regular power supply, the aim of installing and providing Internet services would be defeated. Another remedy as indicated on the table is reduction in the cost of access/printing. This is very important because our students are not economically buoyant and could not access Internet resources because of high cost of these services. Momani (2003) recommends reduction in the cost of access, printing, university support among others to enhance effective utilization of internet services to all categories of undergraduates could use them. Responses on the table also indicate that more computer education be given to students. This is supported by Oyedeji in Tyonum (2011) when he said, it is high time the universities designed a literature course in computer use. He said that such a course should be made compulsory for all students irrespective of course of specialization. This, he hopes will enhance the use of Internet services.

7. Conclusion
The major findings of the study are as follows:-
- Internet facilities are available in Benue State University, but the number is inadequate.
- Students utilize Internet resources for education and research purposes.
- Students face problems such as erratic power cut, slow speed, and high cost of access/printing, inadequate number of computers, downloading problem, and lack of skills, information junk and irrelevant information.
- Proposed remedies to identified problems include- provision of an alternative source of power, subscription to bigger bandwidth, reduction in the cost of access/printing, increase in the number of computers, provision of more computer education/training to students, and more organization and presentation of information on the Internet.

8. Recommendations
Based on the results of this study, the researcher has made the following recommendations:
- An alternative source of power, such as generating set and solar battery inverter back-up systems should be provided to supplement public power system.
- The number of computers in the virtual library should be increased.
- Students should be given more computer education both practically and theoretical.
- Cost of access/ printing should be made affordable for average students.
- The school should subscribe to a bigger bandwidth to speed the rate of downloading and browsing.
- Internet facilities be established in all departments and also be introduced as core course.

9. References
1. Adomi, E.E., Omodeko, F.S. and Otolo, P.U. (2004). The Use of Cyber Café at Delta State University, Abraka, Nigeria. Library Hi Tech, 22(4):383-388.
2. Agu, M. N. (2003) Computer/Internet Technology: Its Needs in Education, Its Diversities. Science Scope. 1(50).
3. Aguolu, C.C. and Aguolu, I.E. (2002). Libraries and Information Management in Nigeria. Maiduguri: ED-Linform Services.
4. Ajuwon, G.A. (2006). Computer and Internet use by First Year Clinical Nursing Students in a Nigerian Teaching Hospital. BMC Medical Information and Decision Making. 3(10) available http://www/bio-digital.com/content/3/1/12. Accessed: 2/12/2010.
5. Al-Ansari, P. (2006), Internet use by the faculty members of Kuwait University. The Electronic Library, 24(6): 791-803.
6. Ape, R. (2008). Modern library Instruction for Schools. Makurdi: Adeka Printing and Pub. Coy Ltd.
7. Asemi, A. (2005). Information Searching habits of Internet users: A case Study on Medical Sciences University of Isfahan (MUI), Iran. Webology, 2(1). Available http://www.webology.ir/2005/v2ni/a/o.html#9. Accessed 2/12/2010.
8. Chafe, C. (2002), Personal correspondence. Stanford, CA, May 2002. The Chronicle of Higher Education, Almanac Issue 2002-3.
9. Deines-Jones, C. (1997). EASI Access to Library Technology. Library Hi-Tech. News, 143: 18, 19 & 31.

10. Dike, V.W. (2000). More than Computers: Information Technology in Library and Information Science Education. Ibadan: NALISE, 50-59.

11. Emmanuel, G. and Sife, A.S. (2008). Challenges of Managing Information and Communication Technologies for Education: Experiences from Sokoine National Agricultural Library. International Journal of Education and Development Using ICT. Vol. 4(3). Retrieved from http://ijedict.dec.uwi.edu/viewarticle.php?id =456&layout=html. Accessed: 5/11/2010.

12. Ezeji, E.C. (2007). Academic Use of Computer Services by Undergraduates in Two Nigerian Universities. Unpublished.

13. Glenn, I. (2009). Determining sample size. Retrieved from www.edis.ifas.ufl.edu/pd006 on 23/07/2013

14. Jensen, M. (1996.) Bridging the gaps in Internet development in Africa. Available: http://www.idrc.ca/acasia/studies/ir-gaps.htm.

15. Manhas, R. (2008). Use of the Internet and Electronic Resources for Dental Science Information: A case study. Library Philosophy and Practice. Available: http://www.unllib.edu/lpp/lpp .manhas .htm.

16. Mitra, A. (2003). Towards Developing Questionnaire Items to Measure Effectiveness of Computers in Teaching. Journal of Educational Computing Research. 23(4):381-394.

17. Mitra, A.; Willyard, J.; Platt, C. & Parsons, M. (2005). Exploring Web Usage and Selection Criteria among Male and Female Students. Journal of Computer-Mediated Communication. 10(3) article 10. Available: http://icme.indina.edu/vol10/ issue 3/mitra/htm. Accessed: 7/12/2009.

18. Momani, H.A. (2003). Evaluation of the nature, extent, and satisfaction with the use of the internet by applied science and technology faculty members in Jordan. Ph.D dissertation, University of Pittsburgh, Pittsburgh, PA.

19. Ness, S. (1997). Libraries: A Critical lane on the Information Supper way. Illinois Libraries, 76(2): 50-52.

20. Nilsen, C. (1997). Computer Technology and Students. Synopsis, 28(4): 197-199.

21. Ogbonna, I.M. (2003). Academic Libraries in Nigeria: Challenges of ICT in the 21st Century. The Nigeria Library Link- A Journal of Information Science, 1(1): 116-128.

22. Ojedokun, A.A., & Owolabi, E.O. (2003). Internet use for teaching and research in Botswana. African Journal of Library, Archives, and Information Science 13 (1): 43–53.

23. Okiy, R.B. (1998). Nigerian University Libraries and the Challenges of Information Provision in the 21st Century. Library Bulletin, 3(1&2):17-28.

24. Parameshwar, S. (2009). Use of the Internet by Faculty and Research Scholars at Gulbarga University Library. Library Philosophy and Practice. Retrieved: http://www.unllib.edu/LPP/ parameshwar-patil.thm. Accessed: 3/3/2010.

25. Tella, A. (2007). Undergraduate User of the Internet and its Implications on their Academic Performance at the University of Botswanda. Gabome Journals of Educational media and Library Science, 45(2): 161-185.

26. Tyonum, N.M. (2011). Assessment of Internet Usage by Undergraduate Students in Benue State University, Makurdi. An Undergraduate Project submitted in the Department of Education Foundations, Faculty of Education, Benue State University, Makurdi. Unpublished