INTERNET AWARENESS, ACCESSIBILITY AND USE BY ACADEMIC STAFF AND UNDERGRADUATES OF NIGERIAN PRIVATE UNIVERSITIES:

The Case of Bingham University, Karu

Abstract

In this work, we attempted to gain an understanding of the current and potential impact of the Internet on Nigeria tertiary educational system, and to assess the level of awareness, accessibility and use of the Internet by academic staff and undergraduate students especially in Nigeria private universities using Bingham University of Nigeria as a case study. A well structured questionnaire was randomly distributed to 250 selected respondents with a response rate of 50(20%) and 200(80%) for staff and students respectively. In concluding our findings, several variables were put into consideration such as, level of computer literacy, level of awareness of Internet service, frequency of Internet use, amount of time spent on the Internet, Internet use experience, location of Internet access point, Internet skills, purpose of using the Internet, favorite search engine, type of Internet resources utilized, and problems faced while using the Internet. The study evidently confirmed high level of Internet awareness but low level of accessibility and use by both staff and students due to some certain factors. Recommendations were made on how to correct these impediments.

Keywords: Bingham University, Internet, Information and Communication Technology.

Introduction

The Internet has been described as information super highway of information infrastructure to emphasize the expectation that it would transform the way information is created, manipulated, stored, retrieved, transferred and utilized (Ehikhamenor, 2003). Yumba (1997) corroborated this as a powerful tool to search for, retrieve and disseminate information. He also reported that technology offers new opportunities for rapid communication and access to information worldwide as it is increasingly being used by all sectors of the society and this has made the resources of the world more accessible to ordinary people all over the world.

The Internet is the fastest growing computer network with millions of users worldwide and has been found to assist users to easily obtain and share information available worldwide. Africa had an Internet User Growth Rate (IUGR) of 167,335,676 as at June 30, 2012, but this only accounted for 7.0 percent of the world's Internet usage (Internet World Statistics, 2012).

The Internet can be used to provide the following services: Electronic mail, Listserv, Newsgroups, File Transfer (FTP), Remote Login (using Telnet) etc. Olalude (2007) reported that the Internet is a powerful and efficient tool for searching, retrieving and disseminating information. It may be used for education, research, trade and commerce, entertainment, sports and news, communication such as email and discussion groups.

Bingham University, Karu was established by the Evangelical Church Winning All (ECWA) following its formal licensing by the National Universities Commission (NUC) on 5th January, 2005. As the name implies, the University was named after one of the trio of pioneer Sudan Interior Missionaries, Roland Victor Bingham whose vision along with those of other founding fathers desired to produce committed Christians thus, the university emerged as a tool through which Christ-centered leaders would be produced (Bingham University, 2013). The university has in place an ICT unit with a student portal for integrated services developed and maintained by the staff of the university's Computer Science Department. The university library works in conjunction with the ICT unit to provide Electronic Library Services (ELS), giving the students and other staff users access to a wide range of academic resources, including the robust NUC virtual library. In addition to that, the university provides Internet wireless services (Wi-Fi) as part of Internet services which covers as far as classrooms, student's hostels, staff rooms, laboratories etc.

Jones (2002) reported that college students are heavy users of the Internet as compared to the general population as it is the students' daily routine since it has been integrated into their daily communication habits and has become a technology as ordinary as the telephone or the television. This makes it important for academic staff in such educational setting to become conversant with the use of the Internet. Hence, the challenge for academic staff therefore, lies in the utilization of opportunities offered by the Internet to improve the quality of their research and teaching services. Even though most staff and undergraduate students can pride themselves as being computer literate, the facts remains that some are yet to know how the Internet works and its numerous essential benefits. Therefore, irrespective of their status, the need for them to exploit the Internet for one purpose or the other cannot be overemphasized.

In view of the foregoing fact, if students who are the major users of educational resources fail to maximize the Internet, then this will put student's personal and individual search for

knowledge and understanding at stake, which will also result to poor academic performance of these students in both internal and external professional examinations as a result of shallow knowledge-level. (V.N. Nwachukwu, personal communication, August 19, 2013). In addition, this will also increased the level of examination malpractice amongst undergraduate students because these students do not use essential information resources provided by the Internet to enhance their knowledge level. And if our universities continue to condone and produce half baked graduates who are the leaders of tomorrow, then there is the likelihood that the society and country at large will be in jeopardy since the country's high level man-power is invariably a potent driver of the country's economic, political and social development.

Objectives

The main objective of this study was to investigate the extent of awareness, accessibility and use of the Internet by academic staff and undergraduate students of Private Universities in Nigeria.

The specific objectives were to:

1. Identify the extent of awareness, accessibility and use of the Internet by both undergraduate students and academic staff of private universities in Nigeria;
2. Identify the different purpose for which the Internet is used by undergraduate students and academic staff of private universities in Nigeria;
3. Indentify whether the Internet services meet the user's needs;
4. Identify the various Internet resources and services used by the respondents;
5. Identify the problems encountered by the respondents while using the Internet;
6. Proffer necessary solutions to the problem.

Literature Review

Internet plays a crucial function in the teaching, learning and research in any academic institution. (Kumar and Kaur, 2006). Igun (2005) also asserted that, academic institutions cannot do without internet services especially in this era of information globalization, explosion and superhighway. Internet enhances teaching, studying, research, publishing and communication. Adegoke (2009) affirms that, "Indeed, the internet is also a virtual library which is seen as virtual space containing a vast amount of information and documents including books, pictures, video, graphs and musical sounds that can be consulted."

While we may not be too keen with the conflicting versions of the origin of the Internet, we would be comfortable with the fact that the origin of the internet is linked with Cold War era. The Air Force in 1962, wishing to maintain the military's ability to transfer information around the country even if a given area was destroyed in the enemy attack, commissioned leading computer scientists to develop the means to do so (Baran, 2009).

From this beginning, it has grown like an octopus to affect different spheres of human endeavor. The net provides superfluous information via networking globally to affirm what McLuhan tagged as information superhighway (Severin and Tankard, 2001).
Reddick and King (2001, p27), aptly capture this thus:

> Clearly, there is a lot of information out there – too much to catalog. In fact, nobody knows exactly what is available online and where it is. The growth represents both an opportunity and a hazard...The opportunity is that, sitting at your desk, you can access information that you may not have been aware existed. The hazard is that you waste a lot of time looking at information that is not relevant to the projects on which you are working.

The growth of mobile computing and wireless networks has helped educational institutions stay at the forefront of this changing world (Khalil, 2004). There is need for research to be reliable, hence the need for fast, quality, easy access and up to date information. There are now thousands of Internet 'home pages' which serve as information sources for institutions and organizations. Most universities throughout the world have established their presence on the Internet, thereby making it possible for researchers to access past and current research publications. Prospective students can also access information on courses being offered by Institutions and as well as their admission requirements.

However, Internet connectivity is rather low in terms of awareness and use. Ohenevwogaga and Ohenevwogaga (2006) averred that internet has been of great help to higher education institutions both in the developing nations. Also, Badu and Markwei (2005) revealed that both staff and students are fully aware of the Internet and most of its services. He however confirmed that frequencies of use of Internet resources are very low, E-mail is extremely used by both staff and students and the Internet was very valuable resource.

The Internet is the fastest growing computer network with millions of users worldwide and has been found to assist users easily obtain and share information available worldwide. According to Internet World Statistics 2012, Africa had an Internet user growth rate of 258.3 percent between 2000 and 2005, but this still accounted for only 7.0 percent of the worlds Internet usage. As at June 30th 2012, there were 148 million Internet hosts around the world and the United State of America has 33 percent of the Internet users worldwide. This has increased to over 1.2 billion users worldwide (Internet World Statistics, 2012), with over 44.2 million Internet users are found in Africa, with Nigeria having 8 million representing 18.21 percent of the Internet users in Africa (Internet World Statistics, 2012).

A review of literature reveals that both academic staff and students use internet for educational purpose rather than social interaction and communication, In view of the importance of this valuable entity to research, teaching and learning processes, this study sought to examine the awareness, accessibility and use of the Internet by undergraduate students and academic staff of Bingham University.

Method

The target population for this study was undergraduate students and academic staff in Nigerian Private Universities, a case of Bingham University. Some variables like age, level and department were ignored so long as the students were undergraduates. Sequel to the fact that the population is too large to be covered for this study, the researcher randomly selected 12 percent from the total students' population (1,700), thus forming a total sample size of 200. While the total number of academic staff is about 250 thus 50 (20 percent) was also randomly selected. Consequently, the total number of questionnaire distributed was 250, and the total number returned were 235 (U/Students, 188; A/Staff, 47) representing 100 percent of the total respondent. A brief one on one Interview was also conducted alongside the questionnaire to obtain more information not covered in the questionnaire, and to also clarify few issues.

Below are the analysis of the responses to the research questions and the interpretation of the findings.
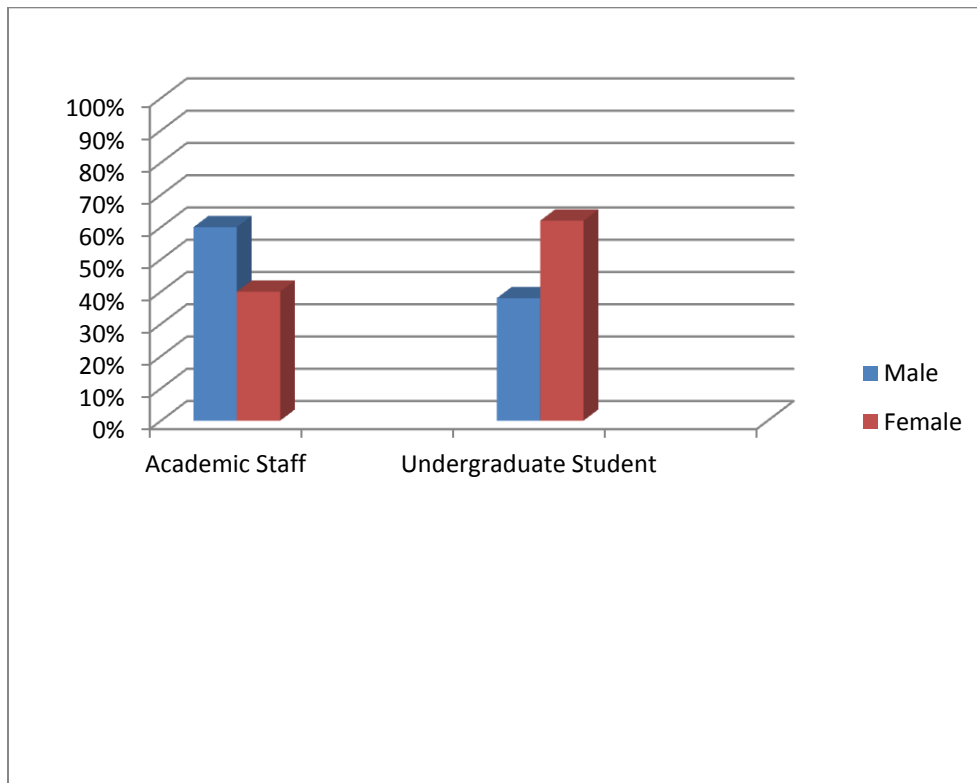
Chart 1:   Gender of respondents

Chart 1. Distribution of the respondents by gender of both the academic staff and the undergraduate students comprises of both male and females. For the academic staff 60 percent were males whereas 40 percent were females while for the undergraduate 38 percent respondent were male whereas 62 percent were female.

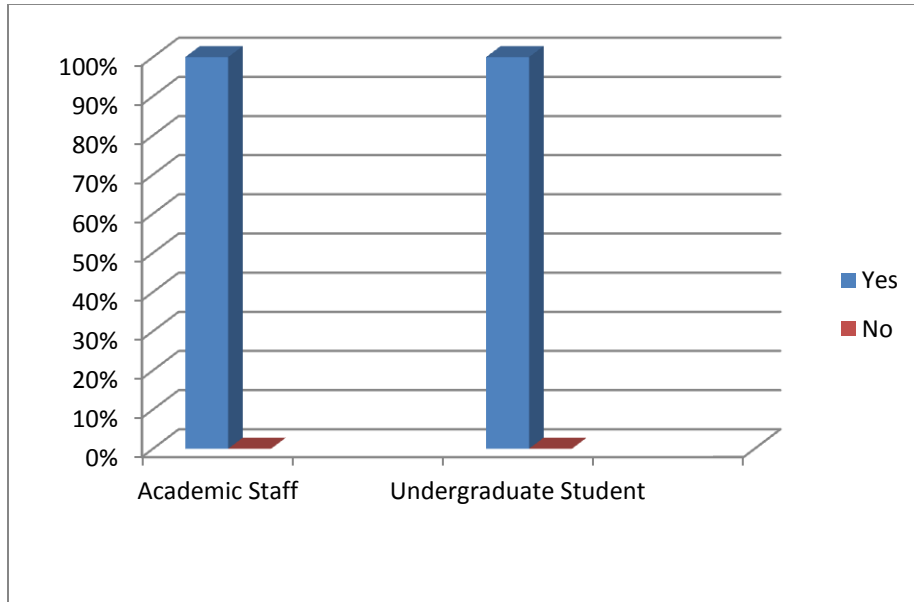Chart 2:   Computer literacy level of respondents

Chart 2. The chart above shows the level of computer literacy by the respondents (academic staff and the undergraduate students) which recorded a 100 percent computer literacy. That shows that all the respondents are computer literate. Although, the high frequency of computer literacy is not surprising, especially in this era of Information Technology, which is also reproduced in various forms like cell-phones, iPods, laptops, palm-tops and likes.

Chart 3:   Internet services awareness level of respondents
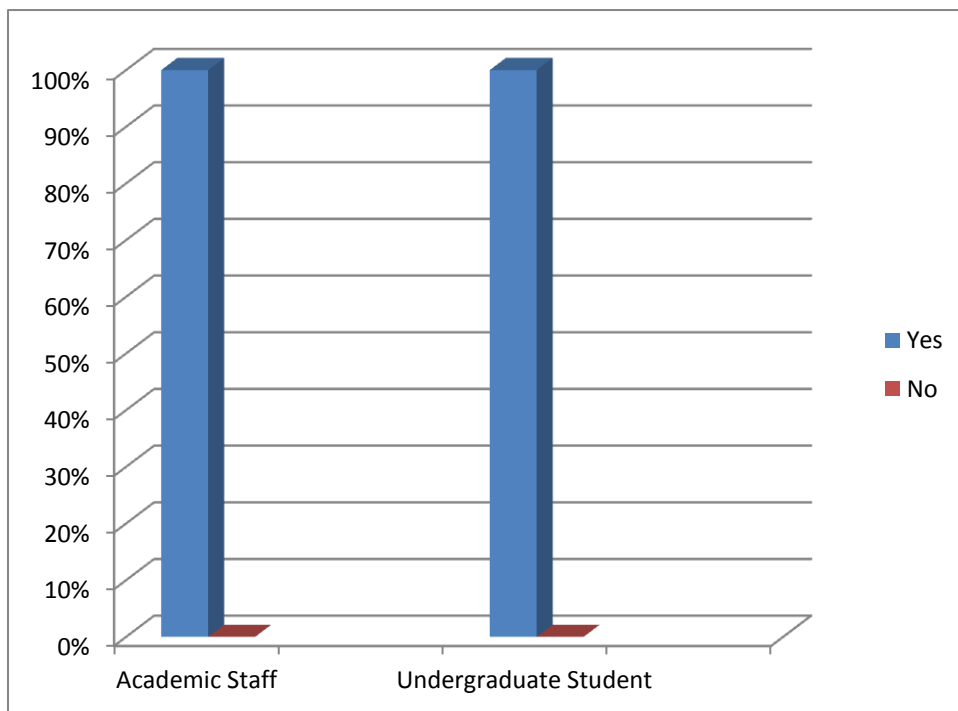
Chart 3. This chart shows the extent of awareness of the respondents in Bingham University as regards Internet services i.e. BHU ICT2, BHU_Library_FF, and BHU Wireless. Besides, from the study it was revealed that both the academic staff and the undergraduate students were 100 percent aware of the University Internet services.
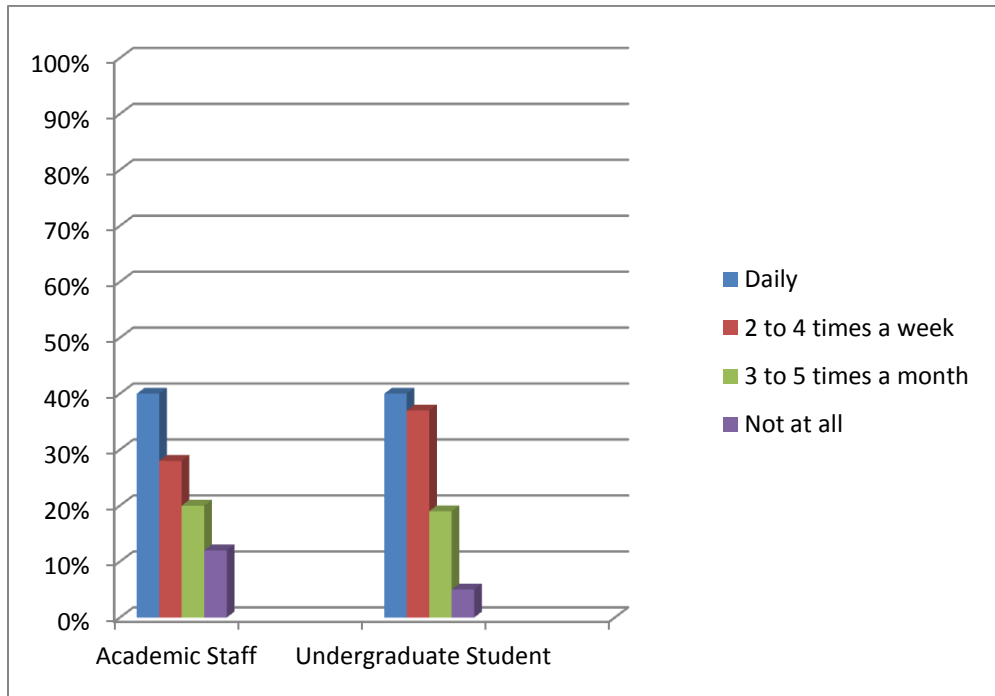
Chart 4:   Frequency of Internet use

Chart 4. From the chart above, it shows that a good number of both the academic staff (40 percent) and undergraduate students (40 percent) use the Internet on a daily bases. While the smallest amount of the users academic staff (12 percent) and undergraduate students 5 percent do not use the Internet at all. It shows that most of the respondents use the Internet for one purpose or the other on daily basis.

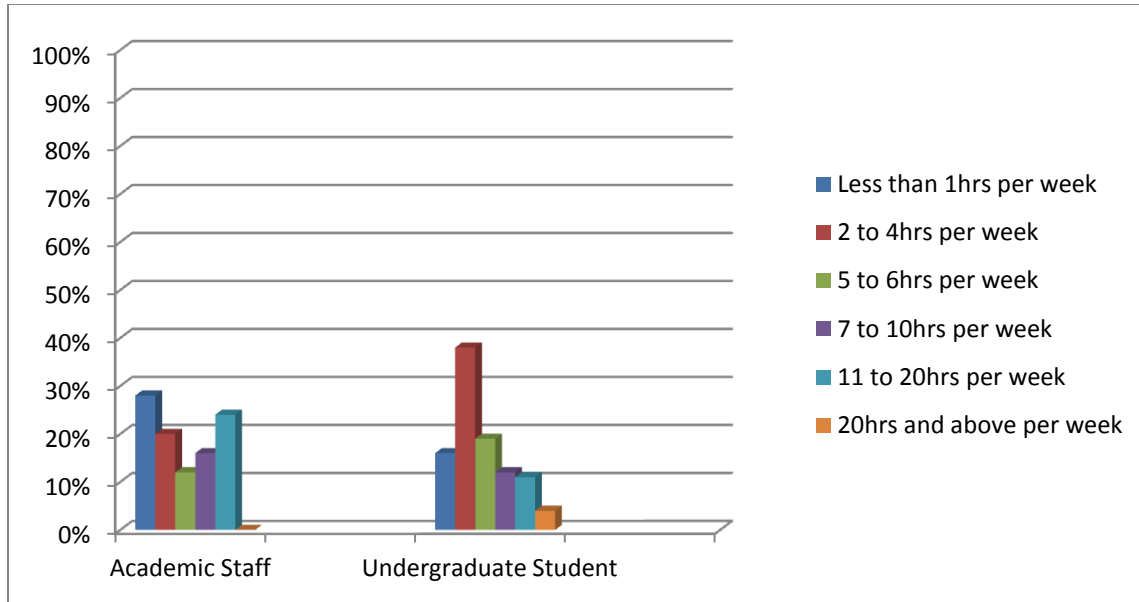Chart 5:   Amount of time spent on the Internet

Chart 5. The chart represents the amount of time and pattern of time spent on the Internet by the respondents, where 28 percent of the academic staff use the Internet less than one (1) hour per week and 16 percent in the case of undergraduate student use the Internet for the same amount of hours per week. 20 percent of the academic staff use the Internet 2 to 4 hours per week while 38 percent of the undergraduate students used the Internet for the same hours per week. 12 percent of the academic staff use the Internet 5 to 6 hours per week whereas 19 percent in the case of the undergraduate student use the Internet for the same amount of hours per week. 16 percent of the academic staff use the Internet 7 to 10 hours per week while 12 percent of the undergraduate students use the Internet for the same hours per week. 24 percent of the academic staff use the Internet 11 to 20 hours per week while 11 percent in the case of the undergraduate students. 0 percent of academic staff do not use the Internet at all between 20 hours and above per week while 4 percent of undergraduate students use the Internet for those hours.

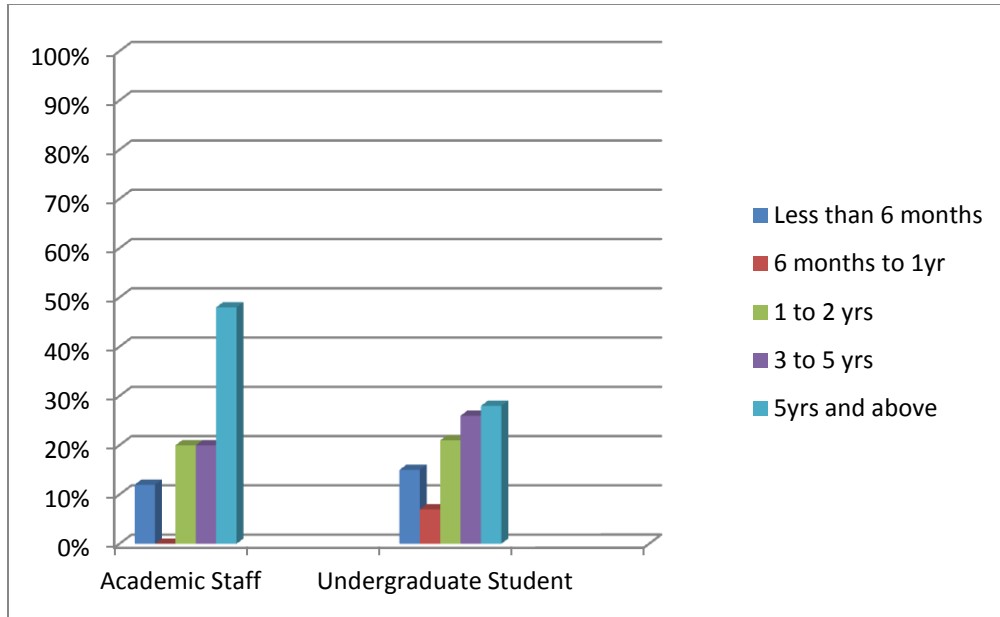Chart 6:   Internet use experience

Chart 6. This chart sought to find out the Internet use experience of the respondents, while 48 percent of the academic staff have used the Internet from 5 years and above, it was 28 percent of the undergraduate student that have used the Internet for 5 years and above which represents the highest number of years of Internet use by respondents.

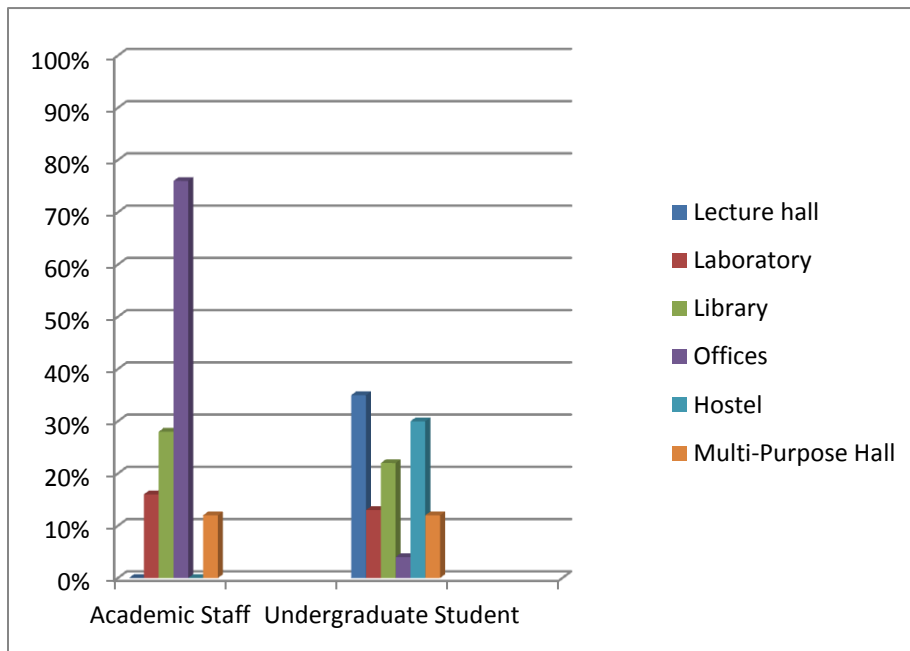Chart 7:   Location of Internet access point

Chart 7. The chart shows that most of the academic staff use the Internet from their offices. 76 percent of them use it from their offices, 28 percent use it from the library, while 16 percent and 12 percent use it from the labs and cyber café respectively. In the case of undergraduate students 35 percent use the Internet in the lecture hall, 30 percent use the Internet in the hostel, while 13 percent and 12 percent of the undergraduate students use the Internet in the labs and Multi-Purpose Hall respectively. From the chart above it shows a high coverage of the Internet connections on the campus.

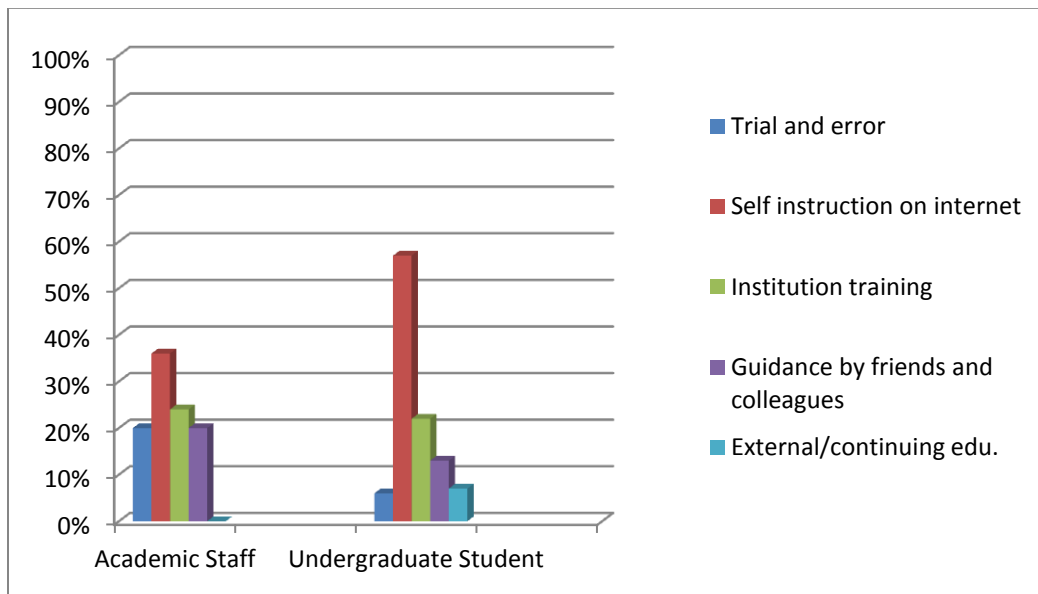Chart 8:   Internet skills of respondents

Chart 8. Respondents were asked to indicate the methods used for acquiring their Internet skills. It was found out that most popular method of acquiring the necessary skills to use the Internet was by means of self instruction on the Internet. 36 percent of the academic staff went for self instruction on the Internet, 24 percent acquired skills through institution's training, 20 percent were assisted by their friends and colleagues while 20 percent were by trial and error. In the case of the undergraduate students, 57 percent of them acquired their skills by self instruction on the Internet, 22 percent of them acquired their skills through institution's training, whereas 13 percent, 7 percent and 6 percent of them acquired their skills through assistance from friends and colleagues, external/continuing education, trial and error respectively.
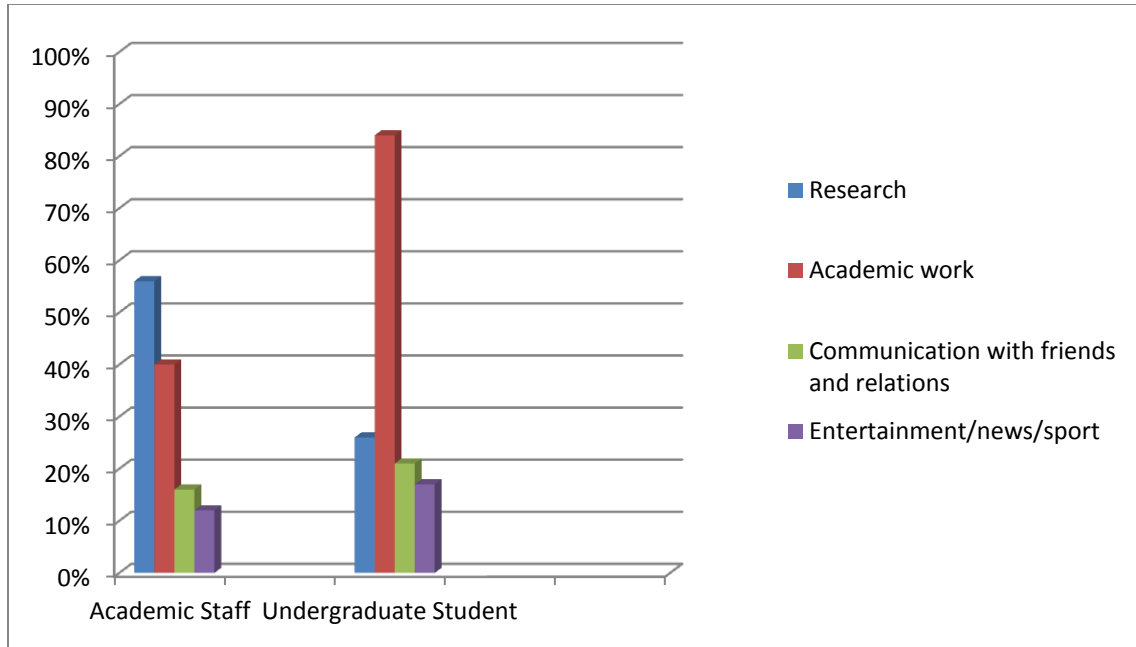
Chart 9: Purposes of using the Internet

Chart 9. Internet browsing may perhaps be done for diverse purposes, and these have been shown in the above chart by the different respondents. 56 percent of the academic staff use the Internet for research, 40 percent of them use the Internet for academic work, 16 percent and 12 percent use the Internet for communication with friends and relations and entertainment/news/sports respectively. 84 percent of the undergraduate students use the Internet more for academic work, while 26 percent of them use the Internet for research, 21 percent of the undergraduate use the Internet for communication with friends and relations and finally 17 percent use the Internet for entertainment/news/sports. This shows that a higher percentage of the respondents use the Internet for academic reasons, perhaps because it is an academic environment full of academic exercises and activities.

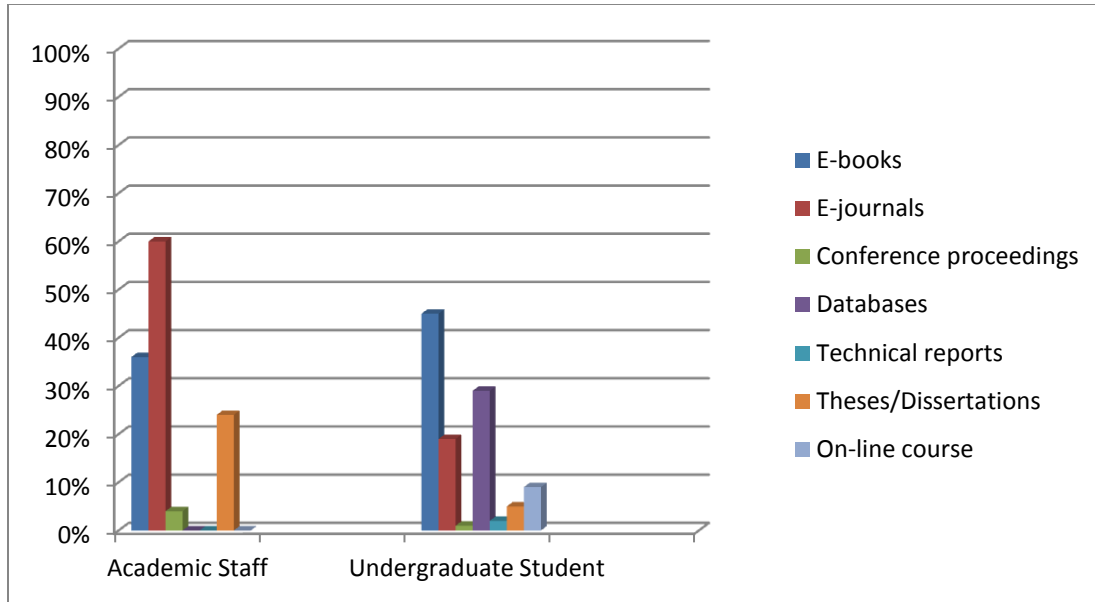Chart 10:   Type of Internet resources utilized

Chart 10. The chart sought to find out the most used Internet resources by the respondents. 60 percent of the academic staff use e-journals, 36 percent use e-books which were the major resources used. However, others who used conference proceedings, databases, technical reports, theses/dissertations and On-line courses had a rather low percentage. While in the case of the undergraduate students, 45 percent use e-books, 29 percent use different databases which were the most used resources while others got low usage.

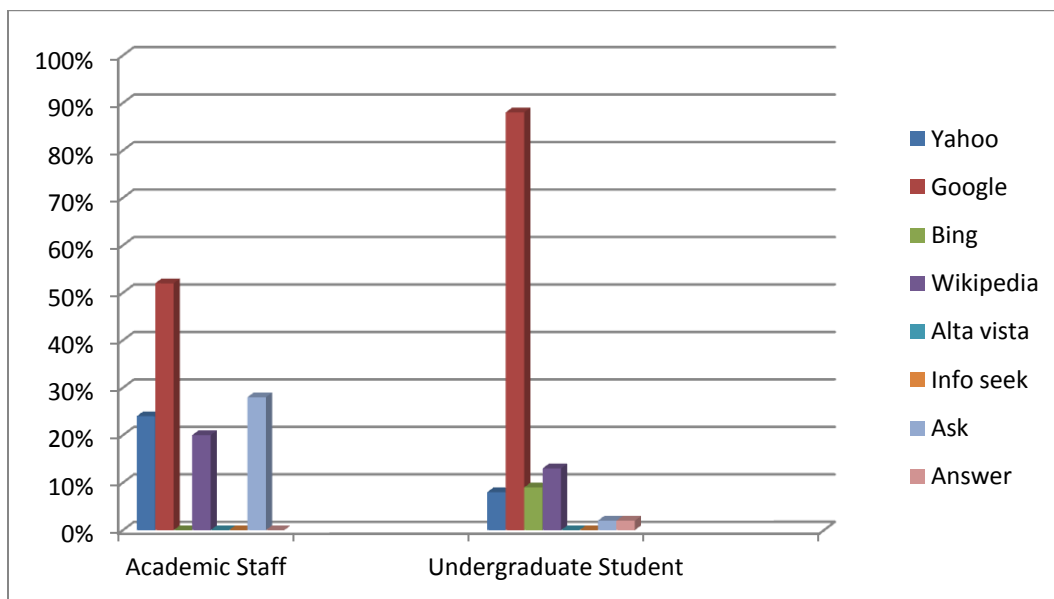Chart 11:   Favorites search engines?

Chart 11. The chart shows the favorite search engines used by the respondents. Goggle topped the list for both the academic staff (52 percent) and undergraduate students (74 percent) followed by Yahoo. The other search engines were minimally utilized by the respondents.

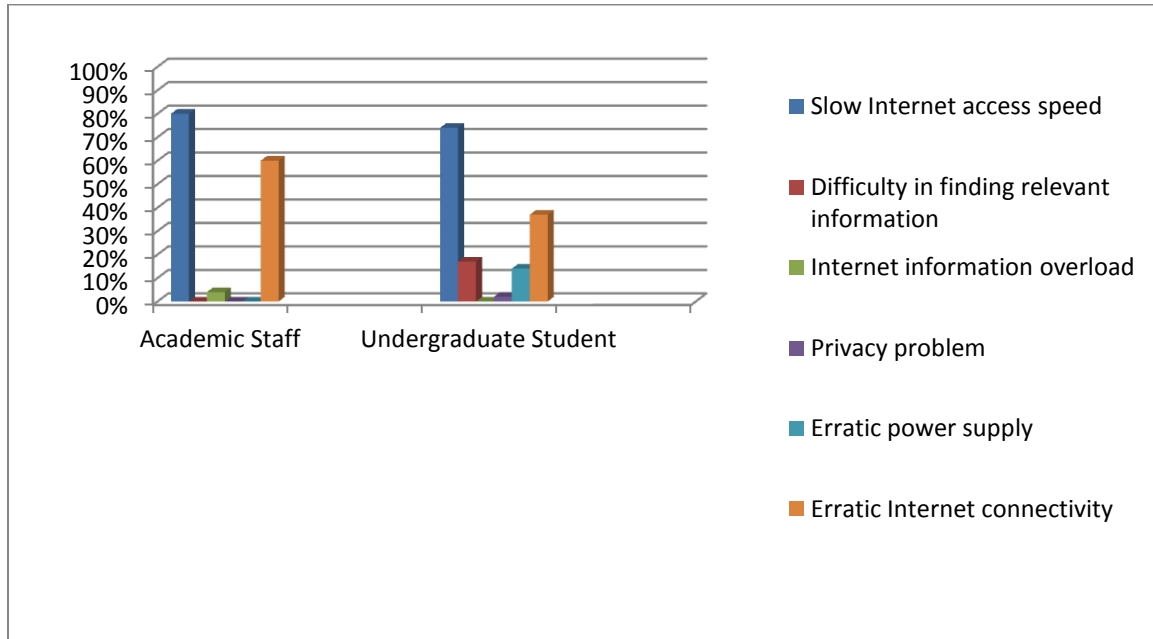Chart 12:   Challenges while using the Internet

Chart 12. As indicated in the chart above, the use of the Internet by the respondents is not trouble free at all. For the academic staff, 80 percent indicated slow Internet speed and 60 percent pointed out erratic power supply was the major problem in using the Internet. Whereas in the case of the undergraduate students, 74 percent indicated slow internet speed, 37 percent said erratic Internet connectivity and 17 percent signified difficulty in finding relevant information on the Internet.

Conclusions and Recommendations

Virtually all the respondents are computer literate, as this is not surprising especially with the advent of ICT applied to virtually all the services rendered to the society, ranging from e-banking, e-education, e-commerce, e-health, social networking, etc. Also a very good number of the respondents are aware of the presence of the university's Internet services either they were told during their first year orientation week or definitely learnt and saw their colleagues browsing in the hostels, classrooms, labs etc using the university Internet wireless. A one on one chat also revealed that the respondents were always required to register with the ICT unit to get their users Id and Password.

The Internet service extends about 150m radius per access point. These points extend to classrooms, hostels and the university library. The Internet coverage is low and also not effective is some areas, more reason why you find few number of the respondents using the Internet services in areas like the multi-purpose hall and laboratory.

As regards usage, most of the respondents frequently use the Internet especially on daily basis, while a negligible number does not use the Internet at all. This negligible number could be those who have probably given up on the use of the Internet services due to some challenges they face whenever they try to browse the net.

This is though not a comparative study, yet it would not be out of place to point out that the students use the Internet more than the academic staff. Obviously because, on the average a lecturer takes between 2-3 courses per semester, while the students on the average offer between 12 to 15 courses with a maximum of 24 credit load per semester. Hence, with such number of courses offered, one will expect more assignments, researches and consultations on the part of the students. Therefore reason for their high patronage of the Internet.

A large percentage of the respondents show that the Internet is mostly used for academic purpose, purely because it's an academic environment that encompasses academic activities. Google is more patronized by the respondents because it is more user friendly and efficient when it comes to searching academic resources.

The major challenges faced by the respondents when using the Internet services are slow Internet speed and erratic Internet connectivity. This is because the bandwidth available is not commensurate to the number of users. Meaning the bandwidth is too small compare to the number of users and this has affected the speed of the connection.

Finally, Undoubtedly the Internet services to an extent can enhance and improve academic activity on campus via the provision of essential online information resources. It is one thing to have the Internet services, it is another thing to have the knowledge of surfing the Internet to get what you want. Badu and Markwei (2005), suggested that the major basis for non-

use of the Internet is insufficient training. Therefore, there is need for proper education and training for both academic staff and the undergraduate students on efficient use of the Internet.

REFFERENCE

Adegoke, L. (2009). *Introduction to Public Relations: Principles, Media and Methods.*
      Amsterdam: Homelab Multiventures.

Badu, E. E. and Markwei, E. D. (2005). Internet Awareness, access and usage by the University
      staff and students. *Information Development, 21(4):260-268.*

Baran, J. S. (2009). *Introduction to Mass Communication: Media literacy and Culture.*Boston,
USA: McGraw-Hill

Ehikhamenor, F. A. (2003). Internet resources and productivity in scientific research in Nigerian
      universities. *Journal of Information Science, 29(2): 107-116.*

Internet World Stats (2012). Usage and Population Statistics. Retrieved from
      http:www.internetworldstats.com/stats1.html   on December 15, 2013.

Igun, S. (2005). Users and Internet skills: A report from Delta state university. *Electronic
      Journal of Academic and Special Librarianship. 6(3):23-27*

Jones, S. (2002). *The Internet goes to college: How students are living in the future with today's
      technology.* Pew Internet and American Life Project, Washington D.C.
      Retrieved from http://www.pewinternet.org/reports/toc.asp?Report=71 on November 13,
      2012.

Khalil, M. A. (2004). Vision to reality: Application of wireless laptops in accessing information
      from digital libraries: end-user viewpoints. *Library Hi-Tech News, 7(25): 83-86*

Kumar, R. and Kaur, A. (2006). Internet use by teachers and students in engineering
      colleges of Punjab, H. and Himachal Pradesh States of India. *An Analysis Electronic
      Journal of Academic and Special Librarianship. 7(1):12-16*

Oghenevwogaga, B. A. and Oghenevwogaga, D. T. (2006). The impact of the Internet on
      research: The experience of Delta State University, Nigeria. *Library, Philosophy and
      Practice. 8(2):15-19.*

Olalude, F. (2007). Utilization of Internet sources for research by information professional in
      sub-sahara Africa. *African Journal of Library, Archives and Information Science*, 17(1):
      53-58.

Reddick, R. & King, E. (2001). *The online journalist: Using the Internet and other
      electronic resources.* (Third Edition) Philadelphia: Harcourt College Publishers.

Severin, W. J. & Tankard, J. W. (2001). *Communication theories: Origins, methods and
      uses in the mass media.* New York: Longman.

Yumba, D. (1997). Internet in the library: Potentials. *African Journal of Library, Archival and Information Science, 7(2): 163-168.*