

Use of Internet Resources in Higher Education: A Case of Faculty of Arts of the University of Cape Coast, Ghana

Gloria Tachie-Donkor¹, Christopher Kwame Filson²

¹Junior Assistant Librarian, The Main Library, University of Cape Coast, Ghana. Email: babearji@gmail.com

²Senior Assistant Librarian, The Main Library, University of Cape Coast, Ghana. Email: kwafilson@gmail.com

Abstract: Purpose: To determine whether faculty and students utilise the Internet resources for teaching, learning and research activities and to ascertain the challenges of accessing the Internet.

Methodology: The study made use of 119 students and 56 lecturers. Proportionate stratified sampling design was used. Here, the main strata of the population for the study was gender. At each level a specific number of students were selected for the study. The selection was made to incorporate 58.3% male and 41.7% female representation to reflect the sex composition of the entire population. The analysis was done using IBM Statistical Package for Social Sciences (SPSS) version 20.

Findings: The study revealed that most of the respondents were aware that the Internet has resources that could be used for scholarly work; however some of them could not access the resources due to lack of adequate searching skills. It also came to light that most of the respondents accessed the internet at home and on their laptops since the departments had inadequate internet resources

Originally: The teaching of Information Literacy Skills at the tertiary level means that faculty and students are exposed to the sources of information in print and non-print format. The uniqueness of this study is that it examines how respondents integrated Internet searching skills into the curriculum of the university.

Keywords: Electronic resources, Faculty of arts, Internet, Sources of information, Access to the internet.

I. INTRODUCTION

The Internet world wide has transformed lives as a result of its ability to immediately disseminate information (Otchere, 2006). In defining the Internet, Leiner, et al. (2002) said that it is a superhighway that provides unlimited access to a wealth of information on different topics contributed by people throughout the world.

In Ghana, Internet usage has improved drastically from 3,000 in the year 2000 to 2,085,501 as at December 31, 2011 (Ather, 2013). This estimate corresponds with the assertion by Abbey (2011: 9) who indicated that over two million Ghanaians now have access to the Internet. It is not surprising therefore that it has become an integral part of education in Ghana, especially higher education. Its use for academic work cannot be over emphasised in terms of information sharing, communication, teaching, learning and research. For instance in Universities, it enables faculty and students to have easy access to online information within the shortest possible time.

Previous studies by Markwei and Badu, 2005; Ojedokun and Owolabi, 2003; 45-53; Ruzgar, 2005) demonstrate the use of Internet by faculty members and students for various purposes including accessing academic information, sending and receiving emails, communicating with friends and family etc.

The University of Cape Coast as one of the Universities in Ghana have an ICT Centre with Internet and Wifi connectivity which enable the University community to access information resources, communicate and to organize materials for teaching, learning and research purposes. The University Main Library also offers Internet access for faculty and students for academic work. Information Literacy skills course is offered by all level 100 students and students are taught how to access and navigate the internet to retrieve relevant materials for their academic work

(Afful-Arthur & Filson, 2015). A guided tour is also organised by the University library for all level 100 students; this tour exposes students to library materials and the services that the library offers. Periodically, training programs are organized for lecturers on how to access the Internet and its resources by the University's ICT centre. From the above submission it can be deduced that both faculty and students have training in the use of the Internet and its resources.

II. PROBLEM STATEMENT

The Internet is supposed to allowed collaborative research within universities and beyond. One of the significant role the Internet is required to execute in universities is the instant knowledge sharing and exchange of information for educational and research purposes. It is also meant to encourage self directed learning and promotes education that stimulates thinking and creativity in higher education

However, studies have shown that there are several challenges to the use of its rich resources by faculty and students in some Universities. The problem at the University of Cape Coast is inadequate training in the use of Internet and its resources, inadequate infrastructure (limited ICT laboratories at the various colleges) and inadequate bandwidth. There is also the challenge of frequent power outages which impedes access to the Internet. These problems were also reported by previous studies especially in Africa, such as Markwei and Badu (2002) and Luambano and Nawe (2004; 13-17).

The implications of these problems are that relatively, lecturers and students cannot communicate online, lecturer's cannot carry out research, update lecture notes and students cannot access online information to complete assignments, projects works and write thesis as expected. It is for these reasons that the research sought to find out the degree of use of the Internet at the Arts Faculty of the University of Cape Coast, Ghana.

III. OBJECTIVES OF THE STUDY

The following are specific objectives of the study

1. To determine the level of awareness of the availability of information resources on the Internet.
2. Establish the purposes for using Internet recourses by faculty and students.
3. To ascertain the challenges of accessing Internet resources by faculty and students of the Arts Faculty.
4. Make feasible recommendations based on the findings of the study.

IV. LITERATURE REVIEW

1. Extent of Use of the Internet by Faculty and Students

There have been a number of studies on the use of the Internet by faculty and students for teaching, learning and research

activities. The capability of faculty and students to access and evaluate information materials is key in our digital society.

The Internet increases access and ease to varying amount of data, it save time, money and provides an opportunity to consult numerous experts with single request via discussion groups. For information seeking, there is greater independence of time and place. A study conducted at S. V. University, Tirupathi by Chandran (2000; 171-178) indicated that the majority of the respondents used Web and e-mail services of the Internet. The study revealed further that more than 25% of the respondents used the Internet for 2-3 times a week, while the purposes of using the Internet were for communication and information gathering.

In the same vein, Kumar and Kaur (2005) conducted a research on Internet and its use in the Engineering Colleges of Punjab, India. The findings indicated that 30.8% of the students have 2-4 years of experience in using the Internet followed by 1-2 years with 27.4% showing that majority of the students have been using the internet for a long time.

Allehaibi (2001) conducted a study on Internet diffusion in Saudi universities, the pattern of Internet use among the faculty, and their interest about the Internet technology. It was indicated that the diffusion of Internet technology was at the early explosion stages, the mass of the respondents (74.6 percent) were using Internet technology, and that (25.4 percent) of the faculty were reluctant to use it. Aduwa-Ogiegbaen, (2005), observed a study on the extent of how faculty members' use the Internet in the University of Benin, Nigeria. The most recurring Internet uses was searching a lot of journal to publish articles was the top rated item, the second top rated item was using Internet to write academic articles for publication, writing lecture notes rated Fourthly. On the contrary, (Selwny 2007; 83-93) stated that regardless of the idea of making ICT the pivot in University education, the reality is that both students and faculty do not make adequate use of computer technology for academic work. Similarly, Adika's (2003; 29) found out low usage of the Internet technology by faculty, according to her this is as a results of lack of access to the Internet and inadequate training.

2. Purposes for Using the Internet by Faculty and Students

Bhatti (2010) noted in her study that faculty members used internet resources for teaching and research purposes; this is as a result of unavailability of latest information materials from the university's library.

(Begum, 1999) argues that many students and faculty turn to use the Internet more as results of the fact that there is narrow access to up to date materials in University libraries in most developing countries which has become a challenge that inhibits research and teaching. Begum continues to state that interlibrary loans and document delivery projects have not been able to solve this

problem of access to information. Al-Anasari's (2006) study on Internet use by the faculty members in Kuwait University, investigated the patterns of the use of the Internet by faculty, their purpose of use, and its impact on teaching and research, and Internet resources they access. The study revealed the fact that the Internet is mainly used for communication, research, publication, find up to date information and correspond with their colleagues.

Kubey et al (2001; 366) in their study investigated Internet use and collegiate academic performance. The study indicated that heavy Internet use is highly connected to high academic performance of students. Another study by Oyedun (2007) emphasized the Internet use in the Library of Federal University of Technology, Minna, most of the participants claimed that through the Internet services in the library, they have improved considerably in their academic performance.

3. Awareness of Internet Resources by Faculty and Students

More students at the University of Cape Coast need encouragement to access Internet resources and tools available to them for their learning and research activities. Renwick's (2005) revealed that accessibility to Internet resources has decreased the time spent searching for print resources in libraries. Lecturers do not get ample time to browse library's collection to support their teaching activities. He stated that Computer-literate faculty members use Internet resources more.

According to Nwezeh (2010; 668) effective use of Internet resources by faculty and students requires to fully explore relevant materials, evaluate found information, use web design, engage in discussion forums and chat rooms, and also send e-mail.

4. Challenges of Using the Internet in the Academic Environment by Faculty and Students

Some faculty members and students are able to exploit the potentials that the Internet brings to academic work while others are also denied as a result of certain circumstances. Ehikhamenor's (2003; 36) investigation of use and non-use of the Internet by academics, the study indicated that the respondents are heavy users of printed sources and that non use of the Internet was as a result of challenges concerning accessibility, ease of use and cost.

A research by Ani et al (2010; 535) revealed that only few respondents were able to access the Internet in their place of work and the university library, this she said resulted from unreliable Internet network on campus.

At the University of Malawi, Harle (2010) identified the challenges of using the Internet as inadequate bandwidth and inadequate computer supplies. Harle revealed that a total number of 3,015 students shared 100 computers which represent thirty (30) students to one (1) computer which is unacceptable in today's technological age. Adika's (2006; 9) study revealed that 63 (59.45%) had departments with computers without Internet facility. Only 43 respondents representing (40.6%) indicated that their departments were connected to the Internet, the study presented that the majority of respondents cannot get access to the Internet from their departments. Husian (2006) in a study at Kuwait University showed slow access, lack of time and lack of access to the Internet as problems they encountered in using the internet. Fasae's (2012) study also outlined the following problems: delay in Internet connectivity, difficult in finding relevant information, high cost of access, irregular power supply and slow access speed. Al-Ansari (2006) also found in his study major problems of Internet use as slow speed, lack of time and lack of access from home.

V. METHODOLOGY

The study made use of 119 students and 56 lecturers, proportionate stratified sampling design was used. Here, the main strata of the population for the study were sex. The sample size was based on the sex composition of the entire population in order to reflect the general make-up of the population under study. At each level a specific number of students were selected for the study. The selection was made to incorporate 58.3% male and 41.7% female representation to reflect the sex composition of the entire population. The analysis was done using IBM Statistical Package for Social Sciences (SPSS) version 20. Analysis of the data was done to show the relationship among the variables under study. Simple frequencies, percentages, and tables were used to present the findings

VI. ANALYSIS OF RESULTS

1. Age of Respondents

The study was made up of 102 (58.3 %) male and (73) 41.7% female making a total of 175 respondents. Out of this number, Table 1 shows that 32.6% of them were below the age of twenty-five, 48% were between the ages of 25-30, 11.4% were between the ages 31-35, 2.9% were between the ages 36-40, whilst 5.1% were forty one and above.

TABLE 1: FREQUENCY DISTRIBUTION BY AGE OF RESPONDENTS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 25	57	6.8	32.6	32.6
	25- 30	84	10.1	48.0	80.6
	31-35	20	2.4	11.4	92.0
	36-40	5	.6	2.9	94.9
	41 and above	9	1.1	5.1	100.0
	Total	175	21.0	100.0	
Miss- ing	System	658	79.0		
Total		833	100.0		

Source: Field data 2017

2. Status of Respondents

The breakdown of the respondents 16.6% level 100 students, 18.3% level 200 students, 14.9% level 300 students, 18.3% level 400 students and 32% of lecturers.

TABLE 2: FREQUENCY DISTRIBUTION OF THE STATUS OF RESPONDENTS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	level 100	29	3.5	16.6	16.6
	level 200	32	3.8	18.3	34.9
	level 300	26	3.1	14.9	49.7
	level 400	32	3.8	18.3	68.0
	lecturer	56	6.7	32.0	100.0
	Total	175	21.0	100.0	
Miss- ing	System	658	79.0		
Total		833	100.0		

Source: Field Data 2017

3. Awareness of Internet Facilities

The study sought to find out if respondents were aware that there were facilities on the internet they could use for their learning and research activities. In response 98.9% of the respondents indicated that they were aware of the informational resources which the internet has, whilst only two respondents sated they were not aware.

TABLE 3: ARE YOU AWARE THAT THERE ARE FACILITIES ON THE INTERNET YOU CAN USE FOR YOUR LEARNING AND RESEARCH ACTIVITIES?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	173	20.8	98.9	98.9
	no	2	.2	1.1	100.0
	Total	175	21.0	100.0	
Missing	System	658	79.0		
Total		833	100.0		

Source: Field data 2017

4. How Long Respondents Have Been Using the Internet

The researchers wanted to know how long respondents have been using the internet, Table 4 shows that in decreasing order that most of them (38.3%) have been using the facility for the past 1-5 years ago. About thirty- six of the respondents started using the internet for 6-10 years, in the same vien, 18.9% of them have used the internet for the ten or more years. However the remaining 5.7% of the respondents started using the internet for less than a year as shown in Table 4.

TABLE 4: FOR HOW LONG HAVE YOU BEEN USING THE INTERNET?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1yr	10	1.2	5.7	5.7
	1-5 yrs	67	8.0	38.3	44.0
	6-10 yrs	64	7.7	36.6	80.6
	above 10 yrs	33	4.0	18.9	99.4
	5	1	.1	.6	100.0
	Total	175	21.0	100.0	
Missing	System	658	79.0		
Total		833	100.0		

Source: Field data 2017

5. Electronic Devices Used by Respondents to Access the Internet

There are numerous technological devices people can use to access the internet, respondents were asked to indicate the various devices they use. A greater number of the respondents (39.1%) used laptops, 38.9% of them used cell phone, 17.1% used desktops, 3.1% used PDA, and whilst 1.7% indicated that they used other gargets.

6. Places Use for Accessing Internet

The study sought to find out where respondents access the internet often, the study revealed most of them used more than one place. 27.7% do access the internet at home. About 20% also stated that they do access the internet at Internet Cafe, whilst 19.4%, 12.6%, 6.9% and 5.5% of them revealed that they access the internet at their various departments, University Library, computer laboratories, and from friends and family homes respectively. On the other hand, 7.1% of them stated that

they access the internet from other places however; they failed to specify the places.

7. Duration of Usage of the Internet by Respondents

About 26.3% of the respondents each indicated that they use the internet for less than one hour and three or more hours daily. On the other hand, 21% used it between 1-2 hours and 19.3% of them use it for 2-3 hours. Whilst 7% of them indicated that they use it for some hours they failed to state.

TABLE 5: HOW LONG DO YOU USE THE INTERNET DAILY?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 hr	45	5.4	26.3	26.3
	1 -2 hrs	36	4.3	21.1	47.4
	2-3 hrs	33	4.0	19.3	66.7
	3 or more hrs	45	5.4	26.3	93.0
	others	12	1.4	7.0	100.0
	Total	171	20.5	100.0	
Missing	System	662	79.5		
Total		833	100.0		

Source: Field data 2017

VII. USES OF THE INTERNET

The internet could be used for various academic works, with this idea, the researchers wanted to know which academic activities the respondents deploy the internet for. It was revealed that 23% of the respondents used the facility to search for information in their fields of study, 19.8% used it to write and update their lesson notes, whilst 13.5% used it to access information on academic conferences.

Others, 11.3% used it to access scholarly associations' information, 6.7% used it to update their profile on academic

networking site, 6.2% used it to purchase textbook online, whilst 5.1% used it to update their personal academic website. However, 1.4% of them stated that they used the internet for other purposes.

1. The Usefulness of the Internet by Respondents

The majority of the respondents representing 70.8% indicated that the internet was very useful facility. About twenty-one percent also stated that the internet was useful, whilst 5.8% ranked it as somehow useful. Surprisingly, 1.8% of the respondents were of the view that the internet was not useful.

TABLE 6: HOW DO YOU RANK THE USEFULNESS OF THE INTERNET?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very useful	121	14.5	70.8	70.8
	Useful	36	4.3	21.1	91.8
	Somehow useful	10	1.2	5.8	97.7
	Not useful	3	.4	1.8	99.4
	7	1	.1	.6	100.0
	Total	171	20.5	100.0	
Missing	System	662	79.5		
Total		833	100.0		

Source: Field data 2017

2. Access to Information Via the Internet

One of the key purposes of using the internet is to access information, having this idea in mind the study sought to find out if respondents do get the information they wanted.

The study revealed that the majority of the respondents 69% were of the view that sometimes they were able to access the information they needed, while 24.4% of the respondents stated that they always got access information to the information they were looking for. However, 6% claimed that the information they got was inadequate.

TABLE 7: ARE YOU ABLE TO ACCESS INFORMATION YOU NEED THROUGH THE INTERNET?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always access information	41	4.9	24.4	24.4
	Never access information	1	.1	.6	25.0
	Sometimes access information	116	13.9	69.0	94.0
	Inadequate access to information	10	1.2	6.0	100.0
	Total	168	20.2	100.0	
Missing	System	665	79.8		
Total		833	100.0		

Source: Field data 2017

3. Problems Encountered When Using the Internet

One of the main objectives of the study is to ascertain the challenges of accessing Internet resources by faculty and students of the Arts Faculty of the University of Cape Coast. The study revealed that 39.7% of the respondents were of the view that the Information they needed were scattered in too many sources. About 28% of the respondents were also of the view that they had difficulty in getting scholarly materials they needed for their scholarly work. Also 17.2% of the respondents claimed that there was no Internet facility in their departments, whilst some stated that they lack adequate internet searching skills.

4. Ways to Improve Internet Usage Among Faculty and Students of the Faculty of Arts of the University of Cape Coast

Respondents were asked to point out how the challenges encountered by users of the internet could be improved. The majority of the respondents 51% were of the view that provision should be made for more Wifi at the faculty. In a decreasing order, 20.3% of them stated that the creation of awareness of the usefulness of the internet was one of the antidotes.

Thirdly, 18.8% of the respondents were of the view that databases at the library should be made accessible. Fourthly, 5% of the respondents deemed it right that spoilt servers and light outages problems should be dealt with. While some believe that there should be a personnel to assist students do the internet searches. One percent each also stated that students should be given assignment often, and also laws on Internet use should be enacted so that it will compel students to use the Internet.

5. The Extent to Which the Use of the Internet Has Improved Teaching, Learning and Research Activities

The researchers wanted to know how the use of the internet has improve upon the teaching, learning and research activities of the faculty of Arts of the University of Cape Coast. About 89% of the respondents believed that the internet has assisted them to get more information for assignments and presentations, 10.2% of the respondents were also of the view that the internet has made learning more easier and saves time, whilst the remaining 0.7% stated that the internet helped in checking plagiarism

VIII. DISCUSSION OF FINDINGS

1. Use of The Internet by Respondents

The study was made up of about 32% lecturers and 68% students of which 98.9 of them revealed that they were aware that the internet had information resources they could use for the teaching, learning and research activities. This finding is not surprising because as indicated by Afful-Arthur and Filson (2015;73), the informational resources on the internet is taught in Information Literacy Skills at the University of Cape Coast.

The study also, revealed that a total of 38.6% and 36.6% of the respondents started using the internet between 1-5; and 6-10 years ago. Comparatively, this is encouraging because, a study conducted by Kumar and Kaur (2005) on Internet and its use in the Engineering Colleges of Punjab, India revealed that only 30.8% of the students have 2-4 years of experience in using the Internet followed by 2-4 years with 27.4%. In all, the finding is supported by similar conducted at S. V. University, Tirupathi by Chandran (2000; 171) which indicated that a majority of the

respondents used the Internet.

On the issue of which device they accessed the internet and at where most of them indicated they used their laptop (39.1%) and 38.9% of them used cell phone. This most of them do at home (27.7%) and 20% at internet cafes with only 19.4%, accessing the internet at their department. This is a matter of concern because one would expect that the department would make adequate provision for free internet access. This finding is similar to the one identified by Ani et al (2010; 535), which revealed that only few respondents were able to access the Internet in their university libraries, this she said resulted from unreliable Internet network on campus.

2. Why Faculty and Students Use the Internet

One of the major objective of the study is to know why lecturers and student of the Faculty of Arts of the University of Cape Coast use the internet, it was revealed that 23% of the respondents used the facility to search for information in their fields of study, 19.8% used it to write and update their lesson notes, whilst 13.5% used it to access information on academic conferences. This study is in support of an assertion made by Renwick (2005), according to him, accessibility to print resources in libraries has decreased because access to online resources is easy. Begum, (1999) also argues that many students and faculty turn to use the Internet more as a results of that there is narrow access to up to date materials in University libraries in most developing countries.

The majority of the respondents representing 70.8% indicated that the internet was very useful facility. About twenty-one percent also stated that the internet was useful, whilst 5.8% ranked it as somehow useful. Surprisingly, 1.8% of the respondents were of the view that the internet was not useful. This crop of respondents could be looking at the disadvantages of the Internet, because when the researchers wanted to know how the use of the internet has improve upon the teaching, learning and research activities of the faculty of Arts of the University of Cape Coast. About 89% of the respondents believed that the Internet has assisted them to get more information for assignments and presentations, 10.2% of the respondents were of the view that the internet has made learning easier and saves time, whilst the remaining 0.7% stated that the internet helped in checking plagiarism

3. The Challenges of Accessing Internet Resources

The challenges of accessing Internet resources by lecturers and students of the Arts Faculty of the University of Cape Coast as noted by the respondents were that the Information they needed were scattered in too many sources, this challenged was indicated by 39.7%, whilst, about 28% of the respondents were also of the view that they had the difficulty in getting scholarly materials they needed for their scholarly work. In addition, some stated that they lack adequate internet searching skills.

This finding should be a bother because most of the respondents studied Information Literacy Skills a course which teaches learners how to access and use electronic resources effectively. Those who claimed that their respective departments had no Internet facility were those who could not afford to procure laptops and other gadgets they could use to access the Internet. This finding is in support with the findings of Adika's (2006; 9) in which 63 respondents representing (59.45%) indicated that their departments were not linked to the Internet

IX. RECOMMENDATIONS

Based on the findings the researchers will like to recommend the following:

1. Departments under the Faculty of Arts of the University of Cape Coast should make adequate provision for Internet access in the libraries.
2. The Information Literacy Skills of the University of Cape Coast should come out with the kind of pedagogical style for the teaching of the internet aspect of Information Literacy Skills.
3. The Main Library of the University should subscribe to a lot of electronic journals.
4. The teaching of Information Literacy Skills should be extended for more than one semester so that students would be abreast with how to do Internet search always.
5. The usage of the Internet should be integrated into the teaching, learning and research activities of the university.
6. Periodically, Internet training should be organised for faculty members.
7. Lecturers of internet should be motivated to put in their best.

REFERENCES

- [1] A. E. Ennin, "2.5m Ghanaians use internet," *Ghanaian Daily Graphic Friday*, p.9, April 2011.
- [2] G. Adika, "Internet use among faculty members of universities in Ghana," *Library Review*, vol. 52, no. 1, pp. 29-37, 2003.
- [3] P. Afful-Arthur, and C. K. Filson, "Strengthening the teaching of information literacy skills: Case of University of Cape Coast, Ghana," *Journal of Applied Information Science and Technology*, vol. 8, no. 2, pp. 72-79, 2015.
- [4] M. M. Allehaibi, "Faculty adoption of internet in Saudi Arabian universities," PhD dissertation, The Florida State University, Tallahassee, FL, 2001.
- [5] O. E. Ani, M. B. Edem, and E. J. Ottong, "Analysis of Internet access and use by academic staff in the University of Calabar, Calabar, Nigeria," *Library Management*, vol. 31, no. 7, pp. 535-45, 2010.

- [6] C. Arthur, and P. O. Brafi, "Internet use among students in tertiary institutions in the sunyani municipality Ghana," *Library Philosophy and Practice (e-journal)*, Paper 859, 2013. Available: <http://digitalcommons.unl.edu/libphilprac/859>
- [7] O. M. Awolaye, W. O. Siyanbola, & O. F. Oladapo, "Adoption assessment of Internet usage amongst undergraduates in Nigeria universities: A case study approach," *Journal of Technology Management and Innovation*, vol. 3, no. 1, pp. 84-89, 2008.
- [8] R. Begum, and W. S. Jean, "Internet use in libraries in South East Asia with special reference to the role of the Universiti Sains Malaysia Library in promoting the use of the Internet for teaching and learning," *65th IFLA Council and General Conference, Bangkok, Thailand, 1999*.
- [9] D. Chandran, "Use of Internet resources and services in S. V. University, Tirupathi environment," Conference on Information Services in a Networked Environment in India. Organized by INFLIBNET, 18- 20 December 2000, Ahmedabad. *International Journal of Cyber Society and Education*, vol. 3, no. 2, pp. 171-178, 2000.
- [10] F. A. Ekhikhamenor, "Internet facilities: use and non-use by Nigerian university scientists," *Journal of Information Science*, vol. 29, no. 1, pp. 35-48, 2003a. Available: <http://jis.sagepub.com>
- [11] J. K. Fasae, & F. R. Aladeniyi, "Internet use by students of faculty of science in two Nigerian universities," *Library Philosophy and Practice*, 2012.
- [12] J. Harle, "Growing knowledge: Access to research in east and Southern Africa," The Association of Commonwealth Universities: London, 2010.
- [13] Husain, "Internet use by the faculty members of Kuwait University," *The Electronic Library*, vol. 24 no. 6, pp. 791-803, 2006.
- [14] S. P. Husain, "Adoption of the Internet as a teaching and learning tool: Patterns of use, motivators and barriers among outstanding faculty in community colleges," PhD dissertation, University of Texas at Austin, Austin, TX, 2001.
- [15] A. Kaur, "Internet facility at GNDU: A survey," *National Seminar on Academic Libraries in the Modern Era*, 2005.
- [16] R. W. Kubey, M. J. Lavin, and J. R. Barrows, Internet use and collegiate academic performance decrements: early findings. *Journal of Communication*, vol. 5 no. 4, pp. 366-388, 2001.
- [17] Kumar, R., and Kaur, A. (2005). Internet and its use in the engineering college of Punjab, India: A case study. *Webology*, vol. 2, no. 4, pp. 1-18, 2005. Available: <http://www.webology.org/2005/v2n4/a21.html>
- [18] Luambano, and J. Nawe, Internet use by students of the University of Dar es Salaam", *Library Hi Tech News*, vol. 10, no. 1, pp. 13-17, 2004.
- [19] B. Muniandy, "Academic use of internet among undergraduate students: A preliminary case study in a Malaysian University," *International Journal of Cyber Society and Education*, vol. 3, no. 2, pp. 171-178, 2010.
- [20] C. M. T. Nwezeh, (2010). The impact of internet use on teaching, learning and research activities in Nigerian Universities: A case study of Obafemi Awolowo University, Ile-Ife, Nigeria," *The Electronic Library*, vol. 28 no. 5, pp. 688-70, 2010.
- [21] A. Ojedokun, and E. O. Owolabi, "Internet access competence and use of the Internet for teaching and research activities by University of Botswana academic staff," *African Journal of Library, Archives and Information Science*, vol. 11, no. 1, pp. 43-53, 2003.
- [22] G. U. Oyedun, "Internet use in the library of Federal University of Technology, Minna: A case study," *Gateway Library Journal*, vol. 10, no. 1, pp. 23-32, 2007.
- [23] Selwyn, N. "The use of computer technology in university teaching and learning: A critical perspective," *Journal of Computer Assisted Learning*, vol. 23, no. 4, pp. 83-94 2007.
- [24] S. Renwick, "Knowledge and use of electronic information resources by medical sciences faculty at The University of the West Indies," *Journal of the Medical Library Association*, vol. 93, no. 1, pp. 21-31, 2005.
- [25] D. Willis, and E. Coakes, "Computer mediated communication: The power of email as a driver for changing the communication paradigm," In E. J. Szewczak & C. R. Snodgrass (Eds.), *Managing the human side of information technology: Challenges and solutions*, Hershey, PA: Idea Group Publishing. Academic work, the Internet and U.S. college students, pp. 106-130. Available: https://www.researchgate.net/publication/222836283_Academic_work_the_Internet_and_US_college_students [accessed Sep 27, 2017].
- [26] M. O. Yusuf, "Society of information science," *Published in The Journal of Nigerian Association of Teachers of Technology, JONNAT*, vol. 6, no. 1, 163-171, 2006.