AN ASSESSMENT ON INTERNET USE BY THE STUDENTS OF ZAMFARA COLLEGE OF ARTS AND SCIENCE, GUSAU

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DECEMBER, 2017

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFULLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN MASS COMMUNICATION

DEPARTMENT OF MASS COMMUNICATION,
FACULTY OF SOCIAL SCIENCES,
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ZARIA

DECEMBER, 2017

DECLARATION

I declare that the work in this dissertation titled AN ASSESSMENT OF INTERNET USE BY STUDENTS OF ZAMFARA COLLEGE OF ARTS AND SCIENCE GUSAU has been carried out by me in the Department of Mass Communication, Ahmadu Bello University, Zaria. The information derived from the literature has been duly acknowledged in the text and in the list of reference. No part of this thesis was previously presented for another degree in this or any other institution.

MUHAMMAD TUKUR JANYAU ……. ……...

CERTIFICATION

AN ASSESSMENT OF INTERNET USE BY STUDENTS OF ZAMFARA COLLEGE OF ARTS AND SCIENCE (ZACAS) GUSAU. by MUHAMMAD TUKUR JANYAU meet the requirements, regulations and a standard governing the award of degree of Master of Science (M.Sc) in Mass Communication, Ahmadu Bello University, Zaria and it is approved for its contribution to knowledge and literature presentation.

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DEDICATION

This research is dedicated to Almighty Allah for his blessing and grace upon my life.

ABSTRACT

This study is aimed at assessing the use of Internet among students of Zamfara College of Arts and Science. The specific objectives of the study are to; examine the frequency of Internet usage by the students, compare the use of Internet for educational and the non-educational purposes by students, examine the types of Internet resources mostly consulted by students, and assess the challenges faced by students in utilizing Internet facilities in the School. The study employed the New Media theory and Uses and Gratification Theory as theoretical framework. Using the survey method of research, 15-item structured questionnaires were distributed to three hundred (300) students' participants drawn from six different programs, namely Diploma in Arts, Diploma in Sciences, Diploma in Social Sciences, IJMB, Consultancy and Remedial programs. Population of the study comprised all students in the College. Proportionate sampling and systematic random sampling technique were used to select the respondents from the population. Data gathered were analyzed and presented through the use of both inferential and descriptive statistic, using Chi-Square test, frequency distribution tables and pie charts. Findings showed that there is no significant relationship between availability of internet and frequency of internet use by the students. The second finding revealed that there is significant difference between Internet use for educational and non-educational purposes by the students of the College. The study further indicated that only 40% of the students use internet for educational purpose. The study also revealed that 4.72% respondents had no Internet access at all. Although effort was made by the College and NITDA to provide Internet facilities, these facilities are inadequate to meet the growing demand of the students. Other challenges faced by the students include, slow speed of Internet connectivity, and erratic power supply. Therefore the study recommends the provisions of alternative power supply adequate Internet facilities with high Internet connectivity and that, computer related study should be made compulsory to all students regardless of their departments.

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CHAPTER ONE

INTRODUCTION

1.1 Background to study

Communication is very vital for human survival; it aids the process of socialization, transformation and technological advancement. From its rudimentary form when society was simple and traditional to the present Information and Communication Technology (ICT) era, communication has been a key factor in achieving human aspiration. Radio was the first medium after the telephone and telegraph that was able to transmit information round the world. People were able to listen to what was happening elsewhere. Television came into being as a result of technological invention that allow information and picture to travel in the whole world today. With the development of satellite and cable television, people have been given the chance to look at the same pictures and the same channels, watch the same programs, and share the same experience.

Basically the Internet is the product of information technology, developed from an early distribution network known as ARPANET(Advance Research Project Agency Network) designed by the US Department of Defense in the late 1960s, with the aim of linking academic, research and military establishments (Wimmer and Dominick: 2000; Large, Tedd and Hartley, 2001;Kim and Weaver:2002). But by the 1990s, the Internet has developed into a communication technology that is being used to send electronic mail (e-mail), transfer files of data or programs from one computer to another, as well as gain access to other computers which stores relevant information among others (Large, Tedd and Hartley: 2001). Nwanwene

(2005:120) sees the Internet as the culmination of the so called communication revolution which according to him,

> ……is a succession of three overlapping technological stages that have taken place during the past 150 years. The first of these was the Wire Age (1844-1900), the second was the Wireless Age (1900-1970), and the third is the one we are now entering- the Integrated Grid Age, in which wire and wireless technology are brought together in powerful combination which has formed the structure of the present global information utility.

The Internet is a computer mediated communication (MCM) facility which according to Arkerman and Hartman (2002) is a collection of tens of thousands of computers that exchange information according to some designed protocols. Based on designed protocols, a computer connected to the Internet transports texts and images and displays them on another computer on the network. Through the evolvement of Internet, people were provided the opportunity to interact with friends, family members, conduct research on any topic they can imagine, and explore the world while sitting in the comfort of their own homes. It also enables students to communicate with other students abroad and thus share each other's ideas, knowledge, experience and cultures.

As a communication medium, the internet offer users a wide range of benefits. These include the among other things, in the area of education and research, which according to Usun (2002), is the most important of all. He cites a number of important areas where Internet can be useful educationally. For instance, the Internet can be used as a supplement or as a replacement to the traditional instructional method, where the researcher may find specified websites to gain more in-depth knowledge about a particular topic. It may also be used to replace the traditional classroom lecture. A number of courses are now being developed in which portions of the course

or the entire course is offered via the Internet. The instructor may place course notes on web pages, or may create a video recording of a live lecture for viewing on the Internet or use a combination of both ideas. In addition, there are many online teachers who use the help of this medium to get better results. Closely related to this is the use of the Internet in the area of finding general information about a subject. The Internet is like an encyclopedia of information. For every subject, there is bound to be some information on the web pages written by someone about it. The web offers many different perspectives on a single topic. The Internet puts a lot of information at ones fingertips that ones might not have found easily accessible.

In business, trading worldwide has seen a big transformation with the help of the Internet as it has become easier for buyers and sellers to communicate, which also saves a lot of money and energy. As a result, shopping has become easier, especially in developed countries in the West. Almost all consumer products can be bought and paid for with the use of the Internet. It gives access to information about product and services. The Internet has an unsurpassed ability to make information about a company's product or services available to potential customers.

The e-mail provides an easier and faster alternative to traditional methods of writing letters. Only that, it is not as personal and reliable as handwritten letters. Similarly, the Internet helps users meet new people. Since many people like receiving e-mail from other people very often friendship is quick to form from casual correspondence. Exchange of e-mail overtime has often developed into real life friendship, especially among members of online discussion groups. There are e-mail based and subject-specific forums. People interact through these sources and form groups that discuss issues that are relevant to them personally or professionally. Members send

e-mails to the manager or moderator and then these mails are distributed to the entire list of subscribers. Presently; this is one of the most important popular services on the net.

With the help of the Internet, people now no longer have to buy newspapers or watch television. They instead, visit the websites of the media outfit to read whatever news is available online. For instance, by visiting www.onlinenewspapers.com, one can have access to thousands of world's newspapers to select from

Closely related to the internet is the World Wide Web (WWW). This is often confused by many with the internet. Though closely related, the two are different. According to Nwanwene (2005). The WWW is the fastest growing feature of the Internet. It allows pictures, whether still or motion, and text presentation which can be made to suit various dimensions. Basically, the www is a location on the Internet called the websites which stores information either for private or public access by persons or organizations. Additionally, the www is one of the many protocols that govern the Internet. Other protocols include Transmission Control Protocol (TCP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP) etc. From the above, the Internet could be seen as a valuable source of information for students looking for academic materials.

The importance of the Internet as a source of information to man nowadays cannot be quantified. As some countries have reached an appreciable level of Internet use, others are at the bottom of the ladder. According to the International Telecommunications Union (ITU,2015) the Internet World Statistics as at June 2015 shows that 86.9% of North American population use the Internet followed by Oceania/Australia 72.1%, Europe 70.4%, Latin America/Caribbean 52.4%, Middle East 48.4%, Asia 34.8% and Lastly Africa 27.5%.

International Telecommunications Union (ITU, 2015) also revealed that only 34.59% of Nigeria's 178,516,904 populations have access and use the Internet for different purposes. This figure accounts for 61,748,997.1, Nigerians. This indicates that Information and Communication Technology is significantly underutilized by students and teachers nationwide due to lack of electricity in large areas of the country, inadequate coverage of the country by the major service providers and computer illiteracy among a greater number of the populace.

The first civilian government under the leadership of Alhaji Ahmad Sani Yariman Bakura (Sardaunan Zamfara) saw the need to establish a college that will provide the much needed avenue for our teeming school leavers to further their education as well as create avenue for the provision of the intermediate manpower need of the state. In pursuance of this noble objective, the Governor inaugurated a committee charged with the responsibility, of looking into the possibility of establishing such an institution which would give the state the required qualified candidates for university education as well as provide the intermediate manpower need of the state.

In pursuance of the committee's report, the state government proposed the establishment of a college to be called Zamfara College of Arts and Science (ZACAS) to be sited in Gusau and submitted it to the State House of Assembly which approved the establishment of the College through the Edict No. 6 of 2000, The former GTC Gusau was selected for the establishment of the Zamfara College of Arts and Science (Z.A.C.A.S). In that year, the College started with a remedial program with the sole aim of preparing candidates with deficiency in their O/Level. In the same year the Academic Planning Committee, set up a committee to look into the possibility of adding other programs. The School management accepted the recommendations of the

committee and forwarded same to the state government for approval. With the approval from the government, two Schools were introduced in 2001 with affiliation from reputable Universities namely Bayero University Kano, Usman Danfodio University Sokoto, and Ahmadu Bello University Zaria. The School of Sciences, the Matriculation programme, the Diploma in Integrated Science, and Diploma in Computer Science were affiliated to Usman Danfodio University Sokoto. The School of Arts and Humanities, Diploma in History, Hausa and Islamic Studies, Diploma in English Hausa and Islamic Studies, Diploma in Arabic Hausa and Islamic Studies, were affiliated to Bayero University Kano. Later, in 2003 the Interim Joint Matriculation Board (IJMB) program was introduced and affiliated to Ahmadu Bello University Zaria. In 2005, a Consultancy unit was also introduced. The unit runs the programs of different disciplines, such as Diploma Accounting and Computer Science, Diploma Crime Management Prevention and Control, Diploma in Public Administration, Diploma in English and Computer Science, and Diploma in Qur'anic sciences. In 2009 other departments were also introduced, these are The National Diploma in Information Technology, National Diploma in Science Laboratory Technology and National Diploma in computer Science.

In 2011, huge sums of money were injected into the College for the completion of laboratories and Computer pool for the installation of Internet in order to get the National Board for Technical Education (NBTE) accreditation of its programs, in 2012, the National Board for Technical Education (NBTE) granted permission to the College to offer courses leading to award of the National Diploma (ND). NITDA in its effort to further allow for propagation of internet use installed the Internet wireless services in the college mainly for educational purposes. The College which commenced operations in the year 2000 with one thousand two hundred remedial students and less than twenty (20) academic Staff. The current Students strength is over three

thousand (3000) engaged in different programs. For the acquisition of Computer and internet knowledge, the College, after the installation of Internet facilities initiated Computer training for students to enable them access the required information for their academic activities. This will also help them connect with students from other countries for interaction.

1.2 Statement of the Problem

The Internet has brought changes in the educational development of developing and developed nations. It has contributed to communication and has it became the most effective way of accessing information resources. Each passing day there is a growing dependence on it. The academic world should ideally take the lead in Internet use because it is concerned with researches for effective teaching and learning. Whereas over 86.9% of North Americans and 34.8% of Asians use the Intrenet, only 27.5% Africans and 34.59% of Nigerians use it (ITU, 2015).

Information and Communication are very vital in attaining development, therefore all sectors of progress including education embrace it. All sectors are affected by it. Whilst the US has achieved tremendous success in the application of ICT in education, Report of the International Development Research Centre (IDRC, 2014) describes Internet utilization in African Tertiary Institutions as too little, too expensive and poorly managed. Also, there are inadequate communication facilities, lack of materials and professional expertise, as well as dearth of empirical data on use of the Internet by students, teachers and researchers Adogbeji, (2006). Again, the Internet use in Nigeria is comparatively low in relation to its position on the continent. This trend may have impact on student's use of the Internet in tertiary institutions in Nigeria. Once research efforts are hampered, teaching and learning in tertiary institutions become

jeopardized. It is in realization of the effect the Internet has on the way we find information and conduct research that the Zamfara State government released thirty million naira for the completion of a Center for Information Technology in Zamfara College of Arts and Science and other tertiary institutions, to facilitate academic research in the year 2012. NITDA also in its effort to connect tertiary institutions with the Internet, the facility was installed in the year 2012 in many institutions Zamfara College of Arts and Science inclusive.

The Zamfara College of Arts and Science, a relatively young tertiary institution, is among the tertiary institutions struggling to meet up with the demands of the IT revolution which has become important in acquisition of knowledge. In its quest to catch up in this area the College needed to embark on various ventures to improve Student's knowledge in IT application and its effect on the performance of the students academically. These investments are expected to impact positively on the use of Internet by the students of the College.

However, there has not been any study to ascertain the usefulness of the Internet to the students of Zamfara College of Arts and Science. This means that while the students continue to have multi-access point to the Internet especially through mobile Internet such as modems, i-phones, ipad, among others which are valuable tools, in communication, teaching and learning, it is therefore necessary to understand the student's use of Internet. Also a College like Zamfara College of Arts and Science needs to find out the frequency and purpose for which their students are using the Internet; whether they use it for communication, academic activities, entertainment, correspondence, business or social purpose. The study therefore investigates the students' use of Internet and the purposes for which they use it.

1.3 Aim and objectives of the Study

The aim of the study is to assess the Internet use by the students of Zamfara College of Arts and Science. The specific objectives of the study are to:

1) Examine the frequency of Internet use by the students of Zamfara College of Arts and Science.
2) Examine the relationship between availability of Internet and frequency of Internet use by the students of Zamfara College of Arts and Science
3) Compare the use of Internet for educational and the non-educational purposes by the students of Zamfara College of Arts and Science.
4) Examine the types of Internet resources most consulted by the students.
5) Assess the challenges faced by the students of Zamfara College of Arts and Science.

1.4 Research questions

The study attempts to answer the following questions:

(1) What is the frequency of Internet use among the students of Zamfara College of Arts and Science?

(2) What is the relationship between availability of Internet and frequency of Internet use by the students of Zamfara College of Arts and Science?

(3) What is the difference between using Internet for educational and non-educational purposes by the students of Zamfara College of Arts and Science?

(4) What are the types of Internet resources the students use?

(5) What are the challenges that confront students when using the Internet resources?

1.5 Research hypothesis

The hypotheses to be tested are:

1) H_O: There is no significant relationship between availability of Internet and frequency of Internet use by the students of Zamfara College of Arts and Science.

2) H_O: There is no significant difference between Internet use for academic and non-academic purposes by the students of Zamfara College of Arts and Science.

1.6 Significance of the study

The Internet is a new technology that has come to add value to the traditional method of acquiring knowledge in academia. Students and researchers alike have turned to the Internet as a valuable tools for addressing social and academic problems. Although there are studies conducted by different researchers on the use of internet by students of various tertiary institutions, but there is no study known to the researcher on the Internet use by students of Zamfara College of Arts and Science (ZACAS) Gusau. Furthermore it provide feedback on the state of the facilities provide by the state and NITDA so that to know what area to fill. The study will avail the researcher with first-hand information on the nature of Internet use by students of the institution under study, thus, making it possible for the researcher to counsel students in particular, and possibly other users on how to utilize the Internet as a medium of communication,

the findings from this research will also add to the available literature as well as provide an insight for making useful recommendations, for the way forward.

1.7 Scope of the study.

The study focuses on the Internet use by students of Zamfara College of Arts and Science. The study covers the purpose of using the Internet, types of educational resources use, means of accessing the Internet, and challenges faced during Internet use by the students. The study chose Zamfara College Arts Science and no other tertiary Institutions in the state. The choice of the College was informed by its location in Gusau the capital of Zamfara State. This is also in realization of the fact that Internet service in Nigeria is commonly found in urban areas; As such the College stands a chance of enjoying good Internet service access. Some students were found with Computer illiteracy.

1.8 **Limitations of the study**

The study did not cover the whole population the students of Zamfara College of Arts and Science, Gusau due to constraint of time and money. The researcher faced the challenge of meeting with the respondents since it encamps both male and female students. The inferential statistic used is not rigorous enough to generalize.

1.9 Operational Definition of Key Terms

Internet use: Internet use in this study means the purpose for which the internet is used by the Students of Zamfara College of Arts and Science.

Availability: Availability in this study refers to the presence of Internet service in the College.

Access: In this study referred to the point through which the Internet service is connected

Zamfara: Zamfara, in this study refers to Zamfara College of Arts and Science in the state.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature relating to various aspect of Internet use. The purpose for this is to explore and examine the existing articles and related studies with a view to further understand the confidence of students in the use of the Internet and its importance to the academia. Therefore, this section is divided into three major parts which include; conceptual literature, empirical literature and theoretical framework.

2.2 Concept of Internet

The term Internet was officially defined as "the global information system that is logically linked together by a globally unique address space based on the Internet Protocol (IP), that is able to support communications using Transmission Control Protocol/Internet Protocol (TCP/IP) and provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure" (Federal Networking Council, 1995:1). However, when individuals talk about the Internet, they are typically referring to more than this technical definition. When individuals access the Internet they typically do it via the World Wide Web (web). The web is actually a collection of electronic documents that are stored on computers

throughout the world (World Wide Web, 2002; Howe 2007). Through the use of a web browser these documents can be easily accessed by anyone who knows what to look for and are frequently identified through the use of search engines designed to access these documents based on key words (Search Engine, 2009). This information can then be communicated to others through the use of email or instant messaging/chat programs.

Kahin and Nesson (1997:49) describe the Internet as:

> An inter-network of autonomous networks built on the packet-switching pioneered in the early 1970 by ARPANET (Advance Research Project Agency). The development of the Internetwork Protocol (IP) enable the true Interpretability among different networks connected to the ARPANET and those inter-operating networks are collectively known as the Internet.

Similarly, Krol (1992) posit that the Internet is in essence computer networks that link public and private computer networks and hundreds of thousands of computers around the world. The Internet also provides information to its users through electronic publishing. The development of electronic publishing offers several advantages to journalism profession that traditional paper based publishing do not provide. Newspapers and radio stations have site on the Internet where the user can find all the information he/she needs, this medium (Internet) has made it possible for people all over the world to communicate with one another effectively and inexpensively (Comer, 2009).

Owing to this significance of the Internet, it has become imperative for students especially in the developing countries to embrace the new technology as obtained in the developed world. The Internet is a valuable sources of information for students. Tella (2007) pointed out that with over 50 million web on the net, the chances are that information on any subject can be found using a

number of appropriate search tools. In this regard, the Internet serves as a useful tool for students in helping them to prepare their projects using a number of sites dedicated to provide educational materials. In the same veins the Internet has become an inevitable tool for communication, learning and research, (Adogbeji 2006)

Agreeing with this, Adegoke (2009:22) affirms that Indeed, the Internet is also a virtual library which is seen as a virtual space containing a vast amount of information and documents including books, picture, video, graphic and musical sounds that can be consulted. Kamba (2008) explained that, "the Internet is a means for exchanging information and ideas among researchers and scholars, and is a medium for communication and collaboration among colleagues". In the same way, the Internet provides a forum for interaction among students as well as their teachers. Goodson (2001) reported that almost all students use the Internet to communicate with friends and family via the social network. This also has led to increasing dependency on the Internet, which is geometrically growing as many enjoy free access 24 hours a day on Internet centers or their mobile Internet such as, i-phone among others.

In line with this, Baker (2000) in Tella, (2007:143) maintained that "the Internet allows students and teachers to exchange greetings, engage in intellectual discourse, conduct meetings, share knowledge, offer emotional support, make plans, brainstorm ideas, learn about other cultures and likewise broaden their mental horizon". In another study by Leiner et-al (2000:34) "A Brief History of the Internet" and Singh (2002) "The Internet-Strategy for Optimum Utilization in South Africa" cited by Jagboro (2003:93) "the Internet provides several opportunities for the academia. It is a mechanism for dissemination of information and a medium for collaborative interaction between individual and their computers without regard for geographical limitation of

space". The idea of inventing the Internet therefore is awesome especially to the academia because it allows intellectual interactions, exchange of ideas and it is capable of solving academic problems. The only thing that the user requires is the skill to manipulate the computer that is connected with the internet and the patience of finding information on the net. Hamersley and Atkinson (1992) in Viseu (2005:71) on the other hand, postulated that:

> Students tend to use the Internet in order to make their work easier or their school life more pleasant. Copying contents and using them in school papers, or using the Internet for personal purposes are good examples of a certain "facilitator vision" described by some students. In other cases, students are concerned with improving their role in school and they use the Internet as a way to diversify their school experience. The fact they appreciate the autonomy and a more active role in the learning process by using the Internet was also mentioned as an advantage.

The benefit of the Internet to the academia cannot be over-emphasized. Its use by students varies, and while some utilize it for academics others use it for leisure and others combine both. To buttress this, Yang-Chih and Su-Yen (2009) in their work 'Internet Use and Academic Achievement', posited that "Internet use varies greatly by what students do online and how they do it". The researcher agrees with Yang-Chih and Su-Yen because on the net, it is observed that, there are many sites that are capable of distracting students from their academic work. Such sites are mostly referred to as social site which include but not limited to the following:

a. Face book
b. Black planet
c. Games
d. Pornographic site
e. Music and movie sites etc.

To students, these sites are social forums where they search and make friends listen to music etc and so it can be an obstacle to their academic performance. However, with all these sites in place, several scholars, local and international, have conducted studies on Internet use by students of tertiary institutions. Omotayo (2006) in her study, that surveyed 'Internet Access and Usage Among students at Obafemi Awolowo University (O.A.U)' cited Hoaffman, Thomas and Ann (2000), who maintained that, there are many surveys on the use of the Internet, and that, nearly all have found that Internet usage is more prevalent among young people. This assertion justifies the reason for this study because most College students are young people and are most likely to use the Internet for their educational activities. Therefore this study is timely as it has investigated the use of Internet by students of the College understudy.

2.3 Concept of Availability

Availability of Internet in tertiary institutions is very important considering the uses to which it can be put. Availability as a concept, has multiple meaning, but mainly refers to the presence of Internet as a service that an individual can use because he has the requisite skill and means to do so. Thus, having a computer is not the same as having Internet connection since the user has to possess the right skills-in the form of computer literacy and connection to the Internet base on power supply.

In many tertiary institutions of learning, there is a conscious effort to make Internet usage easy and affordable. This is achieved by acquiring technical equipment for Internet services and the deployment of the service to class rooms, libraries, laboratories, studious and theaters. this ensures that there are many access point from which students and teachers use the Internet services. Students have to have a computer lap-top, palmtop and smart phones to access the

Internet while access to specific point using cables is one form of ensuring students use the Internet. There is also the use of wireless services such as Internet cloud that ensures ready access at many points without having to connect cables. At a higher educational level in the USA, a national survey has been conducted about the most wireless-friendly campuses, with winners such as Ball state University reporting 625 access points. A research on the uses of the Internet in Cyprus conducted by Miltiadou (1996) found that all faculty members has the availability of Internet service with dial up modems using the point-to-point protocol on campus. The Internet is available and accessible via the Netscape worldwide web browser. The students have a unique opportunity to search the vast amount of information from a network of multimedia-based documents and data base that span the Internet. George (2002) said that using Internet will assist students in nurturing a learning culture.

Various studies were conducted on computer availability in higher Institutions in South Africa. A report commissioned by the World Bank on connectivity in African tertiary Institutions provide some comparative information on the average number of users per networked computer by region(steiner Tirivanyi, Jensenand Gakio 2004). The HEI average is 11 users per computer which is much better than the average for African's tertiary institutions at 55:1

2.4 Access to the Internet

Due to the change in mode of communication in all spheres of human endeavors in this 20th century, tertiary institutions all over the world have tried to promote the use of Information Communication Technology (ICTs) in their campuses and Nigeria is not left behind in the drive. Although Nigerian tertiary institutions are striving to catch up with their counterparts in the developing countries in terms of Internet facilities, availability and access by members of the

institution's community, the facilities have proven inadequate. Anyira (2011) observes that "there is limited Internet service in the university. Majority of the staff and students d to internet facilities as a result of ineffectiveness of the university's infrastructure and lack of distribution of the limited services being offered. Although, Anyiras's work is based on a private university, his finding is synonymous with the situation in government owned institutes in Nigeria. The researcher observed that most Nigerian higher institutions has made frantic effort to install Internet in their schools including libraries but no sooner are installed and become dysfunctional which may be as a result of lack of technical knowhow by the staff to maintain such facilities as well as inconsistent power supply that causes continuous breakdown of the ICT equipment.

The phrase 'Internet access' in Tella (2007) is referred to as, "the means which users connect to the internet", he thus stated that "place of the access include libraries, Internet cafes and various places where computers with Internet connection are available" The researcher agrees with Tella's assertion because in most higher institution in Nigeria, the library is the major place the Internet is accessed by both students and teachers. In addition to that, the Federal Government and some States, including Zamfara, have established Center for Information Technology (CIT) in tertiary institutions to enable internet access to students and staff.

In a study 'Faculty Use of Cyber-cafes for Internet access carried out by Parameshwar and Petil (2009) in Gulbarga University, Kanataka state, India, it was shown that, the respondents have access to the Internet through the library and their departments, while some said they access the Internet through the central computer laboratory. This is also true of most Nigerian tertiary institutions. Students mostly have access to the Internet in the library' and in some departments that have Internet connection for their members. Nonetheless, the facilities are inadequate,

therefore, student rely on private café within and outside the campuses to access the Internet. Some students, who can afford it, use their personal laptops. Supporting this statement Osunade, Philip and Ojo (2007) in their survey found out that Cyber café are a popular source of access to the Internet in Nigeria and even among academics, most of whom have their own computers and/or laptops.

Similarly, Jagboro (2003), in her study: 'Internet usage in Nigeria Universities' revealed that most students access the Internet via cyber-cafes and their departments as well as in the library. She further explained that the reasons for use of the Internet via cyber-cafes is due to the proximity of these cafes to students user facilities such as hostels, mini-market and lecture halls and that the reasons for which students don't access the Internet in their various departments is due to low level of Internet connectivity and availability of personal computers which lead to long queues of users. This constraint is also not different from the situation in the libraries. This situation posited by Jagboro is one of the major factors that usually discourage students from using the Internet.

Internet access in African tertiary institutions and Nigerian tertiary institution in particular, is on the increase. Schofield and Davidso (1997) in Tella (2007) in their study of students' use of Internet in University of Botswana were of the view that, in Africa nowadays, the rate at which people, particularly students, are gaining access to the Internet is progressing. They however, opined that there are restrictions regarding the time of access. The researcher thus, agrees with Schofield and Dividson in Tella stated above, because due to the growing population of students in tertiary institution compared with the few internet facilities available it has become necessary to ration the period of use by each student so as to enable a sizeable number of students to have

access to the facility. We should however, note that the longer the time spent on the Internet the better the understanding of how it works. Consequently, it is necessary for students to have sufficient time on the Internet so as to acquire the required self confidence in the use of the Internet for their academics.

Schofield and Davidson study also found out that "a student is only allowed to access the Internet for only two hours daily. This is due to the limited access points on campus". Another separate study by Ojedokun (2001) in Tella (2007) who studied 'Internet Access and Usage by the Students at the University of Botswana' also stated that computers with Internet facilities were still inadequate which denied many students opportunities of access. Therefore, the idea of rationing the Internet use in most universities is to allow each student who cares to use the facility at least during access time. For example in Bayero University Kano (BUK) the main library building has an internet connection, however, the facilities are inadequate and so students are allowed a period of one hour each on the Internet. This period is inadequate but it is imposed as a means to allow more students to, at least, have access time for whatever small period allocated to them.

The point is that students do have access to Internet on the campus but the question raised is, is this period enough for students to gain the experience of using the Internet for their academic problems?. The researcher thus feels that a period of one hour per student on the Internet is not enough to gain self-confidence to search for information on the net. A longer period of time on the Internet helps to build more confidence in the Internet users. Asdaque, Khan and Rizvi (2010) noted that the number of hours spent on the internet will affect the students CGPA unless the Internet is used for study purpose. This is true because some students who use the Internet at

times venture into sites that are not relevant to their academic work which may adversely affect their study negatively. Students, however, need more time on the Internet to really get more benefit out of it.

Similarly Ani (2010:117) in his survey of three Nigerian Universities' revealed that.

> The Internet is extensively used by undergraduate students in the surveyed Universities. There is inequitable access to the Internet as students mostly rely on private/commercial Internet cyber-cafes both on and off campus for their access and use. Access to the Internet in the university libraries, department/faculties and university computer/information and communication center is grossly poor, this is due to poor Internet infrastructure and connectivity and non-sustainable Internet service in these universities.

This situation is a general phenomenon in Nigeria; Internet service is erratic couple with constant power outage which leaves the students with no option than to rely on private cyber café for Internet services. Likewise, Omotayo's survey found out that 89.9 percent of the students had access to the Internet and that only 10.1 percent of the students had never used the internet at the time of their study. She therefore explained that, "the proportion 10.1 percent may look minimal and suggest over-whelming accessibility of respondents to Internet facilities; it is worrisome that not all students of the institutions use the Internet". And that for student to make use of the Internet they must have access to the facility the absence of which makes the students not to use the Internet on their campuses. It should be stated that accessibility of the Internet on the campus is for students to utilize the resources for their academic activities.

2.5 Internet Use by students

The Internet is one of the greatest and recent advancement in the world of information technology and has become a useful instrument that has fostered the process of making the world

a global village (Asdaque, Khan and Rizvi 2010). They cited Berson (2000) who maintained that "Internet use has become very popular in many areas as well as in education in recent years. Accordingly Internet access in schools has increased greatly over the last 20 years". The researcher observed that students are among the most users of the Internet world wide and that higher institutions in Nigeria are not left behind in the Internet revolution. Students and teachers have embraced the Internet for their academic activities in their entire ramification.

Similarly, the findings of Tella (2007) also showed that internet access by students has enhanced their academic performance. Also Asdaque, Khan and Rizvi (2010) found out that, students who use internet for downloading materials such as book/journals for their assignment do improve their Cumulative Grade Point Aggregate (CGPA) compared to those who use it for other thing outside academics. According to Ogedebe (2010) in his survey, 'The Relationship between Academic Performance and Internet Service in Tertiary Institution and University of Maiduguri". His analysis showed that 79 percents of the respondents accepted that their academic performance has improved as a result of using the Internet. The findings made by Ogedebe (2010), Tela (2007) and Adsaque, Khan and Rizvi (2010) clearly indicate that the Internet can indeed enhance students' academic performance because it has all the resources students can take advantage of.

Another similar study by Chen and Fu (2009) cited in Kubey, Lavin and Barrows (2001) in Kuh and Hu (2001) who posited that 'searching information online about course materials help boost intellectual development and facilitate preparation for future jobs" and that in contrast, heavily indulging in online recreation has been closely linked to impaired academic performance. Still Chen and Fu stated that some studies have suggested there is a positive association between

students Internet use and their learning, they cited Suhail and Bargees (2006) who surveyed university students from Pakistan, where they noted that, around three quarter of respondents noted positive effect of Internet use on their learning in at least three aspects.

1. Internet use has increased their grades.

2. The Internet use has expanded their reading, writing and information processing skills.

3. The Internet has proved a helpful tool in their studies.

This positive effect of Internet use by respondents, as found out by Suhail and Bargees above, is as a result of the availability and accessibility of the resources in the University they studied. Students in Nigerian tertiary institutions could catch up with their counter parts in other institution if the Internet is made available and accessible to them.

Still, Kuh and Hu in Chen and Fu posited that surfing the Internet for course materials had positive net effect on intellectual development and vocational preparation in addition to personal development. In supporting this Tella (2007) cited Kuh and Hu (2001) indicated that there is a positive link between information technology and engagement in effective educational practice. Tella further cited Laird and Kuh (2004) in their study of the use of data by students engaged in Indiana University of Bloomington; they found a strong positive relationship between using the Internet for educational practice such as active and collaborative learning and student's interaction and that "when the students used the Internet, their opportunities for other types of engagements increased".

Comunale, Sexton and Voss (2002) in Tella (2007) found evidence to suggest that higher course grade is related to more frequent web use. Tella therefore concluded that the result of his study

has so far demonstrated that the use of the Internet contributes immensely to the academic performance of students. Ogedebe (2010) also concluded that the Internet and its services play a vital important role in student academic performance. This happens through constant exposure of students to up-to-date and relevant information in their various fields of study and their ability to search the appropriate documents on the Internet for the problem at hand.

In trying to explain the benefits of the Internet to students, Ediger (1994) in Gilflores (2009) asserts that "in the case of schools, computer use would facilitate learning and therefore, has a positive effect on performance" and that "the educational activities that involve the use of technology capture the interest of students, which facilitate their understanding of the contents and provide a different way of expressing knowledge". The researcher also observed that Internet use can be captivating especially to students who are familiar with the technology and are able to manipulate it for their academic work; it is also a means to facilitate their understanding especially when they apply it to update their class work after lectures. By so doing, they are likely to come across other materials that are written by other scholars which may further explain the concepts already treated in the class which in effect broaden their understanding of the concept. Although merit of the Internet makes it an ideal research tool students experience significant academic problems as they surf irrelevant websites, engage in chart room gossip, converse with Internet pen-pals and play interactive games at the cost of productive activity. Students may have difficulty completing homework, assignment, and study for exams or getting enough sleep to be alert for class the next morning due to Internet misuse. Often, students may be unable to control their Internet use which eventually results in poor grades, academic probation and even expulsion from the College. Brady (1996)

2.6 Purposes of Internet use by Students

Many factors could be attributed to student's use of the internet for solving the academic problems. Students find electronic technology very useful and, in some cases, time saving. Students have to access the internet to supplement notes given by lecturers, complete class assignment, write project, and communicate via e-mail with students and friends (Ador Omodeke and Oto, 2004). Ajuwon (2003) studied Internet use by first year clinical and nursing students of the University

College Hospital in Ibadan, Nigeria. Her study revealed that 60% of the respondents used the Internet for different purposes. Odusanya and Bamgbala (2002) found that "58% of the medical and dental students in their final year at University of Lagos, Nigeria, who they studied, used Internet for educational and non-educational purposes.

The Internet allows students to carryout multiple tasks. For example, students can make calls, communicate via keyboard, and, at the same time, solve academic problems. Similarly, Adomi and Ejirefe (2012:75) stated that majority of the student use facebook on Internet to connect with friends, relatives and others. Also it is a platform for keeping in touch with close acquaintances. Students use the internet for communicating with their lecturers through e-mail by asking for clarification, or reporting information to their supervisors, e-mailing, papers and getting feedback Mathew and Schrum (2003).

The researcher finds this statement to be absolutely true because the Internet provides the opportunities to carryout multiple tasks such as described by Adomi, Omodeke and Oto (2004) and Mathew and Schrum (2003) above. However, one should note that the whole process

involved in using the Internet effectively include knowledge and skills, i.e. the ability to manipulate the internet to solve academic problems.

Anunobi (2006) in his study, Internet usage by students of Federal University of Technology Owerri, maintained that "members of the University community use the internet for the facilities it provides to communicate at world level. Thus, they can debate democratically and freely while being exposed to happenings in their field of activity as well as other subjects". He further cited Chifewapa (2003) and Jagdoro (2004) who specified the benefits of Internet to the academic community as;

a) Quick, global and convenient access and exchange of information with experienced and experts in any field;

b) Easy dissemination of research findings;

c) Enhanced collaborative research and other activities;

This is true because student's life on campus is characterized by series of activities throughout the duration of their study in the institution. Therefore they require an easy way out to tackle these challenges and the Internet has proven to be an essential tool for this purpose. It provides easy access to information and encourages collaborative study with other students through Usenet study group on the Internet.

Such purposes are achieved through accessing and downloading academic material, access and downloading software, visiting other tertiary institution's sites and sending or receiving emails. -`(Ayoku, 2001; Akintunde, 2002; Chifwepa, 2003; and Ibegwam, 2004 in Anunobi 2006). This therefore, showed that, the purpose for which students use the internet is enormous ranging from

academics to entertainment etc. However, most studies showed that the primary purpose of using the internet by students is to search and solve their academic problems; they also use it for leisure to ease academic tension.

Ray and Day (1998) as cited by Margaret and Eric (2010:18) surmise that:

> Internet has greater potential for desirable information, is a faster means of accessing information, provides access to a wider range of information; provide access to electronic journals, enable access to multiple files at once; provide access to information from home, and gives more satisfactory answers to queries than library staff.

They further explained that, "Internet use can support and promote the technological revolution that has taken place in education. The Internet seems to be a most perfect instrument of education that offers students convenience while offering enormous potentials for teaching". No doubt therefore, it is a means for achieving academic excellence if put into proper use.

Based on the above, the Internet can actually be regarded as an inseparable part of today's educational system. It has proven to be a complement to the traditional library system where students can fall back to for academic achievement, which is probably the reason why the Federal Government of Nigeria has made it a priority to provide Centre for Information Technology (CIT) in every higher institution for students to take advantage of. Academics increasingly depend on the Internet for educational purposes. A majority of academic and research institutions provide Internet services to students, teachers and researchers (Kaur 2008; in Saffdar, Mamood and Quteab 2010 in Ur-Rehman, Hunjra and Safwan 2010).

Hicks (2002) in Tella (2007) view it this way, "the Internet is a double edge sword, as students can access any educational data-base, learn about any country, they can also be subjected to perverse and deviant topics. Tertiary institutions can use the Internet infrastructure to improve

and supplement traditional courses and degree and sub-degree programs". This is gradually taking place in most Nigerian institutions as Lecturers are beginning to apply computers for power point presentations and students are encouraged to write and submit their assignment via the e-mail service on the net. The Lecturers also conduct their researches on the Internet which, at the end, will be hosted on the net for academic consumption which is a positive step to encourage the use of Internet among students.

In line with the above statement, Kamba (2008) in his study asserts that "with the introduction of the Internet, Nigerian researchers have been able to consult more information resources". So are the students, especially, students in the Colleges undergoing sub-degree program. He further maintained that, "the Internet also provides us with the means of carrying out research online". Similarly, the Internet can be a powerful source for research, challenging students to investigate problems that are authentic and are connected to curriculum and inter-disciplinary areas (Iakushina 2004; Mekenzie 1998, Falvo 1994 in Ur-Rehman, Hunra, Safwan and Ahmad 2010).

In a nutshell, the reviews above showed that students are amongst the most frequent users of the internet geared toward their academics. Some findings, however, revealed that student do use the Internet for leisure, others use it for academics or both. In support of this, Kumar and Kaur (2006) in Tella (2007) opined that, students are the most frequent users of the Internet. They use the Internet mainly for educational purposes rather than entertainment. Tella (2007) on the other hand cited Bavakutty and Salih (1999) their result showed that students, research scholars and teachers use the Internet for the purpose of study, research and teaching respectively. Suhail and Bargees (2006:16) posit that "the misuse of the Internet often leads to unhealthy consequences, while heavy Internet use leaves little time for anything else". They investigated the positive and

negative effects of excessive Internet use among undergraduate students in Pakistan and found positive associations between times spent on the Internet and the various dimensions of the Internet Effect Scale (IES), indicating that excessive Internet use can lead to a host of problem of educational, psychological, and interpersonal nature.

Therefore, being a part of the global world, the technology has since engulfed the Nigerian educational sector especially in the tertiary institutions. Students and tutors have embraced it totally for their academic activities. It has proven to be a vital channel for advancement of knowledge.

2.7 Types of Internet Resources consulted by Students

Internet is a recent technology which most students rely on for their academic pursuits. Students also learn more and better when they use the information available on the Internet wisely. Using the Internet, students get more resources that help them achieve their objectives in preparing for their assignment and project. Having said this, there are enormous resources on the Internet which students and teachers can take advantage of for their academics. Sahin, Balta and Ercan (2010) list the following internet resources that are useful for academic activities.

Academic Journals database

This resource provides rich source of specialized information, and are widely used by many academics. They are an essential reference tools for detailed research into different subject areas, and are grouped into subjects according to different disciplines.

Search engines

Search engines are open access sites and are the most widely used resource for researchers, lecturers, and students project. Many of them have open access on Internet Explorer programs, but some are customized tools supplying multiple search engines like “Copernic” resources which are accessed through these engines and are mostly used by students for gathering the required information for their research. Search engines are sites on the Internet where users search for documents relating to their information need.

Electronic Libraries

These are libraries belonging to various institutions hosted on the Internet where students and teachers consult scholarly resources electronically with an aid of a library web site. Resources on these sites are categorized into two different group’s i.e. open or closed access. The open access is free and open to all users who care to use them whereas the close sources are mostly academic books and contractual journals and are completely trustworthy. These collections are ideal for students, lecturers, and researchers who are members of the institution.

2.8 The Challenges Confronting Students in using Internet

The Internet is arguably one of the most positive technological developments of the 21th century. However, despite the added benefits of this tool to learning, teaching and research a number of problems still plague Internet connectivity and use in Nigerian institutions, Jaboro (2003). Awoleye, Siyabola and Oladipo (2005) in their survey stated that the major constriction and challenges of internet use include, financial constraint, erratic power supply, inefficient internet link and servers, not having enough time, no personal access to the internet, not being computer

literate, cyber congestion and lack of reliable strong facilities etc. It was observed that these challenges are more prevalent in most developing countries that include Nigeria.

On the issue of adequacy, Christian (2008) in his research paper observed that, in Nigerian institutions the number of Internet cafes and computer equipment are quite inadequate hence it is not often surprising to find long queues of clients spending hours waiting to gain access to available computer in order to access the Internet''. This problem is further compounded by the slow speed of Internet connectivity: Christian further clarified that ''notwithstanding the growth in Internet usage in Nigeria , the speed and reliability of the internet connectivity still pose a great deal of challenges to most of the institutions in Nigeria. Based on this, the researcher is of the view that the problem of unreliable Internet service in Nigeria may be as a result of too much dependence on Internet service providers who also depend on other international service providers as against direct use of satellite for Internet service. This situation is usually frustrating especially when the students rely on the internet to solve an urgent problem but finds out it takes a longer time to open or download a web page due to slow speed of internet service. These discourage the student's use of Internet.

It has also been observed that bandwidth allocation in Africa is so expensive that most institutions (on their own budget) cannot afford more than 1.544 Mbps which is less than what many home broadband users have in North America (Gerhard 2003 in Christian 2008). Having said this, Akintunde (2003) is of the view that, maintenance of facilities infrastructure (such as telephone and reliable electric power supply) and of course training and continuous professional development are major challenges that affect full utilization of Internet resources in Nigerian institutions and those in other developing countries. While the researcher may agree with

Akintunde's statement above, it will be unfair to say that Nigerian institutions are lagging behind in terms of training their staff and students as earlier stated. Almost all Nigerian institutions have introduced several categories of computer related courses geared toward training both students and their lecturers. The problem however, may be inadequate facilities and limited access to the existing few.

Gbaje (2007) in Aliyu and Dogara (2008), on the other hand, opined that, "the problem militating against the use of ICT in Nigeria include, "the Nigerian state of power supply, the frequent outages have made the sector so unreliable that electronic facilities which solely depend on constant supply would be doomed no sooner that they are put in place". This is a major problem faced by Internet users in Nigeria. Without electricity the Internet cannot be adequately utilized by students and having the Internet without adequate electricity is as good as not having it at all. Similarly, Osuande, Philip and Ojo's findings stressed the following to constitute some challenges that face Internet users (students) in Nigeria.

a. A reliable supply of electricity is a very important factor in full utilization of internet services but in Nigeria the persistent power failure and prohibitive cost of alternative power source have caused underutilization of the internet.

b. Lack of formal training in terms of computer or internet skills does not appear to be overly restrictive in terms of people's willingness to use ICTs, but usage is based on trial and error, adversely affecting the potential which ICTs hold for academic activities.

c. Although (lack of) time does not appear to be a significant barrier to the use of the Internet and its services in Academic environments according to the respondents, they spend little time using the Internet.

Based on the above, the challenges faced by student when using the internet are enormous. However, the major problems they face include erratic power supply, shortage of computers connected with the Internet, lack of expertise in the use of the facilities and ultimately lack of finance to acquire the facilities etc. All these militate against effective use of the Internet by students of Nigerian tertiary institutions.

Salaam (2003), in a survey of the use of the Internet services in Nigeria University, identifies a poor technological system, unreliable electrical supply, lack of Internet service providers in some part of the country, and poor funding of the university system as major problem militating against access and use of Internet facilities in Nigerian universities.

2.9 Review of Empirical Literature

It has been mentioned earlier that students are most likely group to use the Internet. This is because students are mostly young. And young people use the Internet most (Cortese:1997). They are also information thirsty and information is the most sought about in the Internet as could be seen from some of the results displayed

This explains why many studies make students' use of the Internet subject of their investigation. While some of these studies were trying to establish links between Internet use and students' performance others tried to test the level of utilization of the Internet by students, i.e to find out whether or not students are aware of the immense contribution this medium can make to their

educational progress and have taken this opportunity. Some other studies are concerned with psychological aspect of Internet use as it affects dependence owing to prolonged use otherwise known as Internet addiction or pathological Internet use (PIU)

Rehman and Ramzy (2000:4) says that, the Internet has established a place in the personal and professional lives of researchers and scholars through their daily use of the net for serious work and personal communication, Pascoe,, Applebee, and Clayton. (1996) observed that ‘‘ease, convenience, frequency and accessibility were major factors influencing academic Internet use’’. Underscoring the various importance and uses of the Internet, Dutton (2004:215) found in his study stated that “the Internet is either important or very important to majority of people.

Studies on the use of the Internet in Africa, particularly in Nigeria, include that of Jagboro (2003), who found that for majority of postgraduate students of Obafemi Awolowo University, the Internet is ranked fourth among the sources they use to search for materials”. Adekunmisi, Ajala and Iyoro (2013:17) in a survey on Internet access and usage by undergraduate students of Olabisi Onabanjo University, Nigeria posit that “Majority of the respondents used the Internet for personal communication purposes, and for academic and research activities, for leisure/entertainment, for general knowledge and for current news’’. Fasae and Aladeniyi (2012) found in a survey in two Nigerian Universities on Internet use by students, that 78% of them used the Internet for communication purpose, 89% for educational purposes and 58% for entertainment purposes. Anunobi (2006) conducted a study at Federal University of Technology Owerri, the study revealed that 81% of the students at University used Internet for academic purposes as compared to 15% who use it for entertainment purposes.

Ebersole (2000) explored how some students of ten public Schools in Southern Colorado use the Internet in an educational context. He found that 52% of students reported their purpose for using the Internet as to search for information and learning. Ajuwon's (2003) study points to a disturbing situation of University of Ibadan, Nigeria. The findings of this study show that the first year clinical and nursing students in Ibadan have not fully utilized the opportunity that the Internet offers for medical education. The study found that only slightly more than two thirds (60.7%) of the sample had ever used the Internet while 33.9% had not. It also found that e-mail was the most popular of the services used by students (76.4%) while other uses including research are put at about the remaining percentage. Odusanya and Bambala (2002) found that 58% of the medical and dental students in their final year at the University of Lagos, Nigeria, who they studied, used the Internet for educational and non-educational purposes. Oji (2007) as cited by Margaret and Eric (2010:21) considers Internet usage to be one of the causes of the decline in the reading culture of Nigerian students.

Bao (1998) survey used at seton Hall University. The findings of his study reported that 40.2% of the respondents use the web on a daily basis, 38% weekly and 10.7% on a monthly basis. About 10% said they seldom or never used the Internet. The findings also revealed that the students search the Internet for information related to both their academic 83.2% and non-academic activities 73.8%.

However, like any other Technology the Internet use has a challenge. Kur (2003) Surveys the use of the Internet facilities by students of the Guru Nnak Development University, Amritsar. The findings revealed that the respondents faced the problem of slow Internet connectivity. Jagboro (2003) carried out a study on Internet usage in Nigerian Universities where opinion of

73 respondents was sought for. Two-third of the respondents identified low level of Internet connectivity and high cost of cyber café services as the major constraint they face while using the Internet. Kumar and Kur (2005) carried out a research on Internet and its use in the engineering College of Punjab, India, The findings of the study revealed that the major problems face by the respondents was low access speed of the Internet. Salaam (2003), in a survey of the use of the Internet services in Nigeria University, identifies a poor technological system, unreliable electrical supply, lack of Internet service providers in some part of the country, and poor funding of the university system as major problem militating against access and use of Internet facilities in Nigerian Institutions.

There has also been increased interest over the last few years of the addiction potential of the Internet among students, a population considered to be especially vulnerable. Research feels the urgent need to recognize and respond to the reality of Internet addiction and the threat of its rapid expansion. Niemz, Griffiths and Banyard (2005) studied 371 British students who responded to the questionnaire which included pathological Internet Use (PIU) scale. Results showed that 18.3% of the sampled were considered to be pathological Internet users whose excessive use of the Internet was causing academic, social, and interpersonal problems. They were also more socially disinherited and had lower self-esteem.

It could be seen from the foregoing that studies about Internet usage have generally focused on personal characteristics (demographics such as age, sex, education level, income, etc) of the respondents, different aspects of their Internet use such as frequency of Internet use, access, time, as well as motivation for using the Internet, whereas studies about Internet use by students can roughly be divided into three broad categories:

- Studies that examine whether the students do actually use the Internet. Studies under this category include that of Ajuwon (2003) which found that clinical students of University of Ibadan did not fully utilize the Internet.

- Studies that evaluate the level and utilization of the Internet for learning and academic. The studies of Ebersole (2000) and Jagboro (2003) belong to this category

- Studies examining excessive use of the Internet, Niemz, Griffiths and Banyard; (2005) sought to find pathological Internet use among British students.

The studies, as could be seen, have not paid much attention to issues such as Internet skills acquisition which is a key to maximum utilization, evaluation of Internet information content, search engines used, problems of using the Internet as well as the way forward. It is therefore expected that attention should be shifted to some of these and other areas with a view to having a holistic understanding of the Internet medium.

As for methods Kim and Weaver (2002) found that most Internet related studies employed quantitative methods usually including articles that report data in means and percentages as well as articles using statistics that make it possible to generalize to a large population. And of these quantitative methods, survey has been the dominant trend, accounting for more than one third. This is even true when it comes to studies about occasional use of content analysis and other methods to corroborate survey method, thus allowing for richness of data and clear picture of the problem under investigation. For instance, Ebersole (2002) found that 52% of his respondents reported using the Internet for research and learning, only 27% of the sample size content analyzed were found to be suitable for that purposes.

This study therefore, is an attempt to replicate the common findings in the literature and provide more evidence of Internet use by students in a rather different setting. The respondents here are students from Zamfara College of Arts and Science Gusau who have peculiar problems such as inadequacy of essential facilities and prevailing economic reality in the country, factors very much likely to reflect on their desire to use the Internet.

In summary, the review showed that there has been quite a number of literature written by several scholars on Internet use. It is however, evident that there is very little research carried on an assessment of the use of the Internet by students especially in State own tertiary institutions in Nigeria. However, it is fair to note that quite a number of literature has been written by Nigerian scholars on the use of Internet among students in relation to their academic activities. The review therefore, examines existing articles relating to use of Internet use. Today the Internet is the most popular tool that students rely on for their academic success because the Internet provides the most current information on different academic topics that can be easily retrieved. It also gives room for collaboration between students and their instructors and among institutions world over. In view of this Kamba (2008) explained that, it is a means of exchanging ideas. Leiner et-al, on the other hand, said it is a mechanism for dissemination of information and a medium for collaboration among users. While the Internet is important in carrying out academic tasks it may also be distracting to student especially young ones who form the greater number of students in the College under study. Such sites like the Face Book, Black Planet, as well as movies and music sites popularly referred to as social sites can distract students from their academic activities and so students should be careful about the way and manner in which they use the Internet.

The review also indicates that the facilities are inadequate in most of Nigerian institutions due to insufficient fund and lack of philanthropic gestures to the institutions by prominent Nigerians. Hence majority of the students rely on private cyber-cafes, their mobile phones and, those who can afford it, use their personal laptops with General System Mobile (GSM) modern to access the internet which is usually very expensive. The review also revealed that students are among the most users of the Internet in Nigerian institutions like their counterparts in other part of the world and that the Internet plays a positive role in their academic pursuit i.e. it enhance students' academic performance because it has all the resources students can take advantage of.

Also the review showed that students use the Internet for different purposes, some use it for academics others for leisure where as some use it for both but most students use it for academic activities. The Internet allows students to carry out multiple tasks such as making calls, communicating via e-mail, listening to music and, at the same time, solving academic problems etc. This, therefore shows that the purpose for which the students use the Internet is enormous and this makes the Internet an inseparable part of a student life and experience world over. This trend is also manifested in Nigerian tertiary institutions as confirmed in Kamba's work in which he stated that Nigerian researchers have been able to consult more resources on the Internet therefore; it is a powerful research tool for both students and their teachers.

However, the review showed that Internet use in Nigeria is bedeviled with a number of challenges such as the problem of availability and accessibility of the facilities by students; low Internet service connection in the institutions, constant power outage and lack of good maintenance culture and lack of skills to operate the computer etc. These are some of the challenges faced by students in most Nigerian tertiary institutions. However most Nigerian

Colleges today are trying in terms of Internet connectivity and the training of students on the use of the Internet but the growing numbers of student in the College had made the facilities inadequate. In view of this most students in Nigerian institutions are not computer literate and therefore, do not use the Internet for their academic activities. This study however, investigated the Internet use by students of Zamfara College of Arts and Science, ZACAS, Gusau. Although there a number of studies on Internet use like the study of Ajuwon (2003) who studied Internet use by first year clinical and nursing students of the University College Hospital in Ibadan, Nigeria, and that of Odusanya and Bamgbala (2002) who also study the purpose of Internet use by the medical and dental students in their final year at University of Lagos, Nigeria, and the result was they used Internet for educational and non-educational purposes. The uniqueness of this study therefore, was that it assesses the Internet use by students of Zamfara College of Arts and Science, ZACAS Gusau which is yet to be done in other institutions in the state.

2.10 Gap in Literature.

There are studies conducted by different researchers on the use of internet by students of various tertiary institutions, but there is no study known to the researcher on the Internet use by students of Zamfara College of Arts and Science (ZACAS) Gusau. For instance, Kumar and Kaur (2006) in Tella (2007) posit that students use the Internet more for academic purposes than for other purposes. Consequently, this clearly indicates the gap in the literature, which this study intends to fill. The study discovered that majority of the students use the Internet for communication/non-academic purpose.

Theoretical Framework

The theoretical framework consists of two theories namely New Media theory and Uses and Gratifications theory. This largely due to the fact that no discussion about the Internet will be complete without recognizing the Internet as the embodiment of the new media and for it's at the receiving end of almost all the discourse around new media. The use and gratification theory as contended by some scholars is not a rigorous social science theory enough to explain new media particularly as embodied in the Internet. Some scholars argue just the opposite. For instance, Stafford and Schkade (2004) cited in Anaeto, Onabajo and Osifeso (2008) asserted that the emergence of computer-mediated communication has revived the significance of uses and gratification theory. For them, the use and gratification theory has always provided a cutting-edge theoretical approach to the initial stage of each mass communication medium: radio, TV, satellite and now the Internet.

New Media Theory

The arrival of new types of media has thrown a thrust on communication scholars to examine its various aspects vis-à-vis technology, features, the key issues of implication on society and culture and whether a new theory is required. According to McQuail (2005), new theory is only likely to be required if there is fundamental change in the forms of social organization of media technologies, in the social relations that are promoted or what is termed the dominant structures of taste and feeling.

Similarly, discussion about new media is dominated by McLuhan's idea of the medium being the message and the 'global village' (the world gradually becoming a smaller place as lines of communication grow expansively). McLuhan's writings dealt with the psychological and cultural effect of the new media. According to Anaeto, Onabajo and Osifeso (2008), his idea that new media often have old media as content can also be applied to the Internet citing several

studies documenting the tendency for online newspapers to repackage materials from print newspapers.

There are many grounds for thinking that mass media have changed certainly from the early twentieth century days of one-way, one-directional to an undifferentiated mass. The internet in particular already deviates from the main features typified for media institutions on three points. First, the Internet is not only concerned with the production and distribution of messages; but is equally concerned with processing, exchange and processing storage. Secondly, the new media are as much an institution of private as of public communication and regulated (or not) accordingly. Thirdly, their operation is not typically professional or bureaucratically organized to the same degree as mass media (McQuail: 2005).

These are quite significant differences that underscore the fact that the new media correspond with mass media primarily in being widely diffused, available to all for communication and at least as free from control.

The themes under which new media are looked upon have remained as the four broad concerns advanced for old media. These have to do with power and inequality, social integration and identity, social change and development and space and time. McQuail (2005) argues that theoretical perspectives on the new media can still be discussed in relation to these themes, though it soon becomes clear that on certain terms of earlier theory do not very fit the new media situation. With respect to power for instance, it is pointed out that it is much more to locate new media in relation to the possession and exercise of power. Neither is ownership clearly identified nor is access monopolized in such a way that content and flow can easily be controlled. Communication does not necessarily flow in a predominantly vertical or centralized pattern. Government and law no longer do not control or regulate the internet as they do old media.

The other important area in which new media defy the themes of the old is the ability to overcome the barriers of space and time. Despite its apparent lack of frontiers, the internet is still largely structured according to territory especially national and linguistic boundaries though there are still new factors in its geography. Its more uncertain how far time has been conquered, except in respect of greater speed of transmission, the escape from fixed time schedules, and the ability to send a message to anyone anywhere at any time but without guarantee of reception or response (McQuail: 2005).

Uses and Gratification Theory

Uses and Gratifications also known as Usage and Gratification or Needs and Gratifications is an approach to media analysis which explains how people use media for their needs and gratifications McQuail (2007). In other words, this theory states what people do with media rather than what media does to people; and it has a user/audience-centered approach. Therefore, students of Zamfara College of Arts and Science are part of media users (the Internet) and are bound to derive a lot of benefits from using such a medium in their academic activities. They gain more knowledge through interaction with different reference materials on the net, contact with colleagues elsewhere, using various services such as the e-mail, bulletin board, e-conference, e-learning e.t.c. The needs and gratifications enjoyed according to this theory are categorized into five:

Cognitive needs: People use media for acquiring knowledge, information etc., some of the audience have intellectual needs to acquire knowledge. In order to acquire knowledge and

information, one watches news and particularly browses the Internet using search engine for any topic with no time restriction.

Affective needs: It includes all kinds of emotions, pleasure and other moods of the people. People use media like television and the Internet to satisfy their emotional needs. For instance, people watch television serials and on the Internet to satisfy their emotional needs.

Personal Integrative needs: This is the self-esteem need. People use the media to reassure their status and gain credibility. So people use the media to assure themselves that they have a status in the society.

Social Integrative needs: It encompasses the need to socialize with family, friends and relations in the society. For social interaction nowadays people do not seem to have social gathering on weekend, instead they do such social interaction using the media like the social networking sites like my space, face book, badoe, Google etc. to satisfy their needs.

Tension free needs: People sometimes use the media as a means of escapism and to relief from tension. For example, people tend to relax watching TV, listening to radio or browsing the Internet to relieve themselves of their tensions.

Therefore, the basic assumptions of the theory are: media use it motive, goal-oriented and purposive behavior; individual initiate media use in response to felt needs; a variety of individual differences and social factors guide and filter media use; media use is just one of many alternatives people have, thus media compete with other communication to best satisfy needs and motives and people are a most powerful influence than media in most cases.

Also, Scram in 1961 identified three motives for TV use among children: entertainment, social interaction and learning. Similarly, there are taxonomies of Internet use motivations e.g. interpersonal utility, past time, information seeking, convenience, entertainment e.t.c.

There is also the issue of gratifications expected by users namely: process gratifications and content gratifications. Unlike the other traditional media, the Internet provides not only an activity to engage in process motivation (such as surfing the net or playing games) and information (e.g. news stories, product information, online movies), but also a new social aspect that traditional media lack.

Again, the Internet puts more information in the hands of users more quickly and easily than any other medium. The Internet provides huge database to students which is useful for their academic activities ranging from online journals, academic articles, conference proceedings, research findings, e-mail etc.

Criticisms of Uses and Gratifications theory

One criticism of the uses and gratifications approach is that it focuses too narrowly on the individual. Also, some studies have shown that exposure to media is not always purposeful or deliberate. People are often going through media on "automatic pilot" (Donohew, Nair and Finn, 1984) this view suggest that people consume a great deal of mass communication at a level of attention that might be labeled habitual.

Another criticism of uses and gratification theory is that the audience is not always as active as was once originally thought, "A valid view of audience behavior lies between the extremes of being passive and expected to be influenced by the communicated messages and being active and

expected to make decisions about what media content to accept and reject." (Rubin, 1993). Similarly, McQuail (2007) believe that the theory suffers from lack of theoretical coherence. He thinks that some of the theory's terminologies need to be further defined. He notes that the theory relies too heavily on the functional use of the media, because there are times when the media can be reckless.

Justification of the theory

However, regardless of its methodological constraints and ensuring criticisms, Uses and Gratification theory cannot be immediately consigned to the waste bin as the theory has some practical relevance in the way and manner people use the mass media especially Information and Communication Technologies such as the Internet where McQuail (2007) identified information and education, guidance and advice, diversion and relaxation, social contact, value reinforcement, cultural satisfaction, emotional release, lifestyle expression, security, sexual arousal and filling time as some of the gratification sought by users.

The uses and gratification theory allows us to study why and what the students use the Internet for, and what reasons or needs they are attempting to gratify. An assessment of Internet use by students of Zamfara College of Arts and Science would allow us to understand what the students use the Internet for and whether their needs are being gratified. In making a survey on the student's use of Internet and their purpose for using it, we will have a deeper understanding of the relationship between the aim of making the Internet facilities and services available to the students vis-à-vis encouraging them to use them.

Most uses and gratification scholars agreed that concepts such as an active audience have to be revised when applied to Internet communication. This is because reasons for using the Internet

differ from person to person (Ruggiero, 2000). An active audience is central to uses and gratification theory and communication motives are keys to audience activity. Students use the Internet to fulfill their needs. The Internet's social and psychological effect depends on the function it serves for the user.

Kaye and Thomas, (2004:22) suggest that, 'the uses and gratification theory is particularly well suited to studying the Internet. Through Television, individuals can try to have their needs gratified by using the remote. But, online function such as email, bulletin boards, and chat rooms required active users. In addition web surfers actively look for information by using links and search engines''. Additionally, the vast amount of information available on the Internet should be able to fulfill many needs. Furthermore, the theory can be used to explain the purpose the students use the Internet for. We can as well find out how often they use the Internet for educational and non-educational purpose.

Finally, some scholars are still advocating that the approach should be employed to examine new communication technologies, thus making it particularly well suited to study the Internet. This study falls within the realm of Uses and Gratification model as it sets to find out from a list of uses advanced for Internet, which ones apply to students of Zamfara College of Arts and Science Gusau.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the following research methodology, research design, population of the study, description of the population, sampling technique and size, instrument, data gathering method, validity and reliability, variables and measurement and method of data analysis.

3.2 Research Design

A Survey is appropriate in asking respondents to report on their behaviours, and enables researcher generate quantitative data with relative ease (Ozohu-Suleiman, 2010). According to Osuala (2005), "survey research studies both large and small population by selecting and

studying sample chosen from the population". Samples are chosen especially when the population is large, that due to some reasons such as financial constraint, time and some unforeseen problems may not allow the researcher to study the entire population. Similarly, the study adopted the survey method because it allows researchers to examine the relationship among variables and to develop explanatory inference (Wimmer and Domiminic, 2006). Other variables of this study are the Internet use, access, types of Internet resources, challenges, and demographics: age, gender etc.

3.3 Population of the Study

The population for this study is 3000 students who are within the age bracket of 18 to 45 in Zamfara College of Arts and Science (ZACAS) Gusau. This is made up of people who are admitted as students with the sole aim of learning. The choice of this College as population of this study was informed by its location in Gusau, capital of Zamfara State, because Internet service is commonly found in urban areas in Nigeria as such this College stands a chance of enjoying Internet service access.

3.4 Study Area

The study area is Zamfara College of Arts and Science Gusau. It is one of the three Institutions that was established by the first civilian government under the leadership of Alhaji Ahmad Sani Yariman Bakura (Sardaunan Zamfara) who saw the need to establish a college that will provide the much needed avenue for our teeming school leavers to further their education as well as create avenue for the provision of the intermediate manpower need in the state. The school has six programs with an administrative unit, which ensures the smooth running of the institution.

The students of the college are drawn from the 14 local governments and some neighboring states. Although, the college has three hostel buildings, one occupied by female, and two by male students, some students live off-campus due to the inadequacy of accommodation and for personal reason.

3.5 Sampling technique and Size.

This study used the sample size of 300 respondents across 6 programs of the college. The sample size was drawn based on the recommendation of Gay (1981) who postulates that the study sample depends on the type of research involved. He recommends a minimum of 10% of population for a descriptive research and a 20% of population where the population is small, also Krejeie and Morgan (1981) as cited in Sambo (2006:124) says ‘‘a sample of 10% of a population is a fair representation of a definite population. Corroborating Krejeie and Morgan (1970), Nwanna (1981) as cited in Ogbushi (2005:84) reveals that ‘‘if the population of a study is in a few hundred, a 40% sample should be selected. For a population of few thousands 10% should be selected and if several thousands 5% or less should be selected”. In this study, the population is in few thousands therefore 10% was selected from the population of 3000, and which is 300.

Moreover, due to variation in the population in the College as indicated in Table 3.1 and 4.1 below, the researcher opted for proportionate stratified sampling technique and systematic random sampling. The systematic random sampling was adopted to determine how the sample was selected. The proportionate is a variation of stratified random sampling. We use this technique when our sub-groups vary dramatically in size in our population, and that; proportionate sampling strategies begin by stratifying the population into relevant sub groups and then random sampling within each group. The choice for using systematic random sampling

technique was because it is an objective way of selecting a sample from a population when the list of the population is known while the proportionate was employed because the number of participants recruited from each group is equal to their proportion in the population.

In addition, the systematic sampling was adopted to aid the researcher identifying the intervals at which each respondent was selected while proportionate sampling technique was employed because the target population varies from one program to the other and that the population poses similar characteristic comprising of only students of the College understudy.

Table 3.1 Sample size

Program	**Estimated Population**	**Sample size 10%**
Diploma in Arts	649	65
Diploma in Sciences	534	53
Diploma in Social Science	480	48
IMB Program	556	56
Consultancy Program	310	31
Remedial Program	471	47
Total	3000	300

Source: Field survey, 2015

To determine the systematic sampling size, the nth ten of the population (300) was first of all identified. This was ascertained by dividing the total by the sample size, which was exactly 10.

This means in every ten students counted in each program one student was selected and the research instrument was administered there by spreading the sample size across the study population. Therefore, a list of numbers from one to ten was shuffled, number 4 was picked and this determines the starting point for the sampling.

The justification for using systematic sampling is that the sample was adopted to select each respondent from the list of the population.

3.6 Instrument for data collection

Several instruments have been used for data collection in most survey research; however, for this study, questionnaire was employed for data collection. Osuala (2005) maintains that ‘‘questionnaire is particularly advantageous whenever the sample size is large enough to make it uneconomical for reason of time or funds to observe or interview every subject’’ Gatech (1979) observed that, ‘‘the easiest way of collecting data is through questionnaire and also couple with the fact that it is easy to administer confidentially, it ensure honest participation and relatively more economical to the researcher.’’ The questionnaire therefore was designed to include both close ended and open ended questions mainly for the students: the questionnaire was divided into sections, the sections are. Section (A) which consist of general bio-data of the respondent, which

include age, gender, course of study, and level, Section (B): Internet access, (C): purpose of Internet use. The questionnaire is attached in Appendix 1

3.7 Method of data collection

Data for this study was gathered from both primary and secondary sources. The primary data was obtained from responses provided by the respondents to the questionnaire. The secondary data was generated from existing literature, based on previous research conducted, in this area and documented materials such as the report of the sub-committee on computerization of state government tertiary institutions.

3.8 Validity and Reliability

In order to ensure the instrument measures exactly what it was intended to measure, the questions in the instrument were made relevant, clear and unambiguous. Furthermore, the questions cover all the dimension of the variables included in the study. To attain the validity of the instrument, the questionnaire was pre-tested before embarking on field work in order to finalize the design structure and ensure that the instrument can generate data.

3.9 The Pilot Study

To test the reliability of the instrument, a pilot study was conducted. And for the purpose of conducting the pilot study 30 copies of the questionnaire representing 10% the sample size was administered among students. More so, test retest method was adopted to measure the reliability of the instrument. After the first test, an interval of two weeks was given before the research was fully conducted. The responses were then collated, scored and computed using the Pearson Product Moment. The calculated coefficient for the instrument was positive with a value of 0.5

using the inferential statistics of Chi-Squire test. The use of the pilot study assisted significantly in modifying the instrument before the field administration.

3.10 Study Variables

This research has two main variables, namely: Dependent and Independent variables Ujo (2004:47) explain that the dependent is the expected outcome of the independent variable while independent variable is the cause of the changes in the value of the dependent variable. The dependent variable for this study is the Internet use. This is because the students' use of Internet can either be positive, neutral or negative. And the independent variable for this study is "Availability" which can cause the positive, neutral or negative consequences.

3.11 Method of Data Analysis

Data gathered for the study from responses supplied in the questionnaire were analyzed using both inferential and descriptive statistics. Under inferential statistics, the study employed Chi-Square test to test the research hypothesis at 0.05 level of significance. Also, the study employed descriptive statistics using frequency distribution tables and pie chats to analyze the data collected. These techniques were used because the estimation procedure is simple to understand and reliable.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

The purpose of this study is to assess the Internet use by the Students of Zamfara College of Arts and Science. The questionnaire, being a useful instrument for collecting data from the respondents. Out of the 300 distributed questionnaires, 275 were returned. All the raw data obtained from the respondents through the questionnaire were analyzed. These include: Response rate, demographic data, and frequency of Internet use among the students, comparison

of Internet use for educational and non-educational purposes by the students, types of internet resources used by the students, challenges facing the use of Internet by the students, discussion of Major Findings.

4.2 Response rate of the respondents

Table 4.1 Response rate of the questionnaire by the students

Programs	No Administered	No Returned	Percentage
Diploma in Arts	65	60	92.31
Diploma in Sciences	53	53	100
Diploma in Social Science	48	45	93.75
IMB Program	56	56	100
Consultancy Program	31	30	96.78
Remedial Program	47	31	65.96
Total	300	275	91.66

Source Field survey 2015

The data in the above table revealed that out of 300 copies of questionnaire administered to respondents in various programs 275 returned. The return rate is high because over 91.66% were returned. To achieve this high rate of response, the researcher personally distributed the copies of the questionnaire and reminded the respondents to fill and return the same.

The table also shows that majority of the respondents are diploma students, followed by IJMB students, whereas, consultancy students constitute the minority 30 respondents representing (10.90%) of the population.

The above data indicates that majority of the respondents are from diploma program. This is because the diplomas are the major program in the College and are bound to use the medium more than students from other programs.

4.3 Demographic data of respondents

This section shows the demographic data of the respondents presented in tables

Table 4.2 Age distribution Among Respondents

Age	No of Respondents	Percentage
18-24 years	112	40.72
25-30 years	80	29.09
31-35 years	57	20.72
36- Above	25	9.09
Total	**275**	**100**

Source Field survey 2015

The data in the above table 4.2 indicates that over ninety six per cent of the students are between 18 and 30 years old. Thus they are youths who are known to be high users of the Internet. Their responses therefore are likely to be relevant and valid on the issues of the Internet for educational or other purposes.

Table 4.3 Gender Distribution among Respondents

Gender	No of Respondents	Percentage
Male	212	77.09
Female	63	22.90
Total	**275**	**100**

Source Field survey 2015

Gender:

Table 4.3 reveals the gender distribution of the respondents. The data indicates that majority of the students are males, possibly because parents tend to allow their male children to acquire formal education at tertiary level in this part of the country more than female.

Table 4.4. The distribution of respondents by Academic level

Options	No of Respondents	Percentage
Dip. One	74	26.90
Dip. Two	96	34.90
IJMB	63	22.90
Remedial	25	9.09
Pre diploma	17	2.95
TOTAL	**275**	**100**

Source Field survey 2015

The data above shows the level of the respondents in which less than half of the respondents 96 were in diploma two, followed by students from diploma one and other programs as stated above e.g. IJMB, remedial and pre-diploma.

4.4 Availability of Internet to Students of Zamfara College of Arts and Science.

Table 4.5: Cross Tabulation of availability of Internet by frequency of use

Frequency of Internet use	Availability of Internet					
	Yes	**NO**	**Total**	**X^2**	**Df**	**Sig**
Once a week	42	2	44	3.7651	3	0.288
Three times a week	50	3	53			
Everyday	148	5	153			
Occasionally	22	3	25			

Total	**262**	**13**	**275**

Source: Field survey, 2015

In order to examine the availability of Internet to students, Chi-Squire test was conducted at 0.05 level of significance. The result in table 4.5 shows that majority (262) of the students had access to Internet on campus and other places whereas only 13 do not have the availability of Internet at all. The implication of this is that there is availability of Internet in the College, and, therefore students are in better position to respond to questions relating to Internet use.

The Chi-Square test shows the result at 5%. Level of significance, therefore, we accept the null hypothesis at (X^2=3.7851;Df=3) and conclude that there is no significant relationship between availability of Internet and frequency of Internet use by the students of Zamfara College of Arts and Science.

4.5 Comparing Internet use by Students for Academic and Non-Academic Purposes

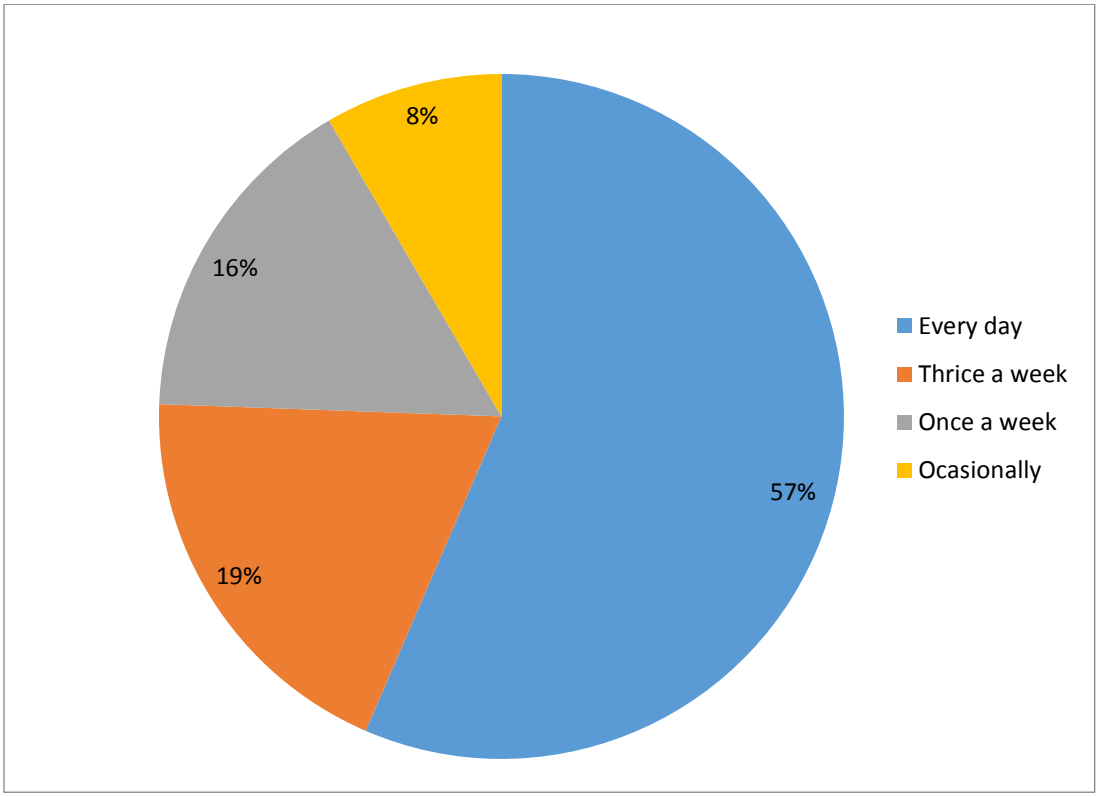
Table 4.6 Purpose of Internet use

	Academic	**Non- Academic**	**Total**	**X^2**		**df**	**Sig**
	113	162	275	8.731	1	0.003	
Total	**113**	**162**	**275**				

Source: Field survey, 2015

In order to compare the use of Internet for educational and non-educational purposes by the students of Zamfara College of Arts and Science, the study used table and Chi-Square test as shown in tables 4.6 the data in table 4.6 shows that student's use of Internet for non-academic purposes is higher than the use of internet for academic purposes. Therefore, the Chi-Square test

result also shows that there is a significant difference between use of Internet by student for academic and non-academic purposes. This is because the probability value or level of significance is less than 5%. Therefore, we reject the null hypothesis and conclude that there is significant difference between the use of Internet for educational and non-educational purposes by the students of Zamfara College of Arts and Science. This finding can be supported by figure 4.6 which shows that 57% of the students use Internet for non-academic purposes.

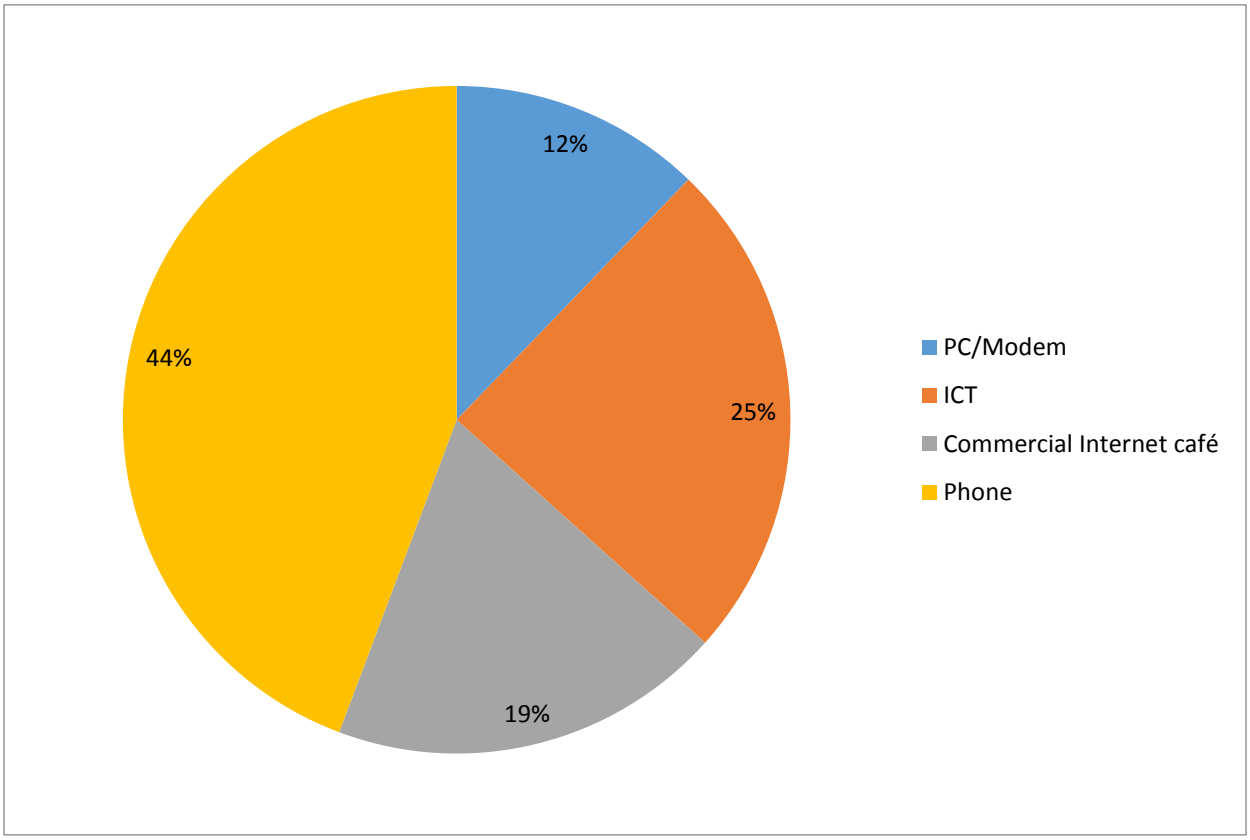


Source**:** Field survey 2015

Figure 4.1 Frequency of Internet use

The analysis of the data in table 4.5 revealed that respondents who access and use Internet every day, thrice a week constitute the majority, while, once a week and occasionally are

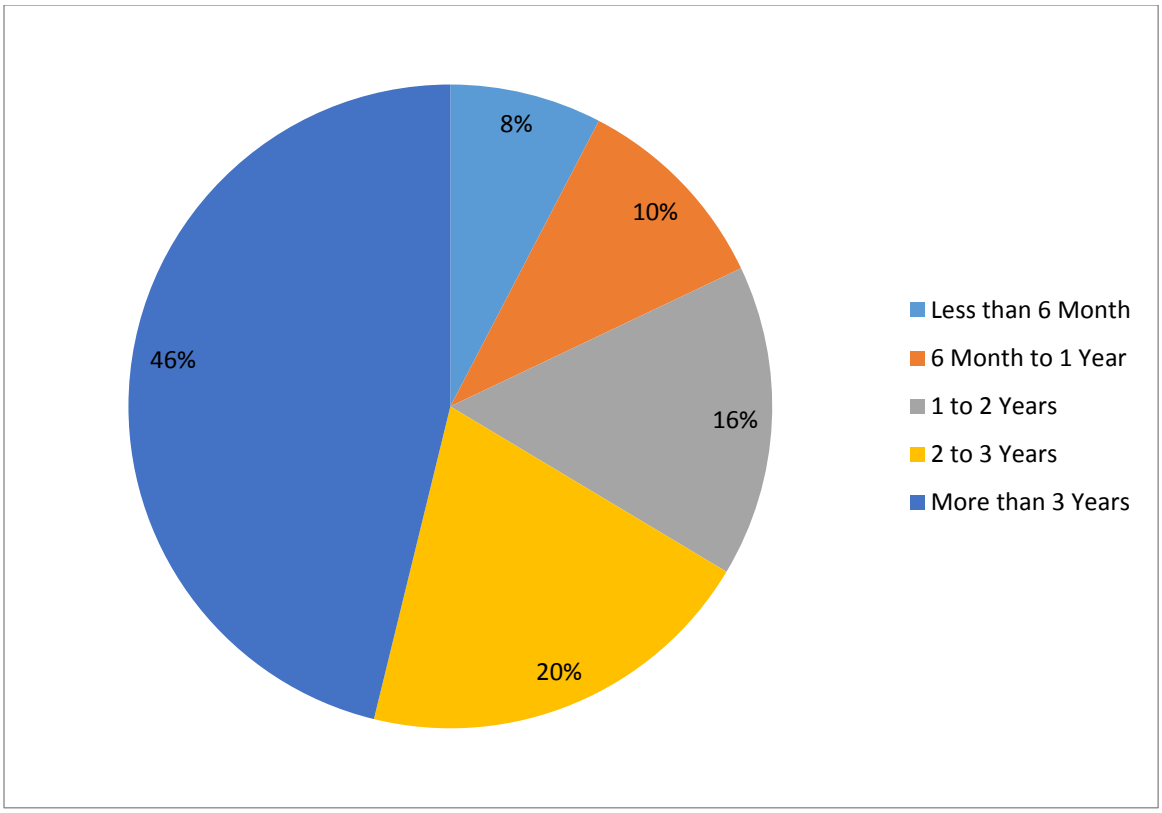
the minority. The study therefore, indicates that majority (57%). of the students in the College use Internet every day.



Source: Field survey 2015

Figure 4.2 Place of Internet access by students

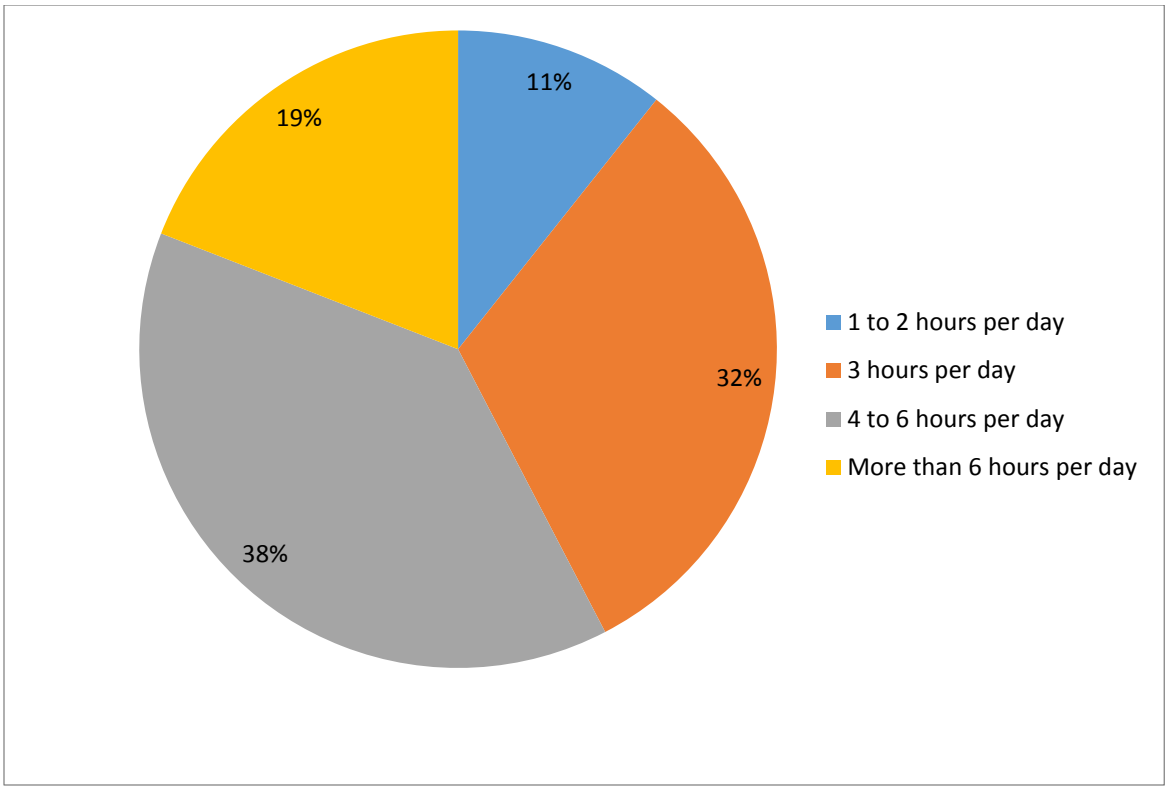
Figure 4.2 shows the respondents' place of access to Internet. The majority (70%) accessed the Internet through their mobile phones and college ICTs. The implication of this on the study is that Internet facility is adequate and accessible to the students.



Source: Field survey 2015

Figure.4.3 Commencement of Internet use

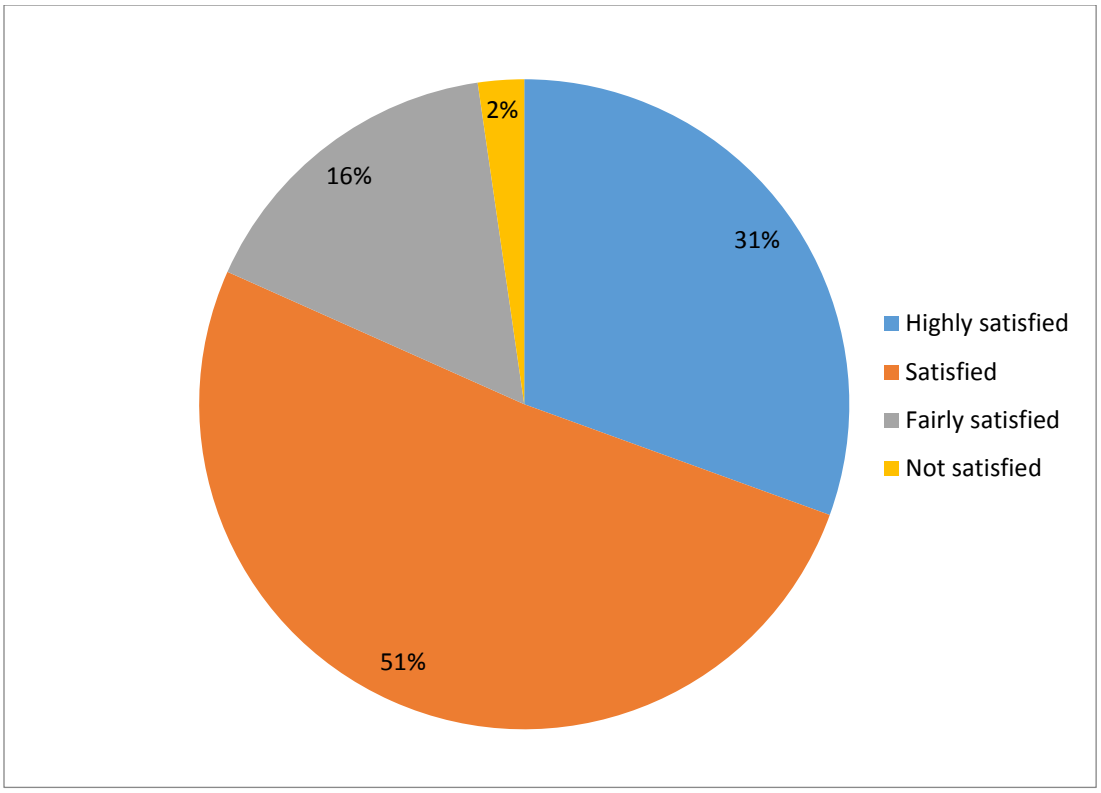
Figure 4.3 data revealed that majority (46.18%) of the respondents started using the Internet for over three years, followed by (20.2%) started using Internet 2-3 years back. The analysis shows that respondents who spent over three years using Internet formed a large percentage. This likely means that students started using Internet service through their mobile devices- i.e. i-phone, ipad which may be as a result of the free or cheap Internet service provided by some mobile phones companies.



Source: Field survey 2015

Figure 4.4 Times spent on Internet per day

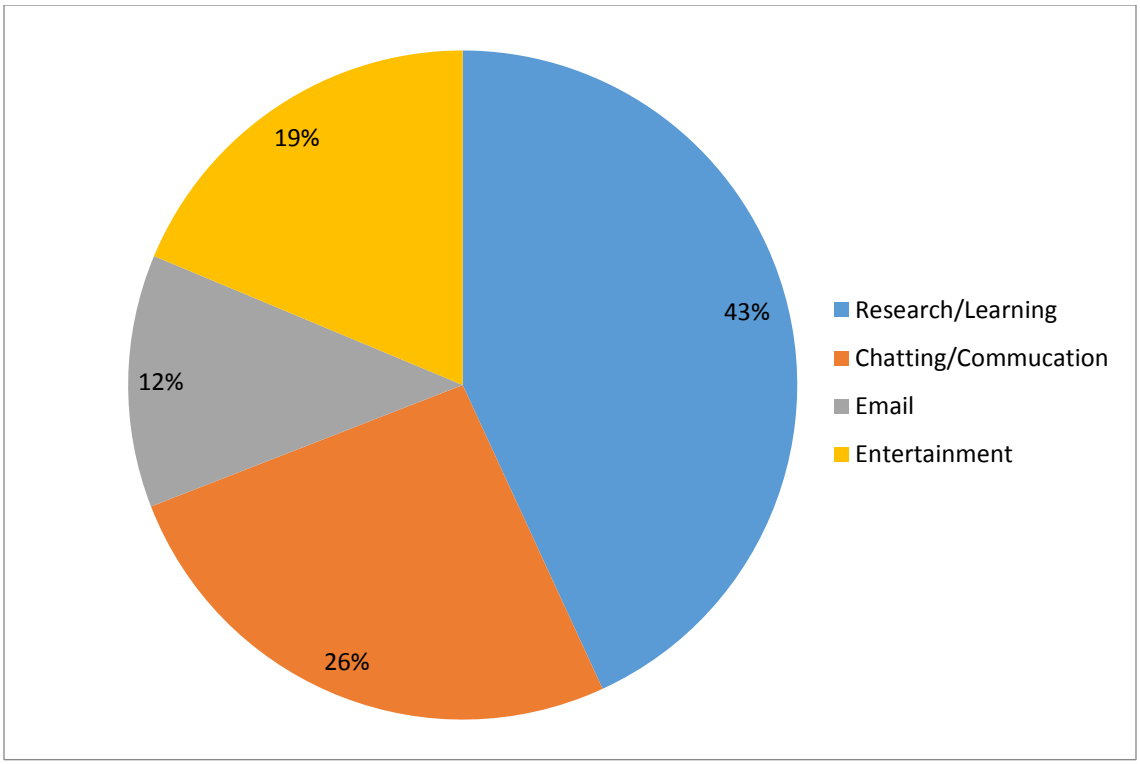
Figure 4.4 revealed that over (60%) of the respondents spent more than 4- hour per day on the Internet. The study revealed that majority of the students in the College spent more hours on the Internet daily. The implication of this on the study is that students are most likely to get used to the Internet.



Source: Field survey 2015

Figure 4.5 Satisfaction with the level of internet use**.**

Figure 4.5 above indicates that majority (over 80%) of the students are satisfied with the Internet use as against (16%) who are not. The implication of this on the study is that students are comfortable with their level of Internet use for their academic activities.



.

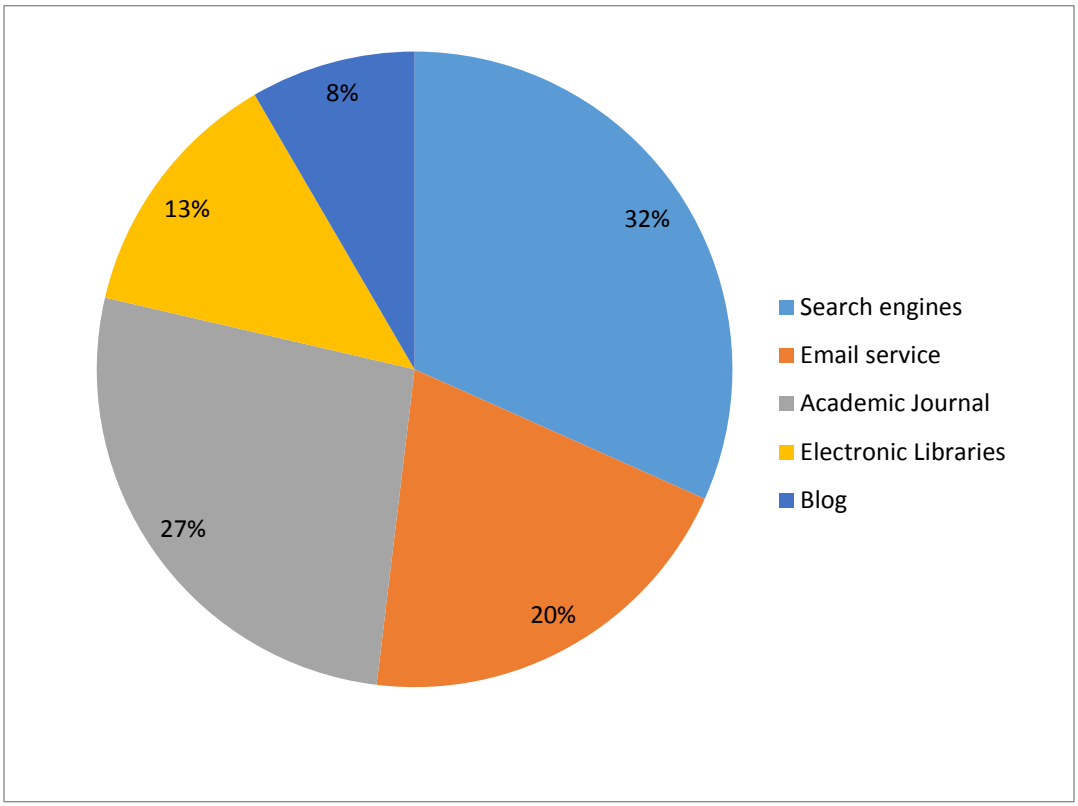
Source: Field survey 2015

Figure 4.6 Purpose for the use of Internet by students

Figure 4.6 shows that (43%) of the population used the Internet for their research and learning, while others for communication purposes. The implication of this in this study is that most students rely on the Internet for both communication and academic purposes; therefore, the Internet has become a viable tools for teaching and communication in the tertiary institutions.

4.6 Types of Internet resources on the net.

In order to examine the types of Internet resources most consulted by Students of Zamfara College of Art and Science, the study adopts descriptive statistics using pie chart as shown in figure 4.7, and 8.

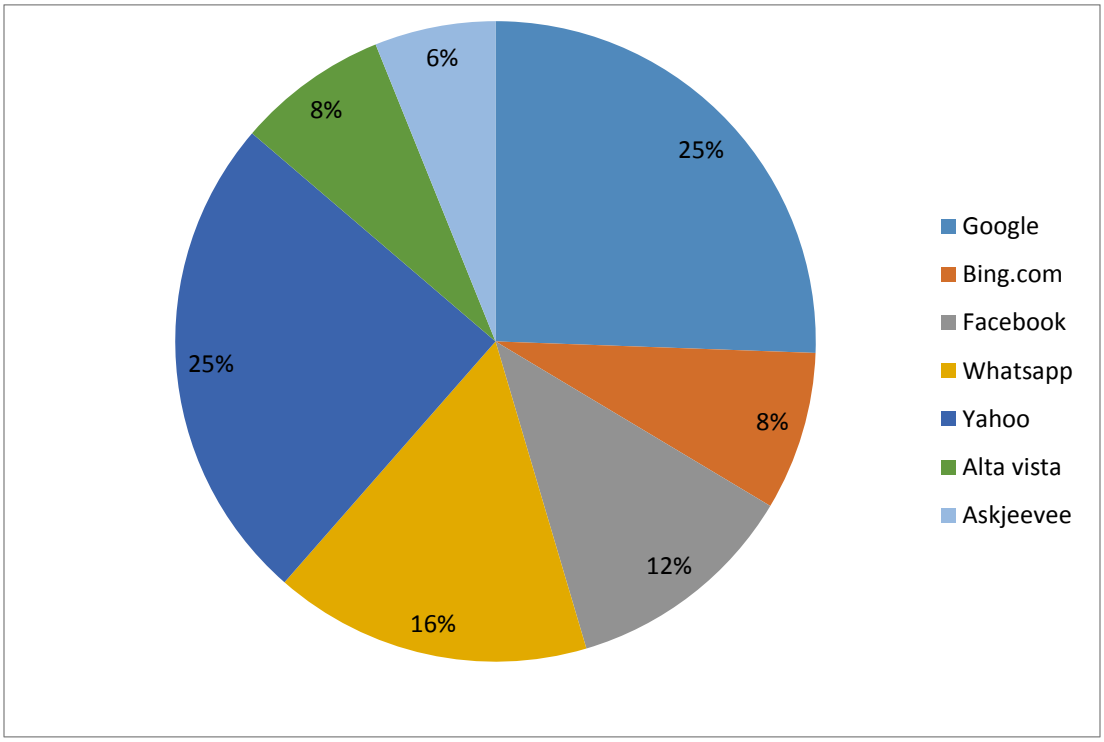


Source: Field survey 2015

Figure 4.7 Types of Internet resources used by students.

Figure 4.7 Majority (52%) said they used search engines and email services as against less than (50%) use other Internet resources, like, Academic journal and electronic libraries for their academic activities, Based on the above therefore, majority of the students used the Search engines, and blogs on the Internet. The implication of this on the study is that students are

exposed to various resources capable of providing solution to their academic problems on the Internet.



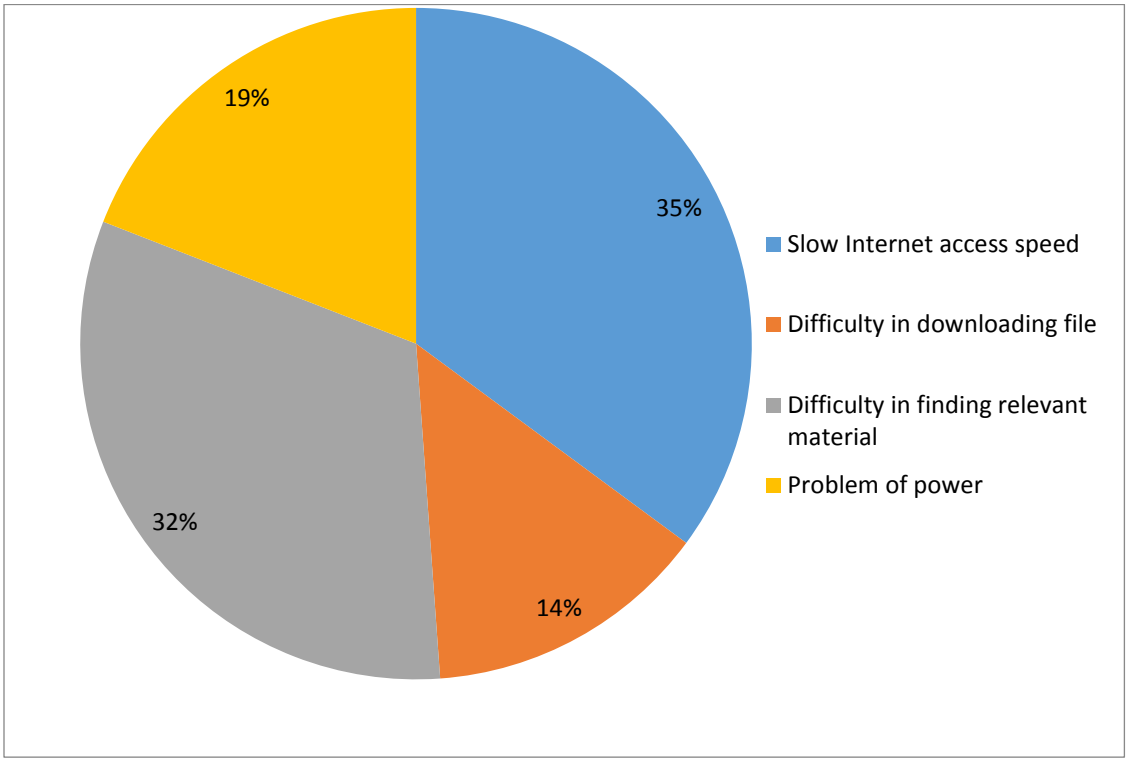
Source: Field survey 2015

Figure 4.8 Search engines used by students

Figure 4.8 indicates that (47%) of the respondents used Google, Bing.com, Altavista, Askjeevees to search for information on the Internet, whereas (53%) of the respondents said that they use Yahoo, Facebook, Whatsapp, to communicate This shows that majority of the respondents mostly used Yahoo, Facebook, Whatsapp to satisfy their need. The implication of this on the study is that the students are familiar with search engines on the Internet and use them to search for information.

4.7 Challenges facing the use of Internet.

In order to assess the challenges faced by Students of Zamfara College of Arts and Science in utilizing the Internet for educational purposes. The study used questionnaire for the students to tick the appropriate answer.



Source: Field survey 2015

Figure 4.9 Challenges face by students while using Internet.

Figure 4.9 revealed that (67%) of the respondents which is the highest frequency face challenge of slow internet access speed and difficulty in finding relevant information on the net, while for the remaining, power supply was the main challenge to accessing Internet services.

A factor contributing to inefficient use of the Internet as indicated by the data of this study is slow internet access speed and difficulty in finding relevant information in the college. This is probably because the college subscribed to low bandwidth from Internet Providers or the providers face technical problems that hampered efficient service provision.

4.8 Summary of the Major Findings.

The major findings of the study indicate that, there is there is significant difference between the Internet use for educational and non-educational purposes by the students of Zamfara College of Arts and Science. It also indicates that the College is connected with the Internet service and this development gives students of the institution the opportunity to access and use resources on the Internet. The study found that the students of the College access the Internet through different means. Majority access the Internet through their phones, followed by other means such as, College ICT, Commercial Internet Café, and Personal Computer/Modem. Majority of the students of Zamfara College of Arts and Sciences use the internet for communication/non-academic purposes, while minority use it for academic purposes. However, some use it for both academic and recreational purposes, adomi, Omodeke and Otolo (2004) specify that, the purpose for which students used the Internet was because they find it easy to use and it supplement note given by lecturers.

Another finding of the study shows that the students frequently patronized the Internet resources such as search engines, email, academic journal and electronic libraries, email, and blogs on the Internet with the aim of satisfying their academic needs. The study also discovered that, students mostly use the popular search engines (Google and Yahoo), as well as Alta vista, Facebook, Bing.co, Whatsapp and Askjeevees, in search of information on the Internet. Finally, the study found out that the major challenges the students encountered while using the Internet are: slow Internet speed, power supply and difficulty in finding relevant material, which makes them spend longer time before accessing desired information.

4.9 Discussion of the Major Findings.

Here the study discusses the findings and at the same time answers the research question.

RQ-1. What is the frequency of Internet use among the students?

In order to examine students' frequency of Internet use, the study employed Chi-Squire test which shows that the students of the College accessed and used various types of Internet resources which have positive effect on the frequency of using Internet by the students. The findings of the study revealed that, majority use Internet every day, followed by respondents who use the Internet thrice a week, and other respondents who used the Internet once a week, while those who use it occasionally are in the minority. This is a positive response to research question 1 which seeks to know how frequently students of the college are using the Internet, and also, this means that the respondents spend a substantial amount of time on the Internet. The findings of the study is in line with the findings of Bao (1998) who surveyed the Internet use at Seton Hall University. The findings of his study reported that 40.2% of the respondents use the web on

a daily basis, 38% weekly, and 10.7% on a monthly basis. About 10% said they seldom or never used the Internet. The findings also revealed that the students search the Internet for information related to both their academic 83.2% and non-academic studies 73.8%

According to Hall and Person (2001) dependence, couple with easy access to technology, point toward students spending a substantial quantity of time on the Internet. In a related study, Suhail and Bargees (2006:16) posit that "the misuse of the Internet often leads to unhealthy consequences, while heavy Internet use leaves little time for anything else". They investigated the positive and negative effects of excessive Internet use among undergraduate students in Pakistan and found positive associations between times spent on the Internet and the various dimensions of the Internet Effect Scale (IES), indicating that excessive Internet use can lead to a host of problem of educational, psychological, and interpersonal nature.

Similarly, the increase in availability of access to the Internet underscores the increase in affinity for digital information. Goodson (2001) reported that almost all students use the Internet to communicate with friends and family via social network. This also led to increasing dependency on the Internet, which is geometrically growing as many enjoy free access 24 hours a day on Internet centers or their mobile Internet such as, i-phone among others.

In general, the findings of this study correlate with the theory used. For instance, figure 4.6 revealed that the respondents use the Internet to satisfy different needs. These needs as categorized and explained by the theory (uses and gratification) are cognitive needs, affective needs, personal integrative needs, social integrative needs and tension free needs.

RQ -2. What is the relationship between availability of Internet and frequency of Internet use by the students of Zamfara College of Arts and Science?

The study examines the relationship between availability of Internet and frequency of Internet use by the students of Zamfara College of Arts and Science. The finding using Chi-Square test, indicate the result at 5% level of significance. Therefore, we accept the null hypothesis at 5% (X^2=3.7651; Df=3) and conclude that there is no significant relationship between availability of Internet and frequency of using Internet by the students of the College. The study agrees with the finding of the Applebee, and Clayton. (1996) observed that ‘‘ease convenience frequency and accessibility were major factors influencing Internet use’’. Underscoring the various importance and uses of the Internet,

RQ -3. What is the difference between using Internet for educational and non-educational purposes by the students of Zamfara College of Arts and Science?

The study compares the use of internet for educational and non-educational purposes by the students of Zamfara Collage of Arts and Science. The findings indicate that majority of the students, use Internet for communication/non-academic purposes; while the minority use Internet for academic purposes. This finding is inconsistent with Fasae and Aladeniyi (2012) in a survey in two Nigerian University on Internet use by students, which shows that 78% of students use the Internet for communication purpose, 89% for educational purposes and 58% for entertainment purposes. This finding is also inconsistent with Anunobi (2006) who conducted a study at federal University of Technology Owerri, the study revealed that 81% of the students at University used Internet for academic purposes as compared to 15% who use it for entertainment purpose. The findings also is inconsistent with the findings of Mathew and Schrum (2003) which revealed that

students use the Internet to get note, assignment/class work, practices, quizzes, etc, from professional web-sites on the Internet. However, the respondents' purpose of using the Internet can therefore be concurred with the five categories of needs to be gratified for using the Internet as put forward by Katz, Gurevittch and Haas, (1973). They are, cognitive needs (acquiring information, knowledge, and understanding), affective needs (emotional, pleasurable, or aesthetic experience), personal integrative needs (strengthening credibility, confidence, stability, and status), social integrative needs (strengthening contacts with family, and friends) and tension release needs (escape and diversion).

RQ-4. What are the types of Internet resources the students use?

The finding indicates the types of Internet resources used by respondents. Majority of the respondents use search engines, e-mail, and blog to communicate with friends, family and their teachers, followed by those who use the Academic journal on the Internet to conduct research. Based on the above therefore, majority of the students use the e-mail, search engines, blogs and academic journal, on the Internet with the aim of satisfying their purpose of using the Internet as indicated above.

The findings of this study agrees with the those of Hall (2000) who maintain that the Internet has the ability to provide up-to the minute information which can be obtained around the world, made it a reliable source for information as well as easier and faster means of communication. It also agrees with Dambo (2000) who maintained that, the Internet offers three basic tools students use for learning and research world-wide and this include e-mail, telnet, World Wide Web and file transfer protocol. It indicates that, students mostly use the popular search engines (Google

and Yahoo), they also use other search engines such as Alta vista, Facebook, Whatsapp, Bing.com and Askjeevees, to be successful in searching for information on the Internet.

The findings correspond with the postulate of the theory, "Uses and Gratifications theory" which says the people who use Internet gain more knowledge through interactions with different reference materials on the net, contact with colleagues, elsewhere, using various services such as e-mail, bulletin board, e-conference, e-learning e.t.c

RQ-5. What are the challenges that the students face when using the Internet resources?

The respondents identified some major challenges they face while using the Internet. For instance in figure 4.9, indicates that the slow internet access speed is the major problems the respondents face, followed by the respondents who asserted that they found it difficult to download files, other respondents lamented that they faced problem of power supply, and insignificant number of the students says they face difficulty in finding relevant information, in line with the study, Kur (2003) surveyed the use of the Internet facilities by students of the Guru Nnak Development University, Amritsar. The findings revealed that the respondents faced slow of Internet connectivity. Kumar and Kur (2005) carried out a research on Internet and its use in the engineering College of Punjab, India, The findings of the study revealed that the major problems face by the respondents was low access speed of the Internet, also, Salaam (2003), in a survey of the use of the Internet services in Nigeria University, identifies a poor technological system, unreliable electrical supply, lack of Internet service providers in some part of the country, and poor funding of the university system as major problem militating against access and use of Internet facilities in Nigerian Institutions. Similarly, the findings of the study will go

a long way in filling the gap that exist in literature with regards to the Internet use by the student of the college under study and their various purposes for using the Internet.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

Chapter five presents the summary, conclusion and recommendations of the study. The chapter is divided into three sections which include; summary, conclusion and recommendations.

5.2 Summary of the Study

This is a survey, which assessed the Internet use by the students of Zamfara College of Arts and science Gusau. Having stated the problem of the study, the research objectives were set out, among which were: To examine the frequency of Internet use by the students of Zamfara College of Arts and Science, to examine the relationship between availability of Internet and frequency of Internet use by students, to compare the use of Internet for educational and the non-educational purposes by the students, to examine the types of Internet resources most consulted by the students, to assess the challenges faced by the students. This was followed by research

questions, research hypothesis, significance of the study, scope of the study, operational definition of key terms. It was stated that the college would be the primary beneficiary of the findings of the study. This is because the college was chosen as the study area.

The study gave a review of the literature related to the research topic by focusing on the use of Internet by students of tertiary institutions; purpose of Internet use; types of Internet resources used; and challenges faced while using the Internet by students of Zamfara College of Arts and Science Gusau; the chapter was segmented into three different part and they are; conceptual literature review, empirical literature as well as theoretical framework. In conducting the conceptual review, a background review was made on Internet. Here, the importance of Internet as well as it uses were highlighted. Similarly, literature on availability of Internet, and access to Internet, purpose of Internet use and challenges face by students while using Internet was also reviewed.

The study employed two theories i.e. New Media theory and Uses and Gratification theory that explains the study, the Uses and Gratification theory explain what the people do with media rather than what media does to the people. According to this theory people use media to satisfy their needs, such as, cognitive needs, affective needs, personal integrative needs, social integrative needs and tension free needs.

The study was conducted among Zamfara College of Arts and Science students in Gusau. The research design was cross-sectional design with field survey as the method. The population of the study is 3000 students. The sampling techniques adopted were systematic random sampling and proportionate stratified sampling to select a sample size of 300 respondents representing 10% of the population. The research instrument was questionnaire whose copies were

administered personally. The instrument was validated using face validity as well as test retest and pilot study. The data was analyzed using both inferential and descriptive statistics. For inferential statistics, the study used Chi-square test while frequency distribution table and pie chart were used for descriptive analysis. The major findings of the study are as follows: There is no significant relationship between availability of Internet and frequency of using internet by the students of Zamfara College of Arts and Science. Also, there is significant difference between using Internet resources for educational and non-educational purposes by the students of Zamfara College of Art and Science; this is because the findings revealed that majority of the students use the Internet for non-academic purpose. This finding is inconsistent with Adomi (2005:81) who posited that ‘‘the Internet is very important to students in Nigeria because it enable them to have access to timely, accurate and relevant information. Third, the Internet resources mostly used by the students of Zamfara College of Art and Science are search engines, email, followed by Academic Journal and Electronic Libraries. Fourth, the most challenges face by the students of Zamfara College of Art and Science is slow of Internet access followed by difficulty in finding relevant information and problem of power supply. The findings of this study confirms the findings of the Gbaje (2007) that the “challenges militating against the use of Internet in Nigeria include, “the Nigerian state of power supply.

5.3 Conclusion

Based on the above findings, the study concludes that there is no significant relationship between availability of Internet and frequency of using Internet by students of Zamfara College of Arts and Science. The study further revealed that majority of the students use the Internet for non-academic purpose while other respondents use the facility for educational purpose. Similarly, the

findings of the study indicates that the students of the college frequently patronize Internet resources such as search engines, Yahoo, Google, Alta vista, Bing.com, Askjeeves etc to satisfy need to communicate, get entertained and search for educational materials online. However the students face the problems of slow Internet speed, difficulty in downloading files, and finding relevant information as well as inadequate power supply which limits the effectiveness of their use of the Internet on the campus. The theory used for the study is New Media and Uses and Gratification theory, because the theory clearly explain how and what people do with the media rather than what media does to the people.

5.4 Recommendations

Base on the findings and conclusion of this study, a number of issues have to be addressed so that the students would avail themselves of the benefits accruing from the use of Internet especially for academic purpose. In line with this, the study suggests the following recommendations.

(1)- As revealed by the findings of the study majority of the respondents accessed the Internet from their phones than the school ICT facility. This calls for improving the quality of the Internet service in the College as well as organizing orientation on the necessity of Internet knowledge, skills and application especially for academic activities.

(2)- As the Internet has been found to be a viable tool that students rely on for academics, it is strongly recommended that the College should encourage the use of the Internet by the students by providing high speed Internet connectivity, as it will further encourage students to take advantage of the resources.

(3)- The findings of the study indicated that there are quite a number of search engines students used to search for information on the Internet, it is however, important to note that in as much as there are resources on the net, there are also some information which could distract the students from their academic. Therefore the researcher recommends that students should be careful in the type of information they consult on the net and refrain from resources that are likely to corrupt their mind which may lead them to academic failure.

(4)- The students should use educational sites such as publishers for current information in their field. In this connection students will benefit a lot especially from London based publishers such as; the Sage Publications online materials during their free trial exercise. And the College should pay for online libraries and journal websites for the staff and students to access.

(5)- The College library should have E-libraries section to complement the cafes and provide more educational resources for students and staff

(6)- It is common knowledge that the state of power supply is not encouraging in Nigeria. The study recommends that the College should have alternative power supply (i.e. solar plants) used to power the facilities in the school.

5.5 Suggestion for further studies

Research on Internet use cannot be exhaustive. This means that further and or similar studies can be conducted in the area. Research could be conducted on other tertiary institutions in the state in order to ascertain the extent in which the students use the Internet, and the challenges they face

while using the important medium. A study can be conducted specifically on students' Computer literacy which is a necessary requirement for proper use of the Internet. Finally, I also suggest that other researches could be encouraged to carry out using other statistical tools which are rigorous.

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APPENDIX I

SURVEY QUESTIONNAIRE

I am an Msc student of Ahmadu Bello University Zaria, Department of Mass Communication. I am conducting a research on assessment on the Internet use by students of Zamfara College of Arts and Science, it will be of importance if you answer the questions below, with the assurance that all answers will be treated in confidence and used for the purpose of this research only.

I hope you will kindly tick objectively.

SECTION A: Background Information

(1)- What is your gender?

Male { }

Female { }

(2)- Please indicate your age

a) 18-25 years { }

b) 26-31 years { }

c) 32-36 years { }

d) 36- Years and above { }

(3)-Which program do you belong to?

a) Diploma Program { }

b) IJMB Program { }

c) Remedial Program { }

(4)-What is your level of study?

a) Diploma. One { }

b) Diploma. Two { }

c) IJMB { }

d) Remedial { }

e) Pre Diploma { }

SECTION B: Use of Internet

(5)-Do you have access to Internet facilities?

(a) Yes { }

(b) No { }

(6)-Place of Internet access by zacas students

a) PC/Modem { }

b) ICT { }

c) Commercial Internet Cafes { }

d) Phone { }

(7)-when did you start Accessing Internet?

a) Less than 6 Month { }

b) 6 Month to 1 Year { }

c) 1-2 Years { }

d) 2 to 3 Years { }

e) More than 3 years { }

(8)-What is the Frequency of your use of Internet?

a) Once a Week { }

b) Three times a Week { }

c) Everyday { }

d) Occasionally { }

(9)-How many times do you spent on internet per day?

a) 1-2 Hours per day { }

b) 3 Hours per day { }

c) 4-6 Hours per day { }

d) More than 6 Hours per day { }

SECTION C: Purpose for the use of Internet.

(10)- For what purpose do you use the Internet?

Tick only one of the under listed options

a) Research/ learning { }

b) Chatting/Communication { }

c) Email { }

d) Entertainment { }

e) Others (please specify)……

(11)-How satisfy are you with the level of Internet use

a) Highly Satisfied { }

b) Satisfied { }

c) Fairly Satisfied { }

d) Not Satisfied { }

(12)-Which search engines do you use?

a) Google { }

b) Yahoo { }

c) Alta Vista { }

d) Facebook { }

e) Bing,com { }

f) Whatsapp { }

g) Askjeevees { }

h) Others { }

SECTION D: Types of Internet academic resources

(13)- What types of Internet academic resources do you use?

a) Academic Journal { }

b) Electronic Libraries { }

c) Email Services { }

d) Blogs { }

e) Search Engines { }

f) Others (please specify)…….

(14)- What challenge do you encounter while using the Internet?

a) Slow Internet access speed { }

b) Difficulty in downloading file { }

d) Difficulty in finding material { }

e) Others (please specify)……

APPENDX II

ZAMFARA COLLEGE OF ARTS AND SCIENCE (ZACAS) GUSAU

The College was established in the year 2000 after a committee that was set up recommended its establishment, with the sole aim of providing much needed avenue for the our teeming school leavers to further their education as well as create avenue for the provision of the intermediate manpower need of the state. In that year, the College started with a remedial program with the sole aim of preparing candidates with deficiency in their O/Levels, but subsequently other programs were introduced with affiliation to reputable Universities. To meet with current trend of IT revolutions a memo was written and submitted to the state Government which approved the establishment of a computer pool and the installation of Internet facilities.

2 ICT FACILITIES IN THE COLLEGE

Fifty six Computer systems were provided for teaching/learning and administration in the College, Fifty computer machines are in use for teaching students in batches, while6 computer machines are used for administrative work in the offices of the principal officers of the College. In addition, NITDA in its effort to connect the tertiary Institutions with Internet facilities installed 30 computers to use by the college community.

i) Provost's office

1 Computer system and one printer

ii) Deputy Provost's office

1 Computer system and one printer

iii) Registrar's office

1 Computer system and a printer

iv) Computer laboratory

50 Computer machines were installed and one HP printer hp

1 Media projector

v) HOD's Office

1 Computer system and a printer

vii) Director Consultancy Unit

1 Computer machine and a printer

viii) Central Examinations office

1 Computer machines and 1 printer

ix) Internet café

30 Computer systems` fully networked with LAN and wireless internet facilities

x) College computer subtotal =86