

**FACTORS INFLUENCING USE OF INTERNET RESOURCES FOR LEARNING
AMONG MASTERS STUDENTS: A CASE OF MASTER IN PROJECT
PLANNING AND MANAGEMENT, UNIVERSITY OF NAIROBI**

BY

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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER
IN DISTANCE EDUCATION OF THE UNIVERSITY OF NAIROBI**

2012

DECLARATION

I declare that this is my original work and has not been submitted to any other college or university for academic credit.

Signed..........Date.....7-8-2012.....

James Ongaki Nyangweso

L45/62049/2010

This research project report has been submitted for examination with my approval as the university supervisor.

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May Glory be to the Almighty God.

DEDICATION

I dedicate this work to my loving wife Ruth Ongaki, daughters Merciline, Sylvia, Faith, Dorothy and Deborah for their genuine support and encouragement.

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LIST OF ABBREVIATIONS AND ACRONYMS

G o K	Government of Kenya
ICT	Information Communication Technology
KENET	Kenya Education Network
KESSP	Kenya Education Sector Support Programme
PC	Personal Computer
SCDE	School of Continuing and Distance Education
UNESCO	United Nations Educational Scientific and Cultural Organization
U o N	University of Nairobi

ABSTRACT

The internet has become an integral part of research at the Masters level. Studies show that the internet is a powerful tool for searching for information globally. Research shows that African universities are faced with the problem of expensive ICT which is poorly managed. For Masters Students internet is crucial for research and publication. The need to investigate the factors influencing the use of internet resources for learning has resulted from the studies which have been done. Therefore this study sought to investigate the factors influencing the use of internet resources for learning among Masters Students especially in the School of Continuing and Distance Education (SCDE) of the University of Nairobi as internet resources present a vital component of research. The study was guided by three objectives namely to determine the accessibility to the use of internet resources for learning among masters students, to establish technological skills in the use of internet resources for learning among masters students and to assess the familiarity with resources in the use of internet for learning among masters students in the University of Nairobi. Descriptive survey method of research was used for this study. The researcher used this kind of research to obtain first hand data from the respondents so as to formulate rational and sound conclusions and recommendations for the study. The research applied purposive sampling in determining the sample size. This sampling resulted to a sample of 89 out of a target population of 89 students pursuing Masters in Project Planning and Management at the Kisii extramural center of the University of Nairobi. Questionnaires were used to collect data from the respondents. Frequency distribution, measure of central tendency and measure of variability were used in this study. Results showed that the internet is not readily available through university computers although the few available computers had excellent accessible networks to the internet at a reduced price and power was always available. Laptops were prevalent among masters students but most students were not skilled in the use of electronic library tools. This indicates high ignorance in the use of library tools. Most of the respondents agreed that they were skilled in the use of network telephony, e-mail, news groups and Google scholar. However not many students were conversant with the use of web boards and chat rooms. The study recommends that the government, universities and educational stakeholders combine efforts to equip institutions with computers; secondly, universities to facilitate training in the use of electronic library resources; and thirdly encourage students to familiarize themselves with other internet resources.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The infusion of internet into higher education has intensified access to archived information sources from various parts of the world, thus it forms a first port of call for students and others when they seek for information (Nwagwu, Adekannbi, & Bello, 2008). Many colleges and universities provide internet access to their students to foster educational activities of research instruction, and literature searching and to serve as a source of information to meet other needs. Kilimci, (2010) observes that the internet has become one of the most powerful resources in accessing information; collecting and analyzing data, conducting interviews, chatting, downloading and education are some of the uses of the internet.

Several studies have been carried out on educational use of internet by students in higher educational institutions (Kunar & Kaur, 2005). In recent years; educators have witnessed the rapid development of computer networks, dramatic improvements in the processing power of personal computers, and striking advances in magnetic storage technology. These developments have made the computer a dynamic force in distance education, providing a new and interactive means of overcoming time and distance to reach learners. Technology is revolutionizing the way to communicate and conduct business, yet it has been slow to penetrate the schools' curricula. During recent years, information technology has received a great deal of attention especially from industry, because of its potential to enhance efficiency in production and service delivery.

Castells, (2001), notes that the emergence and rapid adoption of the internet for human communication has produced an agent for massive social change that is very poorly understood. Research on the phenomenon of the internet has been sparse compared to the speed of the diffusion of the medium, and has been depressingly unscientific for the most part. The world wide web has been credited with producing dramatic social changes as diverse as creating an entirely new world economy, breeding a new form of addiction fostering personal isolation, creating whole new sub-cultures, making geographic distance irrelevant to work.

Rumbough (2001), further notes that more than 17 percent of candidates have used the internet to cheat on class assignments, over 38 percent have accessed pornography websites, 9 percent have accessed sites that involve illegal drugs and more than 18 percent have successfully accessed someone's email account without their knowledge. The internet is the largest, most powerful computer network in the world. It encompasses 1.3 million computers with internet addresses that are used by up to 30 million people in more than fifty countries. As more and more colleges, universities, schools, companies and private citizens connect to the internet either through affiliations with regional not-for-profit networks or by subscribing to information services provided by for-profit companies, more possibilities are opened for distance educators to overcome time and distance to reach students. This means that the Masters Students need to have a strong learner support system. Hence, there is need for them to have a firm ground in the use of internet for their learning and research work. Research is one of the activities of universities besides teaching, learning and extension service processes. Shibanda (2006)

argues that there has been poor output research, publication and dissemination. Information and communication technology have a direct role to play in education and if properly used, ICT can bring many benefits to the classroom and the education and training process in general. It will provide new opportunities for teaching and learning.

Czerniewicz, and Carr (2009), observe that most African universities are seriously constrained in the use of ICT by a lack of computer stations and a lack of access to affordable high-speed internet connectivity. People use the Internet to access the needed information. As a result, societal and educational organizations are challenged to use the Internet more efficiently. Given this climate, it is important to understand the patterns of Internet usage (Zhixian, 2008). Information and Communications Technology (ICT) in distance education programs in Africa has not been encouraging and has been the topic of a good deal of debate globally (Ololube, 2006b). In Nigeria, the relationship between the development of ICT penetration and use in distance education programs in higher education in general is dependent upon government policies. He further observes that while ICT has much to offer, it has failed to deliver on that front. A lot of time and effort has been invested in developing the policy, and its implementation has failed (Ololube, Ubagu & Ossai, 2006). This clearly shows the need for Masters Students to embrace new technology and more so improve in the use of internet for their learning and research work.

GOK (2005) asserts that information and communications technology skills play a key role in promoting economic development of a country. Many of the productivity gains in the developed world economies over the past two decades; can to a great extent be

attributed to the impact of ICT. The government appreciates and recognizes that, an ICT literate workforce is the foundation on which Kenya can acquire the status of a knowledge economy. In order to realize the national development goals and objectives for wealth and employment creation, the government made information-based society a priority (Poghisio, 2008). In view of this background, the government aims at making ICT education the natural platform for equipping the nation with ICT skills in order to create a dynamic sustainable economic growth.

It is against this background that the study investigated the factors influencing the use of internet resources for learning among Master in Project Planning and Management students of the University of Nairobi. The use of internet in the academic institutions like the universities cannot be neglected as it stands as a strong backup of many tangible resources of information (Nyamboga, Ongondo, & Ongus, 2004).

1.2 Statement of the Problem

The use of internet has become a very powerful tool for searching for information. The information in the internet has the advantage in that it is rapidly and regularly updated. The infusion of internet into higher education has intensified access to archived sources from various parts of the world (Nwagwu, & Agarin, 2007).

Farrel, (2007), observes that, the state of ICT in African Universities can be summed up as too expensive, and poorly managed. He further notes that the average African University has bandwidth capacity equivalent to a broadband residential connection in

Europe, and pays 50 times more for their bandwidth than their educational counterparts in the rest of the world.

The goal of the Kenya Education Network (KENET) is to establish sustainable communication and networking among educational institutions in Kenya that will facilitate wide use of internet technology, in teaching, research, and sharing of other information resources to the general populace at affordable cost. The current objectives of KENET are to establish an Internet infrastructure for educational institutions and provide affordable tariffs (Farrel, 2007).

Given that the use of computers for research is an important component of ICT, with limited computers, this makes poor research output, publications and dissemination (Shibanda, 2006). For Masters Students, use of internet is crucial to search for materials for research. Moreover, masters students in universities learn mostly through information accessed through the internet. Thus, students who lack skills in the use of internet resources for learning face a great challenge in their studies. Gakuu et al (2010) further note that, the inability to acquire sufficient computers or update those which are obsolete is due to lack of finances, fast changing technology and high overhead costs. Currently, the Kenya government considers the adoption of ICTs as a key step in bridging the digital divide (Wims & Lawler, 2007).

It is against this background that the study investigated the factors influencing the use of internet resources for learning among masters students in the University of Nairobi.

1.3 Purpose of the Study

This study investigated the factors influencing use of internet resources for learning among masters students. The study drew respondents from students pursuing Masters in Project Planning and Management in the University of Nairobi.

1.4 Objectives of the Study

The study sought to achieve the following objectives:

- 1) To determine the accessibility masters students had to the use of internet resources for learning in the University of Nairobi
- 2) To establish the technological skills of masters students in the use of internet resources for learning in the University of Nairobi.
- 3) To assess the familiarity of masters students with use of internet resources for learning at the University of Nairobi.

1.5 Research Questions

The study was guided by the following research questions:

- 1) How accessible are masters students to the use of internet resources for learning in the University of Nairobi?
- 2) What technological skills in the use of internet resources for learning do masters students possess in the University of Nairobi?
- 3) To what extent are University of Nairobi masters students familiar with use of internet resources for learning?

1.6 Significance of the Study

The study investigated the factors that influence the use of internet resources for learning among masters students in the University of Nairobi. It examined the variables such as accessibility to the use internet resources for learning, technological skills in the use of internet resources for learning and familiarity with use of internet resources for learning among masters students in the University of Nairobi.

After investigating the factors influencing the use of internet resources for learning among masters students, the findings of the study could contribute to the body of knowledge of factors influencing use of internet resources for learning. The findings may also be beneficial to researchers, academics, students and professionals with interest in the area of study.

The research findings can be used to promote the expanded use of ICT as a tool for effective management, research and development, at all institutions of higher learning. They will also be used to develop a policy on provision of adequate infrastructure at all institutions of higher learning and training by bringing together the efforts of all stakeholders. The findings will further assist stakeholders to develop a strategy on ICT that addresses its use at all institutions of higher learning and neighborhoods, incorporating access, content, training of instructors or teachers and supply of ICT to the institutions.

1.7 Delimitations of the Study

The study limited its independent variables to three, namely; accessibility, technological skills and familiarity with resources on use of internet for learning. The dependent variable was use of internet resources for learning among masters students. The study drew its study population from the Kisii extramural center of the University of Nairobi. The extramural center was chosen because there are masters students who carry out research.

1.8 Limitations of the Study

Financial constraints were a limiting factor. These hindered the researcher covering the masters students in the entire university. Lack of openness by students that they lacked basic technological skills was another limiting factor.

1.9 Assumptions of the Study

The study assumed that the respondents offered frank responses and were honest to the study questions.

1.10 Definition of Terms

Accessibility- Being able to obtain internet services for use

Internet Resources - These are resources in the Internet, such as journals, e-mail and newsgroups which can be used to obtain information for academic work.

Technological Skills- These include a knowledge of the methods of retrieving information from the internet and the instructions which must be input into the computer by the searcher, and an understanding of the ways in which the instructions are linked with one another.

Masters Students - Students in the School of Continuing and Distance Education of the University of Nairobi pursuing Masters in Project Planning and Management.

Use of Internet Resources- Searching and retrieving information from the Internet, sending information through the internet and storing information in the internet.

Familiarity with Internet Resources – Having experience in interactive media tools in the internet which help to communicate with other students and locate information conveniently.

1.11 Organization of the Study

The study is organized in five chapters. Chapter one gives the background of the study by showing how internet has been observed around the world, and how, over time it has attracted considerable theoretical and empirical research in recent years. It gives the purpose of the study, statement of the problem, objectives of the study, research questions, significance of the study, delimitations of the study, assumptions of the study and operational definitions of terms.

Chapter two gives the review of literature related to the current studies that have been discussed. Chapter three deals with research design and methodology used in the study, namely the research design, area of study, target population and sampling procedure, data collection procedures and development of data collection instruments. Data collected was analyzed and presented in chapter four. Lastly in chapter five, the findings of this study were discussed and recommendations made. The chapter closes with suggestions for further study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews previous studies related to internet use and misuse and it is discussed in different sub-headings. This chapter begins with ICT and Education, it moves to internet access, technological skills, mode of learning in education, ICT national policies in education, the communication theory, and then conceptual framework that shows the relationship between the variables. The chapter concludes with a gap in literature review the study to be filled and the summary.

2.2 ICT and Education

Information and Communication Technology (ICT) are advances in technologies that provide a rich global resource and collaborative environment for dissemination of ICT literacy materials, interactive discussions, research information, and international exchange of ideas, which are critical for advancing meaningful educational initiatives, training a high skilled labor force, and understanding issues related to economic development. ICT highlight innovative efforts and partnerships and promote ICT literacy, and facilitate interaction between all sectors of a national economy including external spheres (Yusuf, 2006). Higher education institutions across the world have been adopting ICT teaching and learning technologies in an effort to create an environment for both students and their instructors to engage in collaborative learning and gain access to information (Ifinedo, 2006).

Access to information through ICT increases the information accessible to individuals to support them in trying new strategies, thinking and creativity that are reflective in practice aimed at engaging them to new innovations through the use of ICTs (Ololube, 2006b). Information and communication technologies (ICT) are indispensable and have been accepted as part of the contemporary world especially in industrialized societies. In fact, cultures and societies are adjusted to meet the challenges of the knowledge age. The pervasiveness of ICT has brought about rapid changes in technology and has caused social, political, and global economic transformation (Yusuf, 2005).

Every nation invests heavily in higher education because it can produce unquantifiable benefits for individuals, organizations and society as a whole. Education is provided through formal and informal means. In formal settings the conventional (face-to-face instruction) and distance education (offered with separation in terms of physical location of instructors and students) have been used to provide educational opportunities to recipients. Open and distance education, though not new in Nigeria, have been given much prominence recently. It is also a means of providing access to basic information and tertiary education for Nigerians (Yusuf, 2006). Notwithstanding the keenness by the federal and state governments to guarantee open and distance education in Nigeria, the use and penetration of ICT in distance education teaching and learning have been major obstacles that may have impeded proper implementation of the program by institutions of higher learning.

The domain of distance education has not been unaffected by the penetrating influence of information and communication technology. Unquestionably, ICTs have impacted the

quality and quantity of teaching, learning, and research in distance education. Therefore, ICT provides opportunities for distance education students and academic and non-academic staff to communicate with one another more effectively during formal and informal teaching and learning (Yusuf, 2005). For this reason, distance education programs in Nigeria need to integrate ICTs into their agendas, because the quality of teaching using ICTs to gain access to information is known in virtually all countries to be a key predictor of quality student learning. Therefore, effective manpower training is crucial using ICTs, because ICTs are tools that on the one hand can facilitate human resources development, and on the other hand, help us to take full advantage of the potential of technology to enhance quality student learning via distance education (UNESCO, 2003).

2.3 Internet Access

Poor connectivity infrastructure manifests in lack of affordable access to personal computers (PCs), Internet services, modems, telephone lines and Internet connections,(Rao,2001). According to Adeya and Oyeyinka, (2002), Internet access and cost of access are significantly related. In other words, societies with predominantly low income groups are less likely to have access to Internet. Knowledge acquisition was for this reason constrained by low income and low levels of education due to unequal access and more so because of unequal utilization of technology.

Access to the Internet and the World Wide Web is ubiquitous within the United States. Given that online information is so readily available, the Internet has become a potential driving force of the economy, society, and education. People use the Internet to access

the needed information. As a result, societal and educational organizations are challenged to use the Internet more efficiently. Given this climate, it is important to understand the patterns of Internet usage. People in the United States use the Internet more than any other country in the world (Fusilier et al., 2005). What factors influence individuals who use the Internet for activities other than email? This study sought to provide an answer, using data from the U.S. National Opinion Research Center 2000-2004 General Social Survey (GSS), and bivariate correlation and logistic regression analysis.

According to the literature, teachers and students are the main users of the Internet. Jones and Madden (2002) conducted a study on college students' Internet usage. Browsing the Internet was a daily activity; 73% of college students used the Internet more than the library for research. Thus, this study determined the actual factors influencing the use of internet by postgraduate distance learners in conducting research and any other required information for their studies. Mutula (2001) explained that, East African countries like Kenya, Tanzania and Uganda experience problems with internet due to the high prices of computer hardware and software.

2.4 Technological Skills

Warschauer (2004) considers information literacy as part of the electronic literacy spectrum, which includes the ability to operate a computer. One barrier to the efficient utilization of ICT in developing countries is the relatively low level of information literacy (Tilvawala, K., et al 2009). In order to utilize the growing range of electronic resources, students must acquire and practice the skills necessary to exploit them (Obuh, 2009). Blandy and Libutti (1995) argue that for students using a variety of on-line

databases, it is as though they were parking lot attendants, where every vehicle is not only a different make but has a different configuration. As Dutton (1990) suggests, the skills required to maximize the potential of electronic resources are much greater than those required for searching printed resources. These resources include a knowledge of the structure of the database and the instructions which must be input into the computer by the searcher, as well as an understanding of the ways in which the instructions are linked with one another. To this end, Brophy (1993) states that users do not often appreciate the skills required to search these sources, stating they are deceptively easy to use. The ability to find and retrieve information effectively is a transferable skill useful for future life as well as enabling the positive and successful use of the electronic resources whilst at university. As Brophy (1993), argues libraries must reach a position where the acquisition of information skills is acknowledged as one of the key learning objectives for every student entering a university, so that no student leaves without being fully equipped to cope with the information intensive world- the information society- as an end-user.

2.5 Resources in use of Internet

There are many electronic tools on the internet that enable users to achieve the purpose of communication. E-mail is believed to be the most important breakthrough in human communication since the invention of the telephone (Nwagwu et al, 2007). Sometimes e-mail may not be considered in comparison to interactive media (IM), which has also become popular among the youth. The more general opinion is that e-mail serves for more serious communications for which IM may be considered too soft (Ocker & Averbau, 1999). Newsgroups are electronic discussion forums where users meet and

exchange ideas. The topics of newsgroups cover a wide range of subjects and are a good source of answers and information on specific issues. Web boards enhance the use of the web mainly for teaching and learning. Chat rooms, on their own, are a way of communicating by sending text messages in real time to people elsewhere who are using the same chat-room. Access to information through ICT increases the information accessible to individuals to support thinking and creativity (Ololube, 2006). The traditional print resources nowadays face challenges from their electronic counterparts in faster and timely delivery of information as well as in improved access (Bandyopadhyay & Chu, 1999). Dilek- Kayaoglu (2008) revealed that one of the barriers to the use of e-journals as reported by 42.7% of the respondents in his study is lack of awareness of e-journals in their library. Magara (2002) opined that CD-ROM and on-line retrieval services were the most utilized electronic resources in Uganda.

2.6 Mode of Learning in Education

Despite the keenness by institutions of higher learning to establish distance education programs, they are confronted with enormous problems that may have impeded its proper implementation. The most significant of these problems is poor ICT penetration and usage among Nigerian distance education practitioners. Almost all African countries' basic ICTs infrastructures are inadequate; this is as a result of lack of electricity to power the ICTs materials, poor telecommunication facilities, and a poor postal system. That notwithstanding the trend will have to change since the pervasiveness of ICT has brought rapid changes in technology and global economic transformations (Yusuf, 2005).

According to Yusuf (2006), successful distance education cannot be assured without the use of effective communication and technological tools (e-mail, fax, Internet, television, radio). Several cities and rural areas in Nigeria are yet to have or have fluctuation in the supply of electricity. Additionally, most Nigerians do not have access to telephone and other telecommunication facilities. Even, telephone lines in the urban centers are not adequate to serve the teeming population. Services for those who have access are in most cases epileptic. These may make the integration of telecommunication in the delivery of distance education difficult. For example, in a ten African country survey, Botswana has the highest fixed line household penetration at 22.4%, followed closely by South Africa at 22.1%. Zambia is next at 18.6%, with Namibia at 14%. Tanzania has a fixed line penetration of 6.1%, Ethiopia just over 5% and Rwanda 4.4%. Uganda trails far behind the rest, with penetration under 1% (Gillwald & Esselaar, 2005).

Basically, African countries tend not to have the same infrastructural facilities and support as the developed West, which are prerequisites for the new order (Ifinedo, 2005). In addition, the poor state of telephone service has led to increases in dial-up cost for most Nigerians. Even with the recent introduction of GSM in August, 2001, access is still limited, services are yet to be perfect, and service charges may make GSM unattractive for distant learners.

Poor economic situations and their effects on middle level manpower, stand as the major obstacle towards the implementation of ICTs in distance education. Even an average middle income earner cannot afford basic technological and communication gadgets. Thus, computer related telecommunication facilities might not be useful for most Nigerians, as computers are still a luxury in institutions, offices and homes. This has

made the integration of necessary on-line resources (e-mail, newsgroups, world-wide-web, etc.) into distance education in Nigeria most difficult (Ifinedo & Ololube, 2007). Similarly, according to UNESCO (1998), Igwe (2005) and Nwagwu and Ahanihe (2006), efforts to improve ICT access in Africa have been hampered by a number of factors; these are summarized as follows: prospective ICT users that have the expertise, competence and equipment to benefit from access to electronic information networks are minute in number; the shortage and high cost of equipment, software and information compared to situations in industrialized nations; the lack of reliable and accessible physical telecommunications infrastructure; telecommunications monopoly, associated with overly restrictive regulations and high costs, and lack of interregional networking and cooperation amongst national universities and international institutions. In the same vein, Commonwealth of Learning International (2001) made it clear that essential services and infrastructure like electricity, telecommunications and postal services must be developed to levels that could support the declared scale of open and distance education in order to increase administrative networks and develop a proper link between faculty and students.

Another most serious challenge facing distance education at this level in Nigeria is the need for the integration of new ICT literacy knowledge into academic courses and programs. This state of affairs grew mainly from the political isolation that Nigeria experienced during the military eras. Nigeria's professionals were not able to benefit from international assistance, international networking and cooperation or from courses, conferences and seminars abroad. This denial of assistance and interaction has had

adverse consequences, both on the psyche of faculty and on the development of the infrastructure necessary for professional development (COL International, 2001).

2.7 ICT National Policies in Education

An examination of the National ICT Policy (2006) and The National ICT Strategy for Education and Training revealed that they recognize the role of ICTs in education and development. ICT as a universal tool in education and training, and its integration to improve access, learning and administration are emphasized. These policies seek to establish policy frameworks; install digital equipment, connectivity and network infrastructure; and integrate ICTs in education and training. Kenya Education Sector Support Programme (KESSP) (2005-2010), focuses on challenges facing the education sector and gives solutions on how to overcome them. The ICTs in Education Options Paper of 14, June, 2005 page 52 discusses the ways in which ICTs can support and improve delivery of quality education to Kenyans. Although the ICT syllabus in secondary schools and teachers' colleges provides basic computer knowledge, skills and attitudes on use of computers, the focus is on the computer as the object of study. Due to deficiencies in the implementation strategy use of ICT in teaching and learning are lacking in public schools.

From the policy documents, the government hopes to raise digital infrastructure to 80% in secondary schools and to 10% in primary schools by 2011. It also proposes to increase computer-student ratio to 1:50; connectivity and network infrastructure to 70% for secondary schools and 10% in primary schools. It is observed that ICT policy frameworks on ICT are lacking in public schools. Public institutions lack integration of

ICT in delivery of curricula as compared to private institutions. The government should work on ICT in education policy to enhance the pedagogical integration of ICT in institutions. This study also examined the status of ICT equipment, connectivity and access in schools and the extent to which it facilitates teaching and learning. The findings show that 9/10 of the institutions had computers. However, only (6/10) and 38% (128/334) of the computers were connected to the internet. The government like all others in the world has made commitments to make education accessible to its citizenry through ICTs (Olusola & Alaba, 2011).

Another finding was that 8/10 of the institutions had an ICT advisor/technician. The roles of the ICT advisor/technician varied from one institution to another but generally, their duties were to maintain and repair computer equipment; and to advise management on choice of ICT hardware and software. In some institutions, they also taught computer skills to teachers and students.

2.8 The Communication Theory

The theoretical framework of the study is a structure that can hold or support a theory of a research work. It connects core set of a topic and shows how they fit together or are related in some way to the subject; that is, it is a foundation for the parameters, or boundaries, of a study. The study will employ the Communication Theory using the 'Uses' and 'Gratification' approach. The approach suggests that people's need influence what media they would choose to use, how they use certain media and what gratifications the media give them. Ruggiero, (2000) asserts that the uses and gratifications theory has always provided a cutting-edge, theoretical approach in the initial stages of each new

medium, such as newspapers, radio and television, and now the internet. The theory also suggests that people consciously choose the medium that would satisfy their needs and that audiences are able to recognize their reasons for making media choices.

Maddox, (1998) suggested that the most important reason why people use the internet is to gather information. This theory was suitable in this study since the Masters Students carried out research in their studies which required the use of internet and they also came from diverse geographical backgrounds. Hence, this study utilized the theory to investigate the factors influencing the use of internet resources for learning and research among Masters Students in the School of Continuing and Distance Education in the University of Nairobi.

2.9 Conceptual Framework

The conceptual framework as envisaged by the researcher comprises the use internet resources for learning and research as the Depended Variable while there are three independent Variables namely accessibility, technological skills and familiarity with resources available in the internet for use by masters students in the University of Nairobi. The dependent variable in the study is the use of internet resources for learning. However, the possible intervening variables in the study were time to learn, technophobia motivation and workload. These were controlled for during the construction of research instruments.

Independent Variables

Dependent Variable

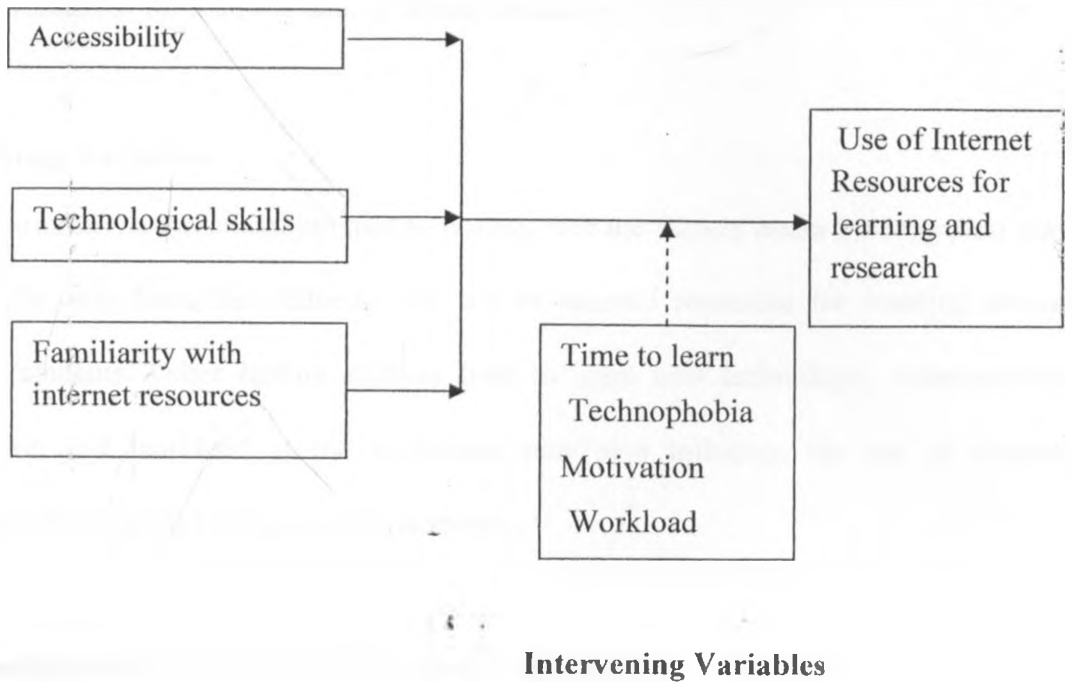


Figure 1: Conceptual Framework

Independent Variables

These demonstrate activities and initiatives regarding internet that have a bearing on the use of internet (dependent variable). This model highlights on accessibility to use of internet resources for learning and research, technological skills in the use of internet resources for learning and research and familiarity with resources available in the use of internet for learning and research. The assumption is that each variable has a direct effect on the use of internet resources for leaning; for instance if accessibility to use the use of internet resources for learning is enhanced then the masters students in the University of Nairobi will use the internet resources for learning more and more proficiently.

Dependent Variable

This attempts to find out the factors (independent variables) which affect the use of internet resources for learning among masters students.

Intervening Variables

These variables in the model attempt to portray that the factors under investigation may not be the only ones that influence the use of internet resources for learning among masters students. Other factors such as time to learn new technology, technophobia, motivation and workload at the workplace may also influence the use of internet resources for learning among masters students.

2.10 Gap in Literature Review to be filled by the Study

Studies have been done on Internet technology, technological developments, and services, but there are few studies on individual Internet usage. Hence, this study investigated the factors that influenced the use of internet resources for learning among masters students in the University of Nairobi so as to improve the research outcomes.

2.11 Summary

This chapter contains literature review in general and specific literature which has been reviewed under the following sub-headings: ICT and Education, internet access, technological skills, resources in use of internet, mode of learning in education, ICT national policies in education, the communication theory, and conceptual framework that shows the relationship between the variables. The chapter concludes with a gap in literature review the study hopes to fill. The strengths and weaknesses of the past studies have also been outlined and hence the position of this study and what it can contribute has been established.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter was to provide a description of the research design, study area, the target population, sample size and sampling techniques, research instruments, validity and reliability of the research instruments, data collection procedures, ethical issues in data collection and data analysis and presentation. Each of the sub-headings mentioned above are explained separately below.

3.2 Research Design

The study adopted a descriptive survey design to investigate the factors influencing the use of internet resources for learning and research among masters students in the University of Nairobi. Descriptive survey designs are used to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2005). Mugenda and Mugenda (2003) note that descriptive survey research is intended to produce statistical information about aspects of respondents. Descriptive survey design enabled the researcher to obtain both qualitative and quantitative information from respondents who were generally a representative sample from a defined population. This was cost effective and feasible in terms of time.

3.3 Target Population

The study targeted 89 masters students at the Kisii extramural center, the registrar and one administrator. Thus, the target population was 89.

3.4 Sample Size and Sampling Procedures

Sampling is a process of selecting a number of individuals from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho, 2005). This study employed purposive sampling. In purposive sampling, the researcher decides which respondents to include in the sample based on their typicality and it is used to collect focused information (Oso & Onen, 2009). In this study, purposive sampling technique was used to select respondents from the Kisii extramural center of the University of Nairobi, and targeted all the masters students pursuing Masters in Project Planning and Management. Thus, the sample was equal the population of 89. The Registrar and the administrator in the School of Continuing and Distance Education were purposively included in the study. Therefore, the study sample comprised 89 masters students at the Kisii extramural center, the registrar and one administrator giving a total of 91.

Table 3.1 below shows the stratification of the respondents used in the study.

Table 3.1: Stratification of respondents

Stratum	Population	Sample
MPP	89	89
Registrar	1	1
Administrator	1	1
Total	89	91

3.5 Research Instruments

This study used questionnaires as primary data collection research instruments. The documents analysis was the only secondary research instrument found to be relevant to collect data for this study.

3.5.1 Questionnaires

A questionnaire is a research instrument that gathers data over a large sample (Kombo & Tromp, 2006). The questionnaires that were used in this research consisted of structured and unstructured questions. Structured questions are easier to analyze, easier to administer because each item is followed by alternative answers. They are also economical to use in terms of time and money. However, the responses are limited and respondents were compelled to answer questions according to the researcher's choice. Unstructured or open-ended questions on the other hand refer to those questions that give the respondent complete freedom of response. This permits a respondent to respond in his/her own way. Respondents responses gave insight into their feelings, background, hidden motivation, interest and decisions, (Mugenda and Mugenda, 2003). However, there is a tendency to provide information that does not answer the stipulated research

questions or objectives. There is also difficulty in categorizing responses and hence difficulty in analyzing quantitatively. There was one set of questionnaires; Masters students' Questionnaires (MS- I) Appendix (II).

3.5.2 Interview Guide

This is an oral administration of a questionnaire, which involves a face-to-face interaction. The interview schedules were administered to the administrators in the SCDE. They were labeled (AD-I) – Appendix (III).

3.6 Reliability and Validity of the Instruments

The reliability and validity of the research instruments was tested before being used in data collection.

3.6.1 Reliability

Reliability of this research is to ensure that the consistency of this research measurement or the degree to which the questionnaires as a measure of an instrument, measures the same way each time it is used under the same condition with the same subjects. A measure is considered reliable if a research's finding on the split-halves are the same. Reliability ensures that there is precision with which data is collected. If the same results are gained time after time, no matter how many times you conduct a piece of research, this suggests that the data collected is reliable (Mugenda & Mugenda, 2003). To ensure the reliability of the questionnaire, a pilot study was carried out with Masters Students in Project Planning in one of the Extramural Centers. According to Nachimias & Nachimias (1992), a Pearson's product moment correlation coefficient of 0.821 was obtained thus enabling the researcher to consider the instruments as reliable.

3.6.2 Validity

A valid instrument contains content that is relevant to the study; validity is thus the degree to which results obtained from an analysis of the data actually represent the phenomenon under study (Mugenda and Mugenda, 2003). Levy et.al (1999) asserts that validity is the degree to which an instrument measures what it is supposed to measure. Kothari (2005) further notes that a test is said to be valid if it measures what it is designed to do. To assess the content validity of the questionnaires and interview schedules the researcher sought supervisory assistance of experts in the school of continuing and distance education of the University of Nairobi (Kothari, 2005). They assessed them and gave the required feedback for implementation. Through this, the researcher was able to identify loopholes in them and made the necessary adjustments.

3.7 Data Collection Procedures

This refers to the collection or gathering of information to serve or prove some facts (Kombo and Tromp 2006). It involves the real process of going to the field to get the required information from the selected population. The researcher got an introductory letter from the Chairman of the Department of Distance Studies (appendix V) which enabled him to proceed to the field to collect data. On the actual dates of the study, the researcher visited the school to conduct the research. The questionnaires were issued to sampled masters students and some questionnaires were collected on the same day while others were collected later. This is allowed more time to properly complete the questionnaires.

3.8 Ethical Issues in Data Collection

The researcher considered the fact that participation in research was voluntary. This is why the researcher took time to explain to the respondents the importance of the study and therefore requested the respondents to participate in the study by giving information relevant to the study. All respondents involved in the study were assured of the confidentiality of the information they would give. The researcher also informed them that their names were not required on the questionnaires.

3.9 Data Analysis

Kombo and Tromp (2006) define data analysis as to refer to the examination of the coded data critically and making inferences. In the study, data was organized, presented, analyzed and interpreted using descriptive statistical techniques. According to Mugenda and Mugenda (1999), descriptive statistics includes the statistical procedures that produce indices that summarize data and describes the sample. Data was collected using questionnaires and interview schedules containing two sections; demographic characteristics and use of internet variables. To analyze the data, frequency distributions of the responses were constructed. Thereafter one-way analysis of variance (ANOVA) technique was used to establish how the observations varied with Masters Students responses. The data was analyzed using the Statistical Package for Social Sciences (SPSS) in ANOVA. The data collected was presented in tables in chapter IV.

3.10 Operational Definition of Variables

Table 3.2 gives a detailed explanation of the variables in terms of how they are used operationally in the study.

Table 3.2 Operational Definitions of Variables

OBJECTIVES	VARIABLES	INDICATORS	MEASUREMENT	MEASUREMENT SCALE	STUDY DESIGN	TOOLS OF ANALYSIS
To determine accessibility to use of internet resources for learning and research among Masters Students in the SCDE	Use of Internet resources	Google search, e-data, email, YouTube	Percentages Frequencies Mean Standard deviation	Ordinal scale	Descriptive / Quantitative	Measure of Central Tendency , Frequency distribution and Measure of variability
To determine the technological skills in the use of internet for learning and research among Masters students in the SCDE	Technological skills	Input, Save, Retrieve information	Percentages Frequencies Mean Standard deviation	Ordinal scale	Descriptive / Quantitative	Measure of Central Tendency , Frequency distribution and Measure of variability
To assess familiarity with resources in use internet among Masters students of SCDE	Familiarity with resources	Use of search engines	Percentages Frequencies Mean Standard deviation	Ordinal scale	Descriptive / Quantitative	Measure of Central Tendency , Frequency distribution and Measure of variability

3.11 Summary

The chapter provides a detailed description of the research design, the target population and sample size selection, research instruments, validity and reliability of the research instruments, data collection procedures, ethical issues in data collection and data analysis and presentation.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter deals with data analysis, presentation, interpretation and discussion of the research findings. In the first section, descriptive statistics are used to provide background information of the respondents who participated in this study. The second section presents the analysis of the responses to the specific objectives of the study as provided by the respondents in the questionnaires and interview schedule. The purpose of this study was to find out factors influencing use of internet resources for learning among masters students: a case of Masters in Project Planning and Management, University of Nairobi.

The study sought to achieve the following objectives:-

1. To determine the accessibility of masters to the use of internet resources for learning in the University of Nairobi.
2. To establish the technological skills of masters students in the use of internet resources for learning in the University of Nairobi.
3. To assess the familiarity with the resources available in the use of internet for learning among masters students in the University of Nairobi.

4.2 Questionnaire Return Rate

A total of 89 questionnaires were given out to the respondents. Out of the 89 questionnaires 76 were received back. This resulted in a return rate of 85.4%. The data from the questionnaires was then analyzed and presented in tables.

4.3 Demographic Characteristics

This variable was important since it enabled the researcher to obtain respondents' personal data in terms of gender, year of study, how they accessed internet, what they used to access internet, how often they searched the internet and where they learnt new skills on using internet.

4.3.1. Gender

Respondent's gender was established and shown in table 4.1

Table 4.1 Gender

Gender	Frequency	Percent
Male	62	81.6
Female	14	18.4
Total	76	100.0

As shown in table 4.1 majority, 81.6% of the respondents were male while 18.4% were female. This indicates that there was gender imbalance in the admission of students to the Masters degree in the university selected for this study.

4.3.2 Year of study

It was important for this study to establish the year of the respondents. Their responses were summarized in table 4.2.

Table 4.2 Year of study

Year of study	Frequency	Percent
1	61	80.3
2	15	19.7
Total	76	100.0

It is instructive to note that 80.3% of the respondents were in their first year of study while 19.7% were in their second year of study. This implies that majority of the respondents were selected from the first year of the study.

4.4 Accessibility to use of internet resources

The study sought to determine the accessibility, masters students had to the use of internet resources for learning.

4.4.1. Access to internet

This study sought to determine what the respondents used to access the internet and their responses were captured in the table 4.3.

Table 4.3 Access to internet

I access internet through	Frequency	Percent
modem	53	69.7
phone	23	30.3
Total	76	100.0

It can be established from table 4.3 that majority of the respondents, 69.7% accessed the internet through the modems while 30.3% indicated that they access through the phone. This shows that majority of the respondents have embraced technology through the use of modems and phones to access the internet.

4.4.2 Gadget for accessing internet.

The respondents were asked what they use to access the internet and they responded as shown in table 4.4.

Table 4.4 Gadget for accessing internet

	Frequency	Percent
Laptop	44	57.9
Desktop	29	38.2
Other	3	3.9
Total	76	100.0

It is clear from table 4.4 that 57.9% of the respondents need laptops to access the internet 38.2% used desktops while 3.9% indicated that they made use of other means to access the use of internet resources for learning through them.

4.4.3 Frequency of searching.

The study sought to find out how frequent the respondents searched from the internet and they responded as shown in table 4.5

UNIVERSITY OF NAIROB
LIBRARY
P.O. BOX 30507
NAIROBI

Table 4.5 Frequency of searching

How often do you search	Frequency	Percent
Very often	13	17.1
often	63	83.9
Total	76	100.0

Table 4.5 clearly shows that 82.9% of the respondents search from the internet often while a few, 17.1% responded that they searched very often. This shows that most of the students searched from the internet frequently to get information.

4.4.4 Mode of accessing internet

The study also sought to find out the different modes masters students used access the internet for learning. The responses were summarized in table 4.6.

Table 4.6 Modes of accessing internet

Statement	SA	A	NC	D	SD
I readily access internet from University computers	2 (2.6%)	7 (9.2%)	5 (6.6%)	32 (42.1%)	30 (39.5%)
The network for access of internet is readily available	4 (5.3%)	43 (56.6%)	5 (6.6)	19 (25.0%)	5 (6.6%)
I access the use of internet cheaply	5 (6.6%)	33 (43.4%)	3 (3.9%)	17 (22.4%)	18 (23.7%)
Power for accessing internet for use is always available	9 (11.8%)	25 (32.9%)	16 (21.1%)	20 (26.3%)	6 (7.9%)
I access use of internet always using my laptop	25 (32.9%)	22 (28.9%)	6 (7.9%)	14 (18.4%)	9 (11.4%)

It is instructive from table 4.6 that 42.1% of the respondents disagreed that they readily accessed the internet from the university computers, 39.5% strongly disagreed, 9.2% agreed, 6.6% were not certain while 2.6% strongly agreed. This implies that the internet is not readily availed through university computers by masters students for use in their learning. On the other hand, 56.6% of the respondents agreed that the internet was readily available, 25.7% disagreed, of 6.6% strongly disagreed, the same proportion was not certain, while 5.3% of the respondents strongly agreed. This shows that although the

access to the computers in the university computers may not be readily available, those which the students can access have accessible networks to the internet.

On whether the students access the internet cheaply, majority 43.4% of the respondents agreed that access to the internet was cheap, 23.7% strongly disagreed, 22.4% disagreed, 6.6% strongly agreed while 3.9% were not certain. This shows that access to the internet in the university is at a reduced price hence it encourages more students to search from it. The table also signifies that 32.9% of the respondents agreed that power was always available, 26.3% disagreed 21.1% were not certain, 11.8% strongly agreed while 7.9% strongly disagreed. This implies that universities provide power to students and minimize the loss of power probably by use of backups like generators. Responses on whether respondents accessed the internet using their laptops, showed that 32.9% strongly agreed 29.9% agreed, 18.4% disagreed, and 11.4% strongly disagreed while 7.9% were not certain about it. This implies that the access to the internet using the laptops is prominent among the university students.

According to literature review, poor connectivity infrastructure manifests in lack of affordable internet connections, (Rao, 2001). The findings were in agreement with the literature review as a total of only 11.8% either agreed or strongly agreed that they accessed internet from the university computers and only 41.9% agreed that power for accessing internet was always available.

4.5 Technological Skills

The study also sought to establish the technological skills of Masters Students in the use of internet for learning and research.

4.5.1 Learning new skills on using internet.

Respondents were asked to state where they learnt new skills in using the internet and they responded as shown in table 4.7

Table 4.7 Learning new skills on using internet

Where do you learn new skills on using internet?	Frequency	Percent
university lectures	9	11.8
workplace	34	44.7
cybercafé	31	40.8
other	2	2.6
Total	76	100.0

It is clear from table 4.7 that 44% of the respondent stated that they learnt new skills using internet at the workplace, 40.8% stated cyber café 11.8% stated university lectures while 2.6% said they learnt from other sources. This means that workplace forms a sole station for learning of new skills and ideas from the internet. This can be attributed to lack of training at the university.

According to the literature review, poor connectivity infrastructure manifests in lack of affordable internet services, modems and internet connection, (Rao, 2001).

4.5.2 Technological Skills in use of Internet

The study sought to find out from the masters students their ideas on the technological skills in use of Internet and their responses were summarized in table 4.8.

Table 4.8 Technological skills in use of internet

Statement	SA	A	NC	D	SD
I am skilled in the use of computers	25 (32.9%)	32 (42.1%)	5 (6.6%)	11 (14.5%)	3 (3.9%)
I am skilled in the use of electronic library tools like CDROM,OPAC and Subject Gateways	3 (3.9%)	11 (14.5%)	21 (27.6%)	25 (32.9%)	16 (21.1%)
I am skilled in the use of internet telephony	15 (19.7%)	29 (38.2%)	7 (9.2%)	15 (19.7%)	10 (13.2%)
I am skilled in formulating search queries	14 (18.4%)	31 (40.8%)	15 (19.7%)	11 (14.5%)	5 (6.6%)
I have skills in computer system/application software such as MS Windows XP and MS Office	25 (32.9%)	35 (46.1%)	8 (10.5%)	8 (10.5%)	0 (0%)

Students were also asked to state whether they were skilled in the use of the computers and it was found out that 42.1% of the respondents agreed, 32.9% strongly agreed, 14.5% disagreed, 6.6% were not certain while 3.9% strongly disagreed. This shows that majority of the students were very much skilled in the use of computers. On the side of the library, students were asked to state whether they were skilled in the use of electronic library tools like CDROM, OPAC and Subject Gateways and 32.9% of the respondents disagreed that they were skilled in the use of electronic library tools, 27.6% were not certain 21.1% strongly disagreed 14.5% of the respondents agreed while 3.9% strongly agreed. This clearly shows that majority of the respondents were not skilled in the use of electronic library tools. Further 38.2% of the respondents agreed that they were skilled in the use of internet telephony, 19.7% strongly agreed with an equal proportion disagreeing, 13.2% strongly disagreed 9.2% were not certain.

This implies that majority of the respondents were conversant with the telephony technology. On whether the respondents were skilled in formulating search queries 40.8% agreed, 19.7% were not certain, 18.4% strongly agreed while 6.6% strongly disagreed. This shows that above 50% of the respondents were skilled in formulation of search queries. On the other hand the respondents were asked whether they had skills in computer system/application software such as MS office and 46.1% agreed, 32.9% strongly agreed, while 10.5% disagreed and an equal proportion was not certain.

According to literature review students must acquire and practice the necessary skills in order to utilize the growing range of electronic resources (Obuh, 2009). The findings were in agreement with the literature review as most responses indicated that most of the masters students possessed the skills in the use of the software and equipment. However

they lacked skills in electronic library tools meaning they lacked skills in an area where the knowledge necessary for their learning is located.

4.6 Familiarity with internet resources

The study further sought to assess the familiarity of masters students with resources available in the internet for use in learning. Respondents were asked to state their level of familiarity with the resources available in the internet for use in learning and research. Responses on the familiarity of the Masters students with the internet resources available in the internet are summarized in table 4.9

Table 4.9 Familiarity with internet resources

Statement	SA	A	NC	D	SD
I am conversant with formats like PDF, JPEG and MPEG	15 (19.7%)	18 (23.7%)	20 (26.3%)	15 (19.7%)	8 (10.5%)
I am familiar with use of e-mail	43 (56.6%)	31 (40.8%)	2 (2.6%)	0 (0%)	0 (0%)
I am familiar with Newsgroups in the internet	11 (14.5%)	27 (35.5%)	12 (15.8%)	26 (34.2%)	0 (0%)
I am familiar with Web boards	7 (9.2%)	13 (17.1%)	37 (48.7%)	19 (25.0%)	0 (0%)
I am familiar with Chat rooms	6 (21.1%)	18 (23.6%)	12 (11.8)	30 (39.5%)	10 (6.6%)
I am familiar with Google scholar	20 (26.3%)	9 (11.8%)	37 (48.7%)	5 (6.6%)	5 (6.6%)

It was established from table 4.9 that 26.3% of the respondents were not certain of their conversancy with the electronic formats like PDF, JPEG and MPEG, 23.7% agreed, 19.7% strongly agreed with an equal proportion disagreeing while 10.5% strongly disagreed. This implies that not all the masters students were familiar with the electronic formats since only less than 44% either agreed or strongly agreed.

Further, on their familiarity with the use of e-mail, 56.6% of the respondents strongly agreed that they were familiar with the use of e-mail, 40.8% agreed while 2.6% were not certain.

On the familiarity of the students with the news groups, 35.5% agreed, 34.2% disagreed, 15.8% were not certain while 14.5% strongly agreed. It is also clear that 48.7% of the respondents were not certain on their familiarity with the web boards, 25.0% disagreed, 17.1% agreed while 9.2% strongly agreed. Responses on the familiarity with the chat rooms indicated that, 39.5% disagreed, 23.7% agreed, 21.1% strongly agreed, 11.8% were not certain while 6.6% strongly disagreed. Only 26.3% either agreed or strongly agreed and the rest were uncertain or disagreed. It was also established that 48.7% of the respondents agreed that they were familiar with Google scholar, 26.3% strongly agreed, 11.8% were not certain while an equal proportion of 6.6% disagreed and strongly disagreed respectively. The findings show that 97.4% of respondents either agreed or strongly agreed that they were familiar with use of email though the proportions were lower for other resources like Web boards which had 26.3%.

According to the literature review email is believed to be the most important breakthrough in human communication since the invention of the telephone (Nwagwu et al, 2007).

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMENDATIONS

5.1 Introduction

This chapter presents summary, discussion of the findings and conclusions. Recommendations from the study and suggestions for further research are also included in this chapter. The chapter is based on the findings of the preceding chapter, objectives of the study and the research questions that were to be answered by the study. The study combined two approaches to data analysis: quantitative and qualitative. This chapter is divided into four sections. The first section presents a summary of the research findings; the second part presents discussions of the research findings; the third contains conclusions, the fourth has recommendations and the last carries suggestions for further research.

5.2 Summary of Findings

The first objective of this study was to determine the accessibility masters students had to the use of internet resources for learning in the University of Nairobi. A large proportion of the respondents disagreed that they readily accessed the internet from the university computers. A small proportion agreed. This implies that the internet is not readily available to masters students through university computers. On the other hand most respondents agreed that internet was readily available. This shows that students accessed the internet even when university computers were not available. On whether the students

accessed the internet cheaply, majority of the respondents agreed that access to the internet was cheap a few either disagreed or were not certain. This shows that access to the internet in the university was at a reduced price and hence it encouraged more students to search from it. A number of respondents agreed that power was always available. This implies that universities provide power to students and minimizes the loss of power probably by use of backups such as generators. Majority of respondents accessed the internet using their laptops. This implies that the access to the internet using the laptops is prominent among the university students since they do not have ready access to university computers. However even though they have laptops once they are away from the university, power for operating the laptops may not be guaranteed.

The second objective of this was to establish the technological skills of masters students in the use of internet resources for learning in the University of Nairobi. Responses showed that most of the respondents agreed that they were skilled in the use of the computers. This shows that majority of the respondents were very much skilled in the use of computers. On the side of the library, respondents were asked to state whether they were skilled in the use of electronic library tools like CDROM, OPAC and Subject Gateways. More than half of the respondents disagreed that they were skilled in the use of electronic library tools. A large proportion indicated that they did not have skills in electronic library tools. More than half the respondents agreed that they were skilled in the use of network telephony the rest either disagreed were not certain. This implies that majority of the respondents were conversant with the internet telephony technology. More than half of the respondents agreed that they were skilled in formulation of search

queries while a few said they had no idea on formulation of queries. A high percentage of respondents agreed that they were skilled in MS application. Though the findings showed that most respondents had skills in computers, internet telephony and formulating search queries a large proportion of them either disagreed or strongly disagreed that they were skilled in the use electronic library tools. This shows lack of a skill that very important in learning. According to the literature review students must acquire and practice the necessary skills in order to utilize the growing range of electronic resources (Obuh, 2009). Lack of skill in electronic library tools implies that they don't use such resources for learning is not optimal.

The third objective of this study was to assess the familiarity with the resources available in the use of internet for learning among masters students in the University of Nairobi. It was established from the results obtained that, less than half of the respondents agreed that they were conversant with the electronic formats like PDF, JPEG and MPEG. Further, on their familiarity with the use of e-mail, nearly all of the respondents strongly agreed that they were familiar with the use of e-mail. Less than half of the respondents agreed that they were familiar with news groups while the rest either disagreed or were not certain. Responses on the familiarity with chat rooms showed that, more than half either disagreed or were uncertain. However, a big proportion of the respondents agreed that they were familiar with Google scholar, while, less than a quarter either disagreed or were uncertain. The results show that most respondents were familiar with email but were not familiar with most of the other internet resources. This implies that the unfamiliarity

hinder use of internet since access to ICT increases the information accessible to individuals to support thinking and creativity (Ololube, 2006).

5.3 Discussion of Findings

The results show that only a small portion agreed that they had access to university computers. This means that use internet resources is very low. The portion of those who indicated that power was available, were less than half. However, more than half had laptops. Even with the big number of laptops, a big proportion didn't use internet resources because power was not available to operate the laptops as indicated by the low percentage of those who agreed that power was always available. As Mutula (2001) explains East African countries like Kenya, Tanzania and Uganda experience problems with connectivity to the internet due to the high prices of computer hardware and software. The lack of computers therefore hinders usage of electronic resources for learning among masters students.

More than seventy percent agreed that they had skills in the use of computers. Less than twenty percent had skills in electronic library tools showing that, most masters students didn't use these tools owing to lack of the skills.

Regarding familiarity, the findings showed that more than ninety percent of the respondents were familiar with use of email while fifty percent were familiar with use of news groups. The web boards, chat rooms and Google scholar had had less that forty five percent agreeing that they were familiar. This findings show that a high percentage of students don't use many resource for learning except the email.

5.4 Conclusion

Based on the findings of this study, it can be concluded that most masters students of the University of Nairobi do not access the internet through university computers but the few computers which they can access have excellent accessible networks to the internet. This access is at a reduced price hence it encourages more students to search from it. It was also established that less than fifty percent of students accepted that power was always available. This implies that universities provide power to students at the campuses and minimize the loss of power probably by use of backups like generators. The uninterrupted power therefore allows most students to access the internet through their laptops while at the university. However, more than fifty percent either disagreed or were not certain of the availability of power. This high percentage of respondents disagreeing; or being uncertain, means that, a large number of them did not access the use of internet for learning. This may be attributed to lack of power when students are off campus.

On technological skills of masters students in the use of internet resources for learning it was found out that most of the respondents agreed that they were skilled in the use of the computers. Respondents were also asked to state whether they were skilled in the use of electronic library tools like CDROM, OPAC and Subject Gateways and over half of the respondents disagreed that they were skilled in the use of electronic library tools. This indicates high ignorance in the use of electronic library tools. However most of the respondents agreed that, they were skilled in the use of internet telephony. Lack of skills in electronic library tools was significant since libraries are good sources of knowledge.

This shows that students lacked skills leading to reduced use of internet resources for learning.

The study further established that more than ninety seven percent either agreed or strongly agreed that they were familiar with email. Fifty percent agreed or strongly agreed to familiarity with newsgroups. Familiarity with web boards, chatrooms and Google scholar, all got less than forty five percent of those who agreed or strongly agreed. This shows that the respondents were not familiar with most resources available in the internet. It means that they don't use those resources for learning since they are not familiar with them.

This is in contrast to literature review which asserts that access to information through ICT increases the information accessible to individuals to support thinking and creativity (Ololube, 2006).

5.5 Recommendations

Based on the findings of this study, the following recommendations are made:

- i. The Government, universities, administrators and educational stakeholders to combine efforts in order to equip institutions with updated computers, wireless internet services to enhance internet access.
- ii. Universities should arrange for library assistants to train the students on the use of electronic library tools like CDROM, OPAC and Subject Gateways to enhance their skills.

- iii. Universities to encourage students to use diverse resources in their learning and research.
- iv. Distance Education Learners to access their learning materials from the internet.

5.6 Suggestions for Further Research

In an effort to fill up existing gap, more gaps emerged which need to be filled. The following are the areas that need further research:

- i. Studies similar to this one to be carried out in other Universities
- ii. A study on the challenges faced by Masters students in the use of internet services and their possible solutions
- iii. A study on the negative effects of the internet on university students.

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