

**THE EXTERNAL DEGREE PROGRAMME OF THE UNIVERSITY OF NAIROBI:
AN EVALUATION WITH REFERENCE TO THE PLACE OF LIBRARY AND
OTHER MULTI-MEDIA SERVICES**

PETER OCHIENG GOR

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION IN
EDUCATIONAL ADMINISTRATION AND PLANNING OF THE
UNIVERSITY OF NAIROBI**

2005

University of NAIROBI Library



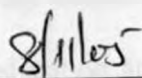
0376380 2

DECLARATION

This research project is my original work and has not been presented for a degree in any university

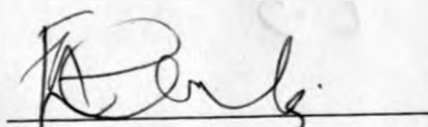


PETER OCHIENG GOR

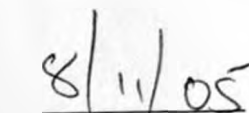


DATE

This research project has been presented for examination with my approval as a university supervisor.



ESTHER ALANDO OMONDI



DATE

Department of History and Government.

University of Nairobi.

DEDICATION

This research work is dedicated to my dear wife Emily Adoyo Ochieng, and my beloved children Hazel Atieno, Sethfage Onyango, Zaintonatte Awuor, Cheril Amondi, and Ida Atieno.

To my dear children may it inspire you to climb the academic ladder to the highest level.

To my beloved parents Philip Gor Nyaimbo and Aska Owuor Gor, my brothers, sisters, and in-laws, who were a great source of inspiration to my education and without whose foresight, sacrifice and support, I would not have reached this far.

To my grandmother Achuodho Nyanyengo (d:1994) may her soul rest in peace.

ACKNOWLEDGEMENT

I am indebted to so many individuals, institutions and organisations for their contribution and support towards the successful completion of this research work. It may not be possible to mention all by name. Please do accept my sincere appreciation and gratitude.

Firstly, my deep appreciation is expressed to the University of Nairobi for financial assistance through the award of scholarship that has enabled me pursue this course with minimal difficulties.

Secondly, to my supervisor Esther Alando Omondi, Department of History and Government, University of Nairobi, for her unwavering and conscientious guidance from the beginning to the successful completion of this research study.

Thirdly, my employer, the Teachers Service Commission for granting me a two year study leave to pursue this course .

Fourthly, my sincere thanks are expressed to all the Part six external students, who took part in the study, particularly for the genuine co-operation, support and concern during data collection. Fifth, I am also indebted to Ministry of Education Science and Technology for granting the research permit for this study and the faculty of external studies for their support. I cannot forget to thank Mr. John Masolo, Mr. Juma Alfred and Mr. Robert Okinda for their typographical work and subtle computer analysis.

Last but not least, I express my gratitude to David Otieno Otigo for his encouragement during the entire work. I would also like to thank the lecturers in the

Department of Educational Administration and Planning, University of Nairobi for their support.

My heartfelt gratitude and appreciation also go to my wife, children, father, mother, sisters, and brothers for their patience and understanding during this study. And to many others, I say thanks very much.

TABLE OF CONTENTS

Content	Page
Title Page	i
Declaration	ii
Dedication	iii
Acknowledgement	iv
List of Tables	xi
List of Abbreviations	xiii
Abstract	ix
CHAPTER ONE	
INTRODUCTION	
1.1. Statement of the Problem	7
1.2. Purpose of the Study	8
1.3. Objectives of the Study	8
1.4. Research Questions	8
1.5. Significance of the Study	9
1.6. Limitations of the Study	9
1.7. Delimitations of the Study	10
1.8. Basic Assumptions	10
1.9. Definition of Terms	10
1.10. Organisation of the Study	13

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction.....	14
2.1. Library Network in Kenya.....	14
2.2. Use of Library facilities in Distance Education in Kenya.....	17
2.3. Multi-Media Resource in University Libraries and Importance to Distance Education Programme.....	22
2.4. Audio-visual Media.....	23
2.4.1. Inherent Strengths and Weaknesses of Digital Multimedia as Learning Media in Libraries.....	23
2.5. Computer Technology.....	24
2.6. Theoretical Framework.....	267

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction.....	28
3.1. Design of the Study.....	28
3.2. Target Population.....	29
3.3. Sample and Sampling Procedures.....	29
3.4. Research Instruments.....	30
3.5. Instrument Validity and Reliability.....	30
3.6. Pre-testing of the Instrument.....	31
3.7. Administration of the Instrument.....	31
3.8. Data Analysis Techniques.....	32

CHAPTER FOUR

DATA ANALYSIS AND INTERPRENTATION

4.1 Introduction.....	33
4.2. Questionnaire Return Rate.....	33
4.3. Demographic Characteristic of the Respondents.....	34
4.4. University of Nairobi Library Networks and Availability of Library Services to External Students.....	37
4.4.1. University of Nairobi Library Network.....	37
4.4.2. Adequacy of Materials at University of Nairobi Library Network.....	38
4.4.3. Category of Libraries in Kenya.....	38
4.4.4. Proximity of Other Libraries to Students' Residential Places.....	39
4.4.5. Adequacy of Materials in Other Libraries.....	40
4.4.6. Relevance of Materials in Other Libraries.....	41
4.5. Use of Library Facilities by External Students of University of Nairobi.....	42
4.5.1. Induction of Students on Library Use.....	42
4.5.2. University of Nairobi Library Visits by External Students.....	43
4.5.3. Common Means of Contacting University Library.....	44
4.5.4. Library Services at the Regional Centres.....	45
4.6. Alternative Multi-Media Services.....	46
4.6.1. Multi-Media Services That Students Are Conversant With.....	46
4.6.2. Multi-Media Services That The Students Have Used During Their Study.....	47
4.6.3. Multi-Media Services At The University of Nairobi Library/ Regional Centres.....	48

4.7. Where Library and other Alternative Services could be availed to External Students.....	49
4.8. Challenges Facing The Provision of Library Services as expressed by External Students.....	50
4.8.1. Challenges facing the Provision of library and alternative information services as expressed by Librarians	51

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATIONS

5.0. Introduction.....	54
5.1. Summary of the Study	54
5.2. Findings of the Study	55
5.2.1. University Nairobi Library Network and its Effectiveness to External Students	55
5.2.2. Library use by External Studies.....	55
5.2.3. Multi-media Facilities in University Libraries	56
5.2.4. Where Multi-media Resource Services could be Availed to External Students of the University of Nairobi.....	56
5.2.5. Challenges facing the Provision of Library and other Alternative Services to External Students of the University of Nairobi.....	57
5.3. Conclusion	57
5.4. Recommendations of the Study	58
5.5. Recommendations for further Studies	62
BIBLIOGRAPHY.....	62

APPENDICES	67
Appendix A: Letter of Introduction to Ministry of Education Science and Technology	67
Appendix B: Letter of Introduction to External Students. University of Nairobi	68
Appendix C: Questionnaire For Students	69
Appendix D: Interview Schedule for Librarians.....	79
Appendix E: Table for Determining Sample Size	80

LIST OF TABLES

Table	Page
Table 1: Distribution of the Students by Age and Gender	34
Table 2: Students' Professional Qualifications.....	35
Table 3: Students' Professional Experience	35
Table 4: Distribution of Students per Regional Centres	36
Table 5: Availability of Branch of Host University Library at the Regional Centres	37
Table 6: Materials adequacy at University of Nairobi Libraries	38
Table 7: Category of Libraries that Students Visit	39
Table 8: Proximity of Students' Residential Places to Other Libraries.....	40
Table 9: Adequacy of Materials in Other Libraries	40
Table 10: Relevance of Library Materials in Other Libraries.....	41
Table 11: Students' Induction on Library Use.....	42
Table 12: External Students' Visits to University Library	43
Table 13: Common Means of Contacting University Library	44
Table 14: Types of Library Services offered at the Regional Centres to External Students.....	45
Table 15: Multi-Media Service that Students are Conversant With.....	46
Table 16: Multi-Media Services Students Have Used.....	47
Table 17: Multi-Media Service at The University of Nairobi Library and Regional Centres	48

Table 18: Response on where Multi-media Services could be Aailed to External Students.....49

Table 19: Challenges in Providing Library Services to External Students as Expressed by Students.....50

LIST OF ABBREVIATIONS

A.L.:	Association of Library
A.V.:	Audio-visual
C.C.U.:	Correspondence Course Unit
C.E.E.S.:	College of Education and External Studies
C.M.C.:	Computer Mediated Communication
CD-ROM.:	Compact Disc Read Only Memory
I.L.R.A.D:	International Laboratory of Research of Animal Diseases
K.A.R.I:	Kenya Agricultural Research Institute
K.E.M.R.I:	Kenya Medical Research Institute
M.M.I.R:	Multimedia Information Resources.
M.O.E.S.T.:	Ministry of Education, Science and Technology
N.:	Total Number in a sample
S.P.S.S.	Statistical Package for Social Sciences
T.S.C.:	Teachers Service Commission
U.N.E.P:	United Nations Environmental Programme.

ABSTRACT

The study set out to evaluate the place of library and other multi-media information services in the external degree programme of the University of Nairobi. The information for the study was solicited from a random sample of male and female students in their part six of study. This grade level of student was chosen because of long period and exposure they have had in the use of library facilities. The sample of the study comprised of 165 respondents out of 290 that formed the target population.

Through self-administered questionnaires, observation and oral interviews, the study elicited views on the place of library and other information services in the external degree programme University of Nairobi. The findings were computed using the statistical package for social sciences (SPSS) and their implications quantified by tables showing percentages and frequencies.

Some of the major findings of the study were that Library network in Kenya do not have sufficient materials for external students use; that majority of external students are located far away from the libraries and that there was an urgent need to install multi media resources to the external students in their respective regional centres.

Finally, the study recommends that the problems in library and alternative information services in the Faculty of external studies, University of Nairobi be addressed to make the learning environment for distance learners more conducive to academic activities and provide quality education.

In line with the findings and conclusions of the study, the following recommendations were made for future research:

1. A Study should be conducted to investigate the place of library and other media resource services in the faculty of external studies, University of Nairobi in relation to other variables a part from the ones used in this study. Faculty of External Studies administrators and lecturers' views could be incorporated into the instruments so as to provide a better insight on the topic.
2. The scope of this study should be expanded to base the findings at a national level, for example conducting similar research on more than one university. say four public universities.
3. It is imperative that similar studies be duplicated on other areas of the library. For example, one can carry out research on effective management of libraries in the external degree programme.
4. Replication of the current study is recommended to ascertain whether different research instruments could yield similar results.

CHAPTER ONE

INTRODUCTION

1.0. Background of the Study

Open and distance learning has expanded dramatically in recent years across the world; across the spectrum of subject areas and across the educational levels. Over the last decade, in many countries but by no means all, higher education has been growing more rapidly than the economies that support it. For instance, according to Keith, (1999) at present, enrolment for distance learning form about 5 and 15% in both industrialised and developing countries. Indeed in some cases, this figure rises to over 25%.

Keith, further points out that different governments have invested in open and distance learning for various reasons; including educational access, equity and responsibility to the demands of labour market or their expectations about economic competitiveness. He observes that, the emphasis of the last decade has not so much been on the establishment of new institutions, (though Bangladesh and Tanzania are important exceptions), but upon quality, upon new tasks for higher education, and upon costs and funding. In many countries, higher education is being asked to undertake two new tasks: to reach wider audiences and to give new emphasis to continuing education. The governments of Bangladesh, Taiwan and Tanzania have all invested in distance education, principally to widen access to education. In India, there is concern that the open universities should in fact provide improved access to students from scheduled castes and scheduled tribes.

Education was renamed College of Education and External Studies (C.E.E.S.) and mandated to admit both full-time and distance students for the degree of Bachelor of Education.

Despite the enormity of the challenge that this re-organisation posed to the new faculty, the first distance education group of 600 students were admitted in 1986 for a six-year degree programme. The new course was to be run on a fairly similar pattern as the old course for the untrained teachers; namely, that the faculty would develop materials, dispatch them to students, expect the students to study them, and finally evaluate them through written assignments, CATs and an examination. The latter would normally follow after a week's residential session on the campus. During this period, polishing lectures and question and answer session would be held. (A Varsity Focus, June 1993).

The Varsity Focus, further reveal that the second intake was largely over-subscribed since 6,000 applications were received against only 1,800 places. This contrasts with 1,250 applications received against 600 places available in 1986. The clear indication here is that the distance education programme is increasingly gaining importance as a pertinent component of the general development of education in the country, and that more and more people are increasingly demanding access to education through this particular facility as a viable alternative to the full-time residential courses.

With the increasing popularity of distance education, a lot of attention worldwide is being focussed on the role of libraries in supporting distant learners away from their campuses. Questions are also being asked on whether libraries have a role in distance

In Kenya, the Ominde Commission (1964) recommended the establishment of external degree programme in the country to train high-level manpower. The main reason for the growth of distance education in Kenya is that the mainstream educational system was unable to cater for the great number of people who wanted to further their education. This is so especially in the areas of initial teacher training and upgrading, secondary education and business studies (Smith 1987).

According to Young et al (1976) at the request of the Ministry of Education, a feasibility study was conducted by the Open University team from United Kingdom that recommended the establishment of an external degree programme under the Institute of Adult Studies in the university of Nairobi. The external degree programme did stem from the Correspondence Course Unit (C.C.U.), which was introduced in what was then the centre of Adult Education Studies. Matiru, as cited in Smith. (1987) observed that the programme was not meant to train teachers in classroom methodology, but to improve their academic knowledge, with the hope that after receiving their training, the teachers would in turn, improve the quality of education in primary schools.

Odumbe (1985) commenting on the C.C.U. observed that the initial objective of the C.C.U. was to support the already existent foundations course in Adult Education and later, the in-service course for untrained teachers. It is this latter responsibility that became the principal pre-occupation of C.C.U. particularly in the development of instructional materials, their dispatch and the handing of written assignments from students. With the foregoing experience, the C.C.U. was to be transformed into a faculty of external studies when in 1987, the then College of Adult and Distance

education at all (Lombardi 2000). A review of the existing literature has shown up dim prospects. For example according to Beagle (2000), a review he conducted on articles on the topic of distance education written by faculty revealed that only a few issues relating to library access or library resource integration were mentioned.

Roccas (2001), searching several databases arrived at rather pessimistic conclusion that there is almost no reference to library resources in studies about distance education. She also noted that libraries were rarely mentioned in distance education courses and literature, other than reference to online catalogues and electronic resources. At the same time, like other forms of education, the aims of distance education cover a wide spectrum, all of which demand that learners are to be adequately exposed to existing literature on the specific field of study.

These aims include the development of personality and cognitive skills through guided learning and problem solving, as well as training of knowledgeable and well-adapted professionals. Thus distance education aims at more than merely information or imparting knowledge.

According to Culpepper (1999), like other forms of teaching, distance learning should facilitate learning goals, such as examinations, self-realisation or professional competence. Critical to the achievement of these goals is the need to promote productive, critical thinking and the ability to conduct independent research among the students.

According to Holmberg (1994), the key element for higher education learning can not be achieved if adequate literature resources are not provided. He points out that

distance education that ignores the role of libraries provides a narrow experience for the learners and fails to encourage the expected research led inquiry as well as the development and challenging of knowledge. He further pointed out that unless libraries are encouraged to play a central role in the learning process and supported in the effort, distant learners face a future in which their experiences as learners are tightly controlled and the quality of knowledge acquired easily questionable..

According to Heller-Rose, (1999) the justification for library services is the access to adequate library services and resources. This is essential for the attainment of superior academic skills in post-secondary education, regardless of where the student, faculty, or programmes are located. She observed that like it is the case for regular campus-bound programmes, libraries are responsible for providing distance education learners with user based library services and information assistance that are required for successful completion of their studies. Distance learning students require access to the full range of library services such as lending services, reference assistance, inter-library loan, course reserves and internet based resources.

Library research and information literacy are essential components of academic learning experience since the aim of instilling lifelong learning skills through general bibliographic and information literacy in academic libraries is a primary outcome for distance learning community as it is for those in traditional campuses (Association of college and research libraries).

Distance education aims at the use of limited educational resources, both human and material, by making university education available beyond the lecture halls (Republic of Kenya, 1981)

The University of Nairobi external student is largely a rural based employee of the government, mostly teachers and workers in other ministries. On the other hand the library network in Kenya is largely institution-based, centralised in urban areas and whose access is only limited to certain categories of people such as regular based-students (Wairimu, 1984). The traditional focus of many libraries has been the development and acquisition of print resources in paper formats. As technology advances, the impact is felt in all sections, the library included. The development of computer technology has meant that arrangement of information has become a huge complex area. Libraries are thus to change their approach to information so as to incorporate the newly emerging systems in the information world (Morara, 2002).

According to Ariadne Journal of Library and Information Science (2001), the libraries are required to support ventures that are hybrid in every sense. They must provide access to a wide range of resources.

Ahmad (1984), commenting on non-print media points out that the greatest aspect of collecting building is the great importance of non-print media in libraries hence they must be accepted as viable tools to assist the teaching and learning process in universities.

Wairimu (1984) further mentions that while the university of Nairobi has six regional centres in Nairobi, Mombasa, Nakuru, Kisumu, Kakamega and Nyeri, which are meant to offer some library services to home-study students within their jurisdiction, these centres have virtually no library facilities. The question which must therefore arise is whether the home-study student of this university must of necessity only depend on the study materials provided to them by the university and

if this is not the case, then what step can be undertaken to ensure that varied sources of knowledge are available to the students to enable them obtain proper training and come out well-rounded individuals befitting university graduates? There is therefore the need to conduct a research study on how library and any other attendant facilities could be availed to the external students so as to improve quality of graduates in Kenya.

1.1. Statement of the Problem

The hallmark of distance education is the phenomenon of home study. The obvious disadvantage of home-study students is the narrowness of information facility that is available to them. The absence of effective national library services to most of them in their respective regions further complicates the problem of distant learners. The scope of information available to these students is obviously limited. This study firstly, is an attempt to establish how effective library services has been availed to external students of the University of Nairobi. Secondly, to determine and explore the extent to which the external students of University of Nairobi use the library facilities. Thirdly, the study seeks to explore how other alternative information services can be made available to external students of the University of Nairobi. Finally, the study examines some challenges facing the provision of the library and other alternative information services to external students of the University of Nairobi and provide possible suggestions for improvement.

1.2. Purpose of the Study

The purpose of this study was to establish how effective library and other alternative information services could be availed to the external students of the University of Nairobi.

1.3. Objectives of the Study

The study intended to:

- (i) Explore the extent to which library services have been availed to external students in the University of Nairobi library network.
- (ii) Find out the extent to which external students of the University of Nairobi use the library facilities.
- (iii) Establish other alternative information services that can be used by the external students.
- (iv) Determine where library and other alternative information services could be availed to external students of the University of Nairobi.
- (v) Find out the challenges facing provision of library services to external students of the University of Nairobi.

1.4. Research Questions

The following five research questions were set parallel to the five stated objectives above:

- (i) Are library facilities available to external students in the University of Nairobi library networks?
- (ii) Do external students of the University of Nairobi make use of library facilities?

- (iii) What other alternative information services can be used by external students other than the library?
- (iv) Where can library and alternative information services be easily be availed to external students of the University of Nairobi?
- (v) What are the main challenges facing the provision of library services to external students of the University of Nairobi?

1.5. Significance of the Study

Information dissemination belies any attempts to educating a public. The existence and proximity of an information centre is a significant point to anyone seeking information or knowledge. Lack of such facilities may even become a disincentive in the genuine quest for knowledge. This study may assist the University of Nairobi and other institutions to identify the weak points of its external programme, particularly in relation to reading materials and to identify viable alternatives as perceived by the target group and in conformity with modern methods in library science. The study provides a significant addition to the continuing attempts to improve distance learning in Kenya in general; and in particular, the University of Nairobi's external degree programme which is increasingly becoming a major method of acquiring university education in Kenya.

1.6. Limitations of the Study

There is inadequate research done on the place of library and alternative services in the external degree programme of the University of Nairobi. It was not possible to use related research to adequately provide support or otherwise for this work. Also

due to inadequate time and funds, the study covered only students in part six of their course. This grade level of students was found suitable for the study because they had been exposed to almost the whole course and have made use of the library or not over an extended period of time.

1.7. Delimitations of the Study

The study was confined to the external degree programme of the University of Nairobi, leaving out external degree programmes in other public universities. The place of the library and other alternative services were studied leaving out other components of the External Programme of the University of Nairobi.

1.8. Basic Assumptions

- (i) The respondents gave accurate response to the questionnaire.
- (ii) All the external students face similar challenges in the use of library and other alternative services.
- (iii) If the library services are available to the external students, their performance will improve.

1.9. Definition of Terms

This section entails definition of significant terms used in the study.

Alternative Services: This includes the use of multi-media information resources such as television transmission of programmes, teleconferencing facilities, new teletext, book microfilms, online services, microcomputer software, and CD-Rom databases.

Correspondence Education: This is a correspondence study in which the student can work alone and at his own pace without a regularly scheduled meeting with an instructor. The unique and distinguishing feature is that the learner is at a distance from the teacher for much, most or even all the time during the teaching-learning process. However, this separation of the teacher and the learner does not preclude supplementary face to face sessions.

Distance Education: Form of educational endeavour in which the learner is quasi-permanently separated from the teacher through out the length of learning process, the learner is quasi-permanently from the learning group through out the length of learning process, technological medium replaces the interpersonal communication of conventional, oral, grouped-based, the teaching or learning process if institutionalised.

External Degree Studies: This is a mode of education that is “external to” but not separated from the faculty staff of the institution. The same staff have two groups of students, one on campus, the other external, and they prepare both groups for the same examinations and awards.

Home Study: This term suggests that the teaching and learning does not take place in the class or lecture room but at home.

Library: Refers to a collection of printed or written materials arranged and organised for the purpose of study and research or general reading or both. Many libraries also include collections of films, micro films, phonograph records, lantern slides and the like within the term written or printed material.

Library Network: This is the distribution of libraries in the country.

Library Services: Include study materials (units), textbooks, special reference books, journals and periodicals. Besides this, there is also the audio-cassettes and radio-programmes.

Mainstream Education: This is education provided in the normal formal classroom-based instruction in a school, college, or a university setting, where teachers and students are physically present at the same time at the same place. Its characteristic structures are the dialogue, the lecture developed by the medieval universities, the tutorial and seminar added by humanist and more recently, the laboratory practical, the field trip and periods of study in the library or resource centre. The mode of study is full time residential studies.

Open learning: The word 'open' as contrasted with 'closed' carries suggestions of lessening or removal of restriction or lowering established barriers between subjects areas. In this kind of learning, the students are allowed to operate with a degree of autonomy and self-direction. It is characterised by participation of learners without imposing traditional academic entry requirements, without the pursuit of an academic degree or other certification as the exclusive reward. Also inclusive are, freedom from time constraints, choice of resources for learning, choice of learning strategies and students control over assessment.

Public Libraries: These are state supported libraries meant for the general public use.

1.10. Organisation of the Study

The study is organised into five chapters. Chapter one consists of the background of the study, statement of the problem, purpose of the study, objectives of the study, significance of the study, limitations and Delimitations of the study, basic assumptions, definition of terms and organisation of the study.

Chapter two focuses on literature review, which is discussed as follows. The library network in Kenya, usage of library facilities in distant education in Kenya; multi-media information services in university libraries and their significance to distance learners, and finding out the challenges facing the provision of library services to external students of university of Nairobi.

Chapter three describes the research methodology which includes research design, target population, sample and sampling procedures, research instrument, instrument validity, instrument reliability, data collection procedures and data analysis techniques.

Chapter four comprises of data analysis and discussion of the findings. Chapter five consists a summary of the findings, conclusion, recommendations and suggestion for further research. The bibliography and appendices appears at the end of chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter reviews literature on this topic as follows: The library network in Kenya, the use of libraries in distance education in Kenya and its adequacy and multi-media resources as alternative services in university libraries and their importance to distance education programme. There is a rich coverage of literature in the general subject of distance education. However, very little of this denotes itself to the rather quite area of the library services in Kenya.

According to Knowels, (1970: 333), the new emphasis on non-traditional study will constitute the library as the “peoples’ university” with libraries replacing the teachers and serving as resource managers and learning consultants.

Eleaner Smith’s paper cited in Knowels (1970: 333) attempts an assessment of libraries and their use. However, this paper generally was on a review of the practice in the US, where library services for disabled persons are special.

Shaw (1969: 274) has pointed out the important role that the library plays such as provision of checkout of books, periodicals and papers. classroom for library science course, reference books for research papers. introduction of students into hidden literary treasures in the stack; and small group use of the conference.

2.1. Library Network in Kenya

The information services in Kenya are composed of academic libraries, special libraries, school libraries. the Kenya national archives and a few documentation

centres, (Wairimu 1984: 26). Wairimu further elaborates that: "...Academic libraries have been established by the institutions of higher learning and training colleges most of which are established by the government to provide manpower for public and private sector."

Ndegwa (1979: 63) states that, public library services in Kenya started in 1948 when the East African Literature Bureau was established by the then East African High Commission to provide library services to the few literate Africans in the East African region; (Kenya, Uganda and Tanzania). The Bureau was also expected to increase the general availability of publications in the region through local publishing and local authorship.

In addition, the Bureau organised a centralised library service for the region with its headquarters in each of the East African countries. The service was provided through regional headquarters, branch libraries and book boxes which were deposited at central places such as churches, offices, community centres and schools. Postal services were also provided (Ndegwa (1979: 64).

Ngundo (1983: 32) mentions that: "... In order to reach the people living outside the city in the case of Nairobi and the various provincial and other towns in the country where branch libraries are located, the Kenya National Library Service Board, introduced mobile libraries in Kenya. This was in realisation of the fact that people were to be reached in rural areas where they live instead of confining services to urban centres."

Wahome Mutahi in his article "Fighting Books Famine with Mobile Libraries noted that the first mobile library hit the road on March 7th, 1972 and the then Minister for National Resources said that continuation of the service would depend on the response of the public.

The special libraries in Kenya include those established by the government research institutes such as: Kenya Medical Research Institute (KEMRI) and the Kenya Agricultural Research Institute (KARI). Besides these, there are special libraries established by International Laboratory of Research on Animal Diseases (ILRAD). The united agencies and documentation centres such as those of the United Nations Environmental Programme (UNEP). Other national and international organisations have also established special libraries for the staff. The Kenya National Library Services is supplemented by school libraries which are not fully developed except for a few private and old secondary schools. On the other hand, Kenya National Archives is more concerned with the conservation, availability of official records for research (Wairimu, 1984: 27).

According to Gelfand (1968: 13), the University of Nairobi has grown into a multiplicity of campuses, institutions and schools located in various places around Nairobi. This has forced the library service to decentralise along the same lines. The present university library system comprises the main library and several branch libraries serving the campus and institutions. The campus libraries thus created particularly becomes special libraries catering for specific subject areas.

According to Muema (2004: 21), there is a dearth of literature on the subject of library services for distance learning in Kenya and among both scholars and

librarians, the subject has not been given much of attention. However, there is a recognition that adequate supply of library and information services to distance learners is critical for the success of distance learning programmes. It is this gap that my study hopes to fill.

Muema (2004: 21) adds that, in the face of increasing importance of distance education in the country, and a poor library system, there is need to come up with creative ways of providing distant learners with adequate library services that are required for successful completion of coursework, research papers, independent thinking and research. This is mainly why my study becomes necessary by trying to meet this pressing need.

Further more, public libraries are not adequately stocked. As at the end of 2000, there were 26 operational libraries in Kenya. But the stock could not support university learning that has increased drastically over the years. More significantly, these libraries are of limited use to distance learners who are spread throughout the country including areas still unreached by the public library services, (Odin, 2000).

2.2. Use of Library facilities in Distance Education in Kenya

A university library facilitates the interaction between people and the information they need. It exists to support the information needs of all members of the university which include students facilities, administration and support staff. It provides resources in many formats (Library Association, 1995)

Library users have diverse needs and require access to a wide range of equipment, relating to both storage and retrieval of books and periodicals, audio-visual and high

technology provision. The resource base of any library thus should comprise of both print and non print media (Ibid, 1991)

Ibid (1991) further points out that information and communication are the engines of growth and social transformation. He points to information as a resource and is applicable in social, Political, economical and technical fields. This statement is further complemented by Dove (1975) postulating that, no matter in what form literature is presented, it is the librarians job to acquire it, to house it and exploit it to the full. Dove also reveals that, the advancement of information technology offer libraries opportunity to facilitate collection packaging and repacking and creating local content in format suitable to the needs of various communities. The development of the information resources in a university library or any other library is done through a collection development process.

Shaw (1969: 274) observed that, "... the adult student has need for current literature of all types. Where the adult centre is in the same facility as the day school, an arrangement should be worked out so that the work hours of at least one librarian cover the operation of an adult centre. If a full-time librarian cannot be provided, services should be made available on part time basis . . ."

According to Smith (1972), effective management requires managers to know the market for their product and keep in touch with it. Effective management of libraries is no exception to this rule and libraries have to keep in touch with communities they serve, small or large and relate services to their needs.

This statement underlies the need for conducting user surveys to determine the needs of library users. In Kenya as in most developing countries development in library services have been determined and continue to be determined, primarily by professionals involved in offering and running the services through guesswork as to the needs of their clients and in the light of contemporary discussion and philosophy.

Ngundo (1983: 33) adds that: "...The use of guesswork as a tool for planning and organising services is long gone. "Developments and growth patterns of library services must be determined by reference to the client community for whom it has been created. Failure to do this will only lead to the building of big monumental buildings stocked with book collections which few people will ever consult. Public libraries in Kenya have not been able to attract as many clients as they should hence creating difficulty to the external students to adequately and appropriately make use of them. The need to conduct library user survey in Kenya has always been cited as Opondo (1976: 9) puts it: "...Library services improve when personnel develop a spirit of enquiry to evaluate the outcome of operations carried out in a given manner, whether this really accomplish the library objectives and also when they acquire a capacity to evaluate the procedures and services rendered."

Similar views have been expressed by other librarians in Kenya. According to Oluoch (1975: 5) while commenting on the use of public libraries in Western Kenya; he observed: "...We may ask ourselves and we indeed do, whether there is something wrong with our services, book stock, attitude of staff, or with the habits and character of our educated people. Perhaps there is need to re-examine and rectify what is wrong in all factors given above." User studies also have important

implication for stocks building. The survey will not only point out the deficiencies of the libraries but also provide a good tool for book selection and distribution according to the needs of the readers.

Muema (2004: 23) observed that... a variety of techniques have been employed in Kenyan universities to provide library services to distance learning community. These include provision of access to campus print collections and electronic resources such as CD – ROMS and internet based resources. There is also an effort (as in the case of United States International University – Africa and the African Virtual University) to provide electronic journal access from remote locations through user identification arrangement. He however reiterated that these methods are not effective due to a number of factors. He observed that the most critical problem facing library services for distance education is the lack of institutional policies to guide the provision of information for this category of learners. He observed that while there is agreement among faculty members in distance learning programmes that access to adequate library resources is essential for attainment of superior academic skills, there exists an ambivalent attitude among planners of these programmes towards the role of these services to the distance learning community. This has hindered the creation of viable policies to guide library personnel in designing services for distance learning. It has not been possible to arrange for optimal funding, planning and implementation of programmes for the provision of library services for distance learning.

It has also been observed that inadequate funding experienced by public universities and its accompanying effects of poor facilities, equipment and resources is a major

hindrance towards the provision of access and timely library services for distance learners. At present some libraries in host institutions, especially public universities, are facing unprecedented decline in funding from their parent organisations (Republic of Kenya, 1999). This means that they do not have sufficient funds to purchase most current reading materials, such as journals and monographs, equipment such as computers and enlist the services of qualified staff even for campus-based regular programmes. Therefore, the libraries from which distant learners are encouraged to borrow information material are already incapacitated by lack of financial resources necessary for acquiring a sufficiently large stock of books relevant to the courses the learners are taking. In cases where materials are available for students who live far away, especially rural areas, regular use of library is inhibited by cost and time involved in visiting the university library; short loan periods for books and restricted use of rare books, theses and journals. This prohibitive cost of reading materials could be one of the reasons for high dropout rate from some courses which at some point stood at between 15 percent and 25 percent (Otiende, 1988).

Stockey (1982: 28) cited that, accessibility plays every important role in the use and presentation of public library services. The accessibility depends upon a number of factors. These include:

- The closeness on libraries to the community they serve.
- Their location within the community.
- Access to buildings that house public libraries.
- The size and range of facilities provided by public libraries.

- Public transport and road patterns.
- The socio-economic status of the client community (Stockey 1982: 28).

For people to derive maximum benefits from these libraries, they must be located in places where people can reach them with least difficulty. Various studies on the effect of the location of public libraries and use have revealed that people are not willing to travel long distances to the libraries (Department of Education and Science, Public Libraries, 1973: 60).

Oluoch (1975: 6) reiterates that, in Kenya as in most developing countries, transport systems are poor or totally lacking. The majority of the people are poor and the importance of libraries as a source of knowledge and information is not fully recognised and most students are unwilling to go far to use a library. The external study students of various universities are therefore faced with a similar challenge of library accessibility.

2.3. Multi-Media Resource in University Libraries and Importance to Distance Education Programme

The Multi-Media Information Resources (M.M.I.R.) also referred to as non-print resources as seen by Pemberton (1984) are those library materials that require some form of equipment to be used. This definition excludes things like still pictures, photographs and maps but include microfilms and microcomputers software. A common characteristic of these resources is their reliance upon equipments to be accessed. Equipments are thus an integral part of non-profit collection and central to issues of selection, acquisition and use. Dove (1975: 18) pointed that libraries are

communication centres and that media materials should be given the same consideration awarded to books as regards selection, evaluation and acquisition.

Multi-media resources are developed to both entertain and inform. While the technological development that brought many of the media resources formats began more than a hundred years ago; their rate of innovation has increased dramatically in recent years. This development poses a special challenge to libraries that undertake to collect these resources (Schimid 1990: 236).

2.4. Audio-visual Media

The audio-visual collection in academic libraries typically included 16 run films, reel – to reel audio recordings and phonograph records. By 1987 the guidelines had noted the potential of A.V. to support research and instruction. The advent of formats like video cassettes, laser disks and audio compact had brought A.V. into the majority of academic libraries (Keegan, 1993: 180).

Keegan further points out that cable television is essentially a local distribution facility. It has the potential for campus based higher education institutions to extend their teaching to off-campus, in the areas covered by a cable network, or for local support for national distance teaching as a means of distributing video programmes nationally, where terrestrial broadcasting facilities are not available.

2.4.1. Inherent Strengths and Weaknesses of Digital Multimedia as Learning Media in Libraries

Despite the numerous advantages derived from the use of multimedia information services, it faces quite a number of challenges. According to Speake (1977), such shortcomings are particularly evident in many of the pre-packaged learning

experience offered by such mass storage media as CD-ROMS. They observed that, although CD-ROMS are excellent for presentation of vast amounts of data, many CD-ROM causes fail to engage learners in the process of critically assessing the merit or utility of such data. CD-ROMS and internet-based courses appear to have been designed to present a set of correct facts which the learner is expected to commit memory rate.

According to Palmer (1995), computer mediated communication (C.M.C.) is a mode of choice for task-oriented communication and problem-solving and excellent as a medium for providing learners with drills for testing generic skills as mathematics and languages. However, in a survey of studies, Palmer (Ibid) delineated a number of perceived deficiencies of C.M.C. as a means of interpersonal and social, information, including the restriction of social presents, diminished social context cues and restricted number of channels particularly non verbal vocal mode of expression.

Alan (1999), observed that, educational multimedia may supplement a learning experience by presenting powerful simulation of a particular fact of external world. however, what digital multimedia commonly lack is the ability to interact dynamically and intelligently in a discourse with every learner what such assimilation means.

2.5. Computer Technology

Until recently, it has been necessary to use local centres to deliver computer – based distance teaching, either on terminals linked to a central mainframe computer or on stand alone microcomputers located at the local centre. Although CD-ROM was

becoming popular in academic libraries, they were in text only and therefore were not of concern to many libraries by 1990. However, multi-media CD-ROM made their way before this time. Both analogue and optical were played on a single machine but today computers are equipped with CD-ROM drive, sound card and video card and can thus use most of the software (URL: <http://www.ariadne.ac.uk>).

Multi-media collections are now important collections in any university library. The 1999 guidelines for media resources in academic libraries by A.C.R.L. group recommended that:

- All academic libraries collect media resources in all formats.
- Libraries should provide adequate functioning to media services and collections for easy access.
- Collection management that apply to print resources should also apply to media collections.
- Collection preservation practices that apply to print media should also apply to media collection (Media Guidelines URL: A.C.R. 1999).

Muema (2004: 24) observed that librarians view the use of virtual services such as internet technology as a viable alternative to the provision of print based services which would necessitate physically visiting the library to satisfy specific needs. However, the prospects of web-based resources are constrained by a number of factors. In the first place, library automation in Kenyan universities has largely focused on functions such as acquisition and cataloguing, circulation and administration. Therefore the rise of internet technology for information is still at its

infancy. Secondly, internet use has been hampered by high costs and low speed of access due to poor telecommunication infrastructure in the country. So far, internet services are largely restricted to the main towns where the right telecommunication infrastructure exists. Thus, it is limited to distance learners spread through the country.

The libraries are therefore required to develop and maintain multi-media resource bases to effectively exploit the already emergent information and communication technologies. The advantages of multi-media collection include:

- Meeting the requirement of disabilities for example those who cannot read can access audio books.
- Providing appropriate materials to people who require graphic display for better comprehension.
- It provides information repacked in alternative formats for example CD – ROMs databases through a computer.

Provides music scores and games in support of educational pursuits (URL:<http://www.ariadne.ac.UK>).

From the foregoing literature review, it is evident that the provision of efficient library services and other sources of alternative information are central to any process of learning, particularly if the learning is through distance education. It has already been shown that distance learners acquire much of the needed information away from the campuses which they are affiliated with. Some of these learners are often spread to the remotest areas of any given country. The external students of the

university of Nairobi fall under this category of learners, and are equally faced with similar needs, demands and challenges of accessibility to information materials. How then has the library services as well as other alternative sources of information been availed to these learners?. This study is an attempt to find out how library and other multi-media information services have been availed to external degree students of the University of Nairobi.

2.6. Theoretical Framework

This study used the structural functionalist approach in analysing the problem in it had set out to investigate. This approach is based on the assumption that an organism will survive if it is able to meet some basis individual and group needs. To achieve these needs, norms and institutions are set up which co-ordinate the requisite variables towards the maintenance of the organism (read programme) through adaptation, goal attainment and integration of the organism's activities into a wholesome dynamic entity or unit. Structural functionalism deals with related role sets and institutions that constitute the structure that enables the effective performance of tasks by which an organism operates and survives.

In examining the place of libraries in the External Degree Education Programme of the University of Nairobi, this study effectively attempted to look into ways of enhancing the structure of the programme as well as its effectiveness in the attainment of its goals, hence the explanatory relevance of structural functionalism as the suitable theoretical framework of analysis for the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This chapter contains the following sections. Research design, Target population, sample and sampling procedure, research instruments, instruments validity and reliability, data collection procedures and data analysis.

3.1. Design of the Study

The design of the study was survey. Ary et. al., (1996) define the survey research method as a research technique in which detailed information concerning a social phenomenon is gathered by posing questions to respondents, and that through such investigations it becomes possible to find explanations of the social phenomenon in question. Ray (1988) argues that findings of a survey investigation help researchers explain social phenomenon with confidence and authenticity since the investigation is face to face with respondents on his/her views concerning the investigation.

The survey method was selected because it promised to meet the goals of the study and provided a means to contextualise, interpret, and understand the respondents' perceptions about the place of library and other media resources in the external degree programmes of the University of Nairobi. Survey research is normally interested in the accurate assessments of the characteristics of the whole population of people. It is based on the theory that random sample can often furnish the same

information as a census (and enumeration and study of the entire population) at much less cost with greater efficiency and sometimes greater accuracy (Kerlinger, 1973).

3.2. Target Population

In this study, the target population consisted of the external degree students of the University of Nairobi. The students who were in Part Six of the course were selected as the target population. This grade level was found suitable for the study because the students had been exposed to almost the whole course and had made use of the library or not over an extended period of time. The target population therefore comprised of all 290 students in part Six of their study.

Apart from the main focus on the students, this study also sought possible explanations from the librarians who provided information that explained problems in the use of library and other media resources in the external degree programme. A total of 6 University of Nairobi librarians were used

3.3. Sample and Sampling Procedures

Wiersma (1995) and Churchill, Jr (1991) pointed out that an ideal sample should be large enough so that the researcher can with confidence, within special limits be certain that a different sample of the same size if drawn using the same procedures, can give approximately similar results. Sampling error is a function of the size of the sample and it is greatest when the sample is small. The sample for this study was statistically large enough in order to minimise the possibility of sampling error occurring. A sample of 165 respondents were required for the study. The sample size was specified by using a table of determining sample size from a given population

(Krejcie and Morgan, 1970). In order to include a significant number of male and female respondents, a stratified simple random sample was selected. Proportion of male and female subjects randomly selected be the same as the proportion of the group in the target population. Appendix E shows the population and the sample for the study.

3.4. Research Instruments

There was one set of questionnaire for the student and an interview schedule for the librarians. The first part of the survey sought for the demographic and background information on the respondents. The second part was to establish the access the students have to other sources of knowledge other than the materials dispatched to them by the relevant faculty, the proximity of the library, their frequency of using it and accrued advantages, suggestions for improvement among others.

The third part of the survey comprised of testing the appropriateness of some modern techniques in the dissemination of knowledge to the external students taking into account the development of other services like in information technology.

The last part sought information on some challenge facing the provision of library services to distance education programmes. This information was gathered from the students' questionnaires and interviews scheduled for librarians.

3.4.1 Instrument Validity and Reliability

Instrument validity was tested by use of a pilot study to ensure the questionnaire was constructed properly and was suitable for the study. The respondents who participated in pre-testing of the instrument suggested areas to be improved on the

initial instrument. This was great assistance, as it reduced the possibility of misinterpretation of some items. The researcher omitted items which appeared vague and included more items to improve the quality of the instruments.

3.4.2 Instrument reliability

An instrument is reliable when it can measure a variable accurately and consistently and obtain the same results under the same conditions over time. The reliability of the instrument was further tested by administering the items to the same group of students a second time.

3.5. Pre-testing of the Instrument

The pre-test was conducted to find the instrument validity and reliability and the procedures of administration. Mulusa (1990) recommends the use of 10 cases, which represent the target population in all the major aspects to be used in the pilot study. The questionnaire items which were administered were duly completed.

The suggestions from the respondents were accommodated by the researcher to ensure reliability of the study. The results from the pilot study showed that the questionnaire items were clear to the respondents. This was evident as students were able to read and understand the items as presented to them without any difficulty. Recommendations from students and the librarians were considered when the final instrument was being prepared.

3.6. Data collection procedures

Authority to conduct the study in the Faculty of External Studies of the University of Nairobi was obtained from the Ministry of Education Science and Technology

(M.O.E.S.T.) for a copy of the expected permit, (See Appendix E). The researcher also reported to the principal, College of Education and External Studies (C.E.E.S.) University of Nairobi for clearance. The researcher also obtained permission from the Dean, Faculty of External Studies, University of Nairobi to conduct research in the faculty. The research questionnaire (See Appendix C) was personally distributed to students to participate in the study and were collected when dully completed. Direct contact with respondents allowed instruction on how to complete the questionnaires and assure the respondents the confidentiality of their responses. This personal involvement is an important factor in motivating the participants to respond more readily than if the questionnaires had been mailed to them. Beside this the researcher also had a separate oral interview with some librarians selected across the University of Nairobi libraries.

3.7. Data Analysis Techniques

One statistical technique was utilised in data analysis. This was descriptive statistic. Descriptive statistics such as frequency and percentages were utilised to analyse demographic information. A computer was used to perform the analysis. Data processing was done using the statistical package for social sciences (SPSS) programme.

The analysis was broken into three phases, which comprise the three main areas envisaged as the body of the study as follows: University of Nairobi library networks and availability of library services to external students, external students access to library facilities, other alternative information services in university libraries.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRENTATION

4.1 Introduction

This chapter is a presentation of analysis; and interpretation of data to evaluate the place of library and alternative services in the external degree programme of University of Nairobi. The chapter is organized in six sub-sections. The first sub-section deals with the questionnaire return rate. Sub-section two entails analysis, interpretation and discussion of the demographic information of the respondents. The third part presents analysis, interpretation and discussion of the findings on the University of Nairobi library Network. The fourth section consists of data analysis, interpretation and discussion of findings pertaining to use of library facilities. Sub-section five indicates findings on other alternative multi-media resource services. Finally Sub-section six analyses the challenges facing external students in their use of the library and multi-media resource services.

4.2. Questionnaire Return Rate

Questionnaires were to be administered to 165 external students in their part six of the study. Nineteen of the questionnaires were found to be incomplete in most sections and were discarded for purposes of data analysis. A total of 146 students responded to the questionnaire instruments out of 165 who constituted the sample size. This was 88% return rate and can be treated as a perfect return rate. Such a return rate can be attributed to the fact that the researcher used captive audience

method in the administration of the instrument. This indicates that there was high return rate of the questionnaire.

In support of such rate of return, Hartman (1979) states that 50 percent is adequate, 60 percent is good and 70 percent or more is very good. They further considered that students with less than 30 percent return rate are also acceptable.

4.3. Demographic Characteristic of the Respondents

The students were requested to give information concerning age and gender, professional qualification, professional experience and regional centre. The composition of the sample of the respondents by age and gender was tabulated in Table 1.

Table 1: Distribution of the Students by Age and Gender

Age category (years)	No. of males	No. of females	Total
Less than 40 years	73 (50.0 %)	44 (30.1%)	117 (80.1%)
41 – 45 years	18 (12.3%)	10 (6.8%)	28 (19.2%)
45 – 50 years	- -	1 (0.7%)	1 (0.7%)
Total	91 (62.3%)	55 (37.7%)	146 (100.0%)

The findings in Table 1 above indicate that 91 (62.3%) were male while 55 (37.7%) were females. The findings therefore indicates that male students dominate external studies in that group. With regard to the age of the respondents, the range was between 40 years and 45 years and majority of these students who formed 80.1% of

the total sample were aged below forty years. Thus a few of them e.g. 28 were aged between 40-41 years, while one student was above 45 years. Table 2 indicates professional qualification.

Table 2: Students' Professional Qualifications

Professional qualification	Frequency	Percentage
P1	126	86.2
S1/Diploma	17	11.7
UT	3	2.1
Total	146	100.0

Table 2 indicates that 126 (86.2%) of the students were P1 grade teachers, while 17 (11.7%) were S1/Diploma in education holders and 3 (2.1%) were untrained teachers. Table 3 shows the professional experience of the students.

Table 3: Students' Professional Experience

Experience in years	Frequency	Percentage
0 – 5	27	18.5
6 – 10	38	26.0
11 – 15	57	39.0
16 and above	24	16.5
Total	146	100.0

Table 3 shows that between 0 to 5 years were represented by 27 (18.5%) of the students. Others had an experience of 6 to 10 years, which was 38 (26.0%). A majority of the respondent had 11 to 15 years in the profession 57 (39.0%). A few respondents 24 (16.5%) were aged from 16 and above. The impression we can get from the results is that many students join University education while they still have many years in service. Table 5 illustrates students distributed as per regional centres.

Table 4: Distribution of Students per Regional Centre

Regional centre	Frequency	Percentage
Kisumu	30	20.5
Nairobi	28	19.2
Nyeri	24	16.4
Mombasa	22	15.1
Kakamega	21	14.4
Nakuru	21	14.4
Total	146	100.0

The results from the questionnaire on which students were asked to indicate their regional centres are shown in Table 5 above. These results indicate that a large number of students 30 (20.5%) were from Kisumu centre. This was expected since Kisumu region is one of the largest centres in the faculty of external studies. Nairobi and Nyeri closely followed with 28 (19.2%) and 24 (16.4%) respectively. Nakuru and Kakamega became last with 14.4% for the each case. It is however evident that all the regions were fairly represented in the study.

4.4. University of Nairobi Library Networks and Availability of Library Services to External Students

The study sought to establish the availability of library services to external students in the University of Nairobi library network. Presented in this section is the data on University of Nairobi library network and availability of library services to external students, adequacy of materials in the university of Nairobi libraries, other libraries that external students visit, proximity of these libraries to external students residential, adequacy and relevance of materials in other libraries to external students.

4.4.1. University of Nairobi Library Network

Respondents were asked to indicate whether there is a branch of the host University Library at the regional centres. The findings are presented in Table 5.

Table 5: Availability of Branch of Host University Library at the Regional Centres

Response	Frequency	Percentage
Yes	45	30.8
No	101	69.2
Total	146	100.0

Information from the table above show that the university library networks are less spread with only 45 (30.8%) of the respondent indicating their presence while, 101 (69.2%) indicate that these libraries are not available at the regional centres. From the analysis above it could be deduced that external students of the University of

Nairobi do not effectively make use of university libraries. This is because this category of students spent most of their time studying from home.

The findings concur with Wairimu (1984) who in her research on the availability of publications in Kenya pointed out that the University of Nairobi's six regional centres have virtually no library facilities.

4.4.2. Adequacy of Materials at University of Nairobi Library Network

Table 6 shows the adequacy of materials at the University of Nairobi.

Table 6: Materials adequacy at University of Nairobi Libraries

Response	Frequency	Percentage
Yes	5	3.4
No	141	96.6
Total	146	100.0

Data in Table 6 indicate that 141 (96.6%) of the students stated that materials at the University of Nairobi library were inadequate. Only a small fraction of 5 students (3.4%) registered adequacy of the materials. What emerges from Table 6 therefore, points to the fact that university of Nairobi libraries have no sufficient reading materials for external students, hence these students are not effectively served by these libraries.

4.4.3. Category of Libraries in Kenya

Table 7 indicates other libraries in Kenya that the students use apart from the University of Nairobi library.

Table 7: Category of Libraries that Students Visit**N = 146**

Category (library)	Frequency	Percentage
Kenya National libraries	81	55.5
University of Nairobi library	33	22.6
Other university libraries	11	7.5
School based libraries	6	4.1
Special libraries	2	1.4

Information from the above Table 7 reveals that external students frequently use Kenya national libraries 81 (55.5 %) compared to the host university library 33 (22.6%). Other university libraries 11 (7.5%), school based libraries 6 (4.1%) and special libraries 2 (1.4%) are least used. However, it should be pointed out that even though many students rely on the Kenya National Libraries, these libraries may not be having the relevant materials.

4.4.4. Proximity of Other Libraries to Students' Residential Places

Respondents were asked to indicate if other libraries were located near their residential places. Table 8 illustrates the findings.

Table 8: Proximity of Students' Residential Places to Other Libraries

Response	Frequency	Percentage
Yes	60	41.1
No	86	58.9
Total	146	100.0

Of the 146 students 86 (58.9 %) live far from the other libraries. About 60 (41.1 %) live close to the libraries. It is therefore evident that the majority of the students have to travel long distances to get to libraries. This can prove expensive on their part because of time and cost involved. A study by Ngundo (1983) on the general library network supports the current study. The study established that there was need to introduce mobile Libraries in rural areas so as to reach the people living outside Nairobi City.

4.4.5. Adequacy of Materials in Other Libraries

Table 9 demonstrates material adequacy to external students in other libraries.

Table 9: Adequacy of Materials in Other Libraries

Response	Frequency	Percent
Yes	23	15.8
No	123	84.2
Total	146	100.0

It is evident from Table 9 that the majority of the students, 123 (84.2 %) revealed shortage of materials in other libraries. About 23 (15.8%) visit libraries with adequate materials. These findings suggest that most of the external students have problems in getting sufficient materials required for their work. These findings are further supported by Ngundo (1983), who cited the inadequacy of materials in public libraries.

4.4.6. Relevance of Materials in Other Libraries

The respondents were asked to indicate the relevance of materials that they use in other libraries. Table 10 illustrates the findings.

Table 10: Relevance of Library Materials in Other Libraries

Response	Frequency	Percentage
Yes	25	17.1
No	121	82.9
Total	146	100.0

The findings from Table 10 reveal that 121 (82.9%) of the students visit libraries with irrelevant materials for their work compared to 25 (17.1 %) students visiting libraries with relevant materials. The findings from this study concur with those of Opondo (1976) who showed the need to conduct user surveys in Kenya in order to provide materials that meets the needs of the clients; Oluoch (1975), in his study, saw the need for user survey. He argues that these surveys point out deficiencies of the libraries and provide a good tool for book selection and distribution.

4.5. Use of Library Facilities by External Students of University of Nairobi

This study also sought to find out information on use of library facilities by the external students of the university of Nairobi. In this section, analysis is done in relation to induction on library use, university library visits, common means of contacting the university library, library services at the regional centres and, categories of libraries that the students use.

4.5.1. Induction of Students on Library Use

Respondents were asked to state whether they were inducted on the use of library facilities. The findings are presented in the Table 11.

Table 11: Students' Induction on Library Use

Response	Frequency	Percentage
Yes	76	52.1
No	70	47.9
Total	146	100.0

The findings in Table 11 indicate that more than half of the students received induction when they first joined the University. The responses indicated that 76 (52.1%) received induction while 70 (47.9%) did not receive inductions. It is however clear from the findings that quite a large population of students have difficulties in library access.

4.5.2. University of Nairobi Library Visits by External Students

Respondents were asked to state the occasions when they visit university library. The findings are presented in Table 12 below.

Table 12: External Students' Visits to University Library N = 146

Occasion	Frequency	Percentage
Residential	97	66.4
Special visits	24	16.4
End of semester	5	3.4
Beginning of semester	2	1.4
Never visited	3	2.1

While the host university library seems to have been used a little less than public libraries, several entries were made regarding its use during residential periods. A total of 97 (66.4 %) visited the library during residential sessions. Other students visit the library during special visits 24 (16.4%), end of semesters 5 (3.4%) and beginning of semester 2 (1.4%). It is also important to note that 3 (2.1%) of the students have never visited the host university library. This may be attributed to the fact that these students may be depending squarely on the study materials dispatched to them or rely on materials from other libraries. However, it should be noted from the above observation that majority of external students visit the library while they are on session.

4.5.3. Common Means of Contacting University Library

The respondents were asked to state common means of accessing the university library facilities. Table 13 shows the findings.

Table 13: Common Means of Contacting University Library N = 146

Means of contact	Frequency	Percentage
By personal visit	125	85.6
Through another person	4	2.7
Online services	3	2.1
Telephone	-	-
Postal	-	-

The above findings indicate that by far, the most common way of contact is personal visits 125 (85.6%). The second common mode of contact was by going through another person which recorded 4 (2.7%). Online recorded minimal entries of 3 students (2.1%) while telephone and postal registered nil respectively. It is however evident that majority of the students only access the library facilities while they are on session. These findings confirm the work of Otiende (1998) that the regular use of library by distant learners is inhibited by cost and time involved. Department of education and science public libraries and their use, Landon (1973) also confirms that people are often reluctant to use libraries that are not within their own immediate community.

4.5.4. Library Services at the Regional Centres

The respondents were asked to state the library services available at the regional centres. Presented in Table 14 are the library services at the regional centres.

Table 14: Types of Library Services offered at the Regional Centres to External Students N = 146

Service	Frequency	Percentage
Reference materials	79	54.1
Reading services	41	28.1
Audio – visual facilities	25	17.1
Internet	11	7.5
Micro-computer hardware	3	2.1
Electronic cataloguing	1	0.7

The most popular service to these students is reference materials 79 (54.1 %). Reading services and audio-visual reached 41 (28.1%) and 25 (17.1%) respectively. Other services like Internet, micro-computer software and electronic cataloguing are least available to external students and stood at 11 (7.5%), 3 (2.1%) and 1 (0.7%) respectively. The low response in Internet, micro-computer software and electronic cataloguing can be attributed to these services being restricted to main towns and lack of funds to purchase equipment such as computers to be used by external students at the regional centres.

4.6. Alternative Multi-Media Services

In this study, information was also sought out for alternative media services. Presented in this section is analysis on multi-media services that students are conversant with, multi-media services that the students have used in their study, multi-media services at the university of Nairobi library or regional centres.

4.6.1. Multi-Media Service That Students Are Conversant With

The respondents were requested to state the Multi-Media Services they are conversant with in the University Library. Presented in Table 15 are the findings.

Table 15: Multi-Media Service that Students are Conversant With

N = 146

Information service	Frequency	Percentage
Online service	31	21.2
Television transmission facilities	22	15.1
Micro-computer software	6	4.1
CD-ROM data bases	6	4.1
Teleconference facilities	1	0.7
New teletexts	1	0.7

Online services recorded 31 (21.2%) while television transmission facilities registered 22 (15.1%). Teleconference facilities 1 (0.7%) and New teletexts 1 (0.7%) were the ones the students were least conversant with. It is however clear from the analysis that multi-media services in University of Nairobi libraries are still

undergoing developments. This study confirms the work of Muema (2004) that stated that Internet technology for information is still at its infancy.

4.6.2. Multi-media services that the students have used during their study

The students were asked to state the multi-media services that they have used during their study. Presented in Table 16 are the findings.

Table 16: Multi-Media Services Students Have Used N = 146

Information service	Frequency	Percent
Online services	27	18.5
Television transmission facilities	13	8.9
Micro-computer software	7	4.8
CD-ROM data bases	5	3.4
Book micro film	4	2.7
Teletext	1	0.7

The analysis above shows that very few students have made use of multi-media services in their studies. Online services featured top with 27 (18.5%), television transmission facilities 13 (8.9%), while micro-computer software, CD-ROM database, book microfilm and teletext registering very low percentages at 7 (4.3%), 5 (3.4%), 4 (2.7%) and 1 (0.7%) respectively. It is evident that external students rarely use these services

4.6.3. Multi-Media Services at the University of Nairobi Library/ Regional Centres

Respondents were asked to state the multi-media services at the university of Nairobi library. Table 17 demonstrates whether new information services are available at the host university library or regional centre.

Table 17: Multi-Media Service at The University of Nairobi Library and Regional Centres

Response	Frequency	Percentage
Yes	21	14.4
No	125	85.6
Total	146	100.0

Table 17 above shows that 125 (85.6%) of the students confirmed that there are no multi-media services at the university of Nairobi library or regional centres. A small population of the students suggested availability of these facilities. According to the findings, therefore, it is evident that these facilities exist in most university libraries. This findings concur with the findings of Muema (2003), who observed the need for such facilities at the university of Nairobi and Kenyatta university.

4.7. Where Library and other Alternative Services could be availed to External Students

The respondents were asked to state where library and other alternative information services could be availed to external students. The findings are presented in Table 18.

Table 18: Response on where Multi-media Services could be Availed to External Students N = 146

Place	Frequency	Percent
Regional centres	83	56.8
Nearest library	35	24.0
Institutional library	16	11.0
Installing personal computer	12	8.2

Students' perception showed that majority of the respondents 83 (56.8%) wanted these services in their respective regional centres. Besides this, 35 (24.0%) of the students preferred that facilities be availed at the nearest library. Institutional library and personal computers registered 16 (11.0%) and 12 (8.2%) respectively. Above all, many students preferred these services extended close to them in order to support them in their studies.

4.8. Challenges Facing The Provision of Library Services To External Students

The students were asked to state the challenges facing the provision of library services. Table 19 indicates the Challenges experienced by the University libraries in providing services to external students.

Table 19: Challenges in Providing Library Services to External Students as Expressed by Students N = 146

Challenges	Frequency	Percent
Long distance/ travelling expenses	78	53.4
Absence of relevant materials	50	34.2
Limited loan period	36	24.7
Most students are not ICT literate	36	24.7
ICT services not available in most libraries	31	21.2
Lack of information about systems and practices	30	20.5
Inconvenient opening times	28	19.2
ICT services are expensive	27	18.5
Breakdown of information on when certain facilities will be available to external students at the library	20	13.7
Short period during residential session	20	13.7
Limited space for reading	17	11.6
Difficulties associated with short loan collections	15	10.3
ICT services are mostly in towns	14	9.6
Restricted external borrower status in other libraries	11	7.5

Table 19 shows that long travelling distance from student's homes to the libraries was ranked top with 78 (53.4%) among the challenges students face. Absence of relevant materials 50 (34.2%) was also a major challenge followed by limited loan period 36 (24.7%), ICT illiterate students 36 (24.7%), absence of ICT services 31 (21.2%), lack of information about system and practice 30 (20.5%), inconvenient opening times 28 (19.2%), expensive ICT services 27 (18.5%), breakdown of information on when facilities are available to external students 20 (13.7%), short period during residential session 20 (13.7%), limited reading space 17 (11.6%) difficulties associated with short loan collected 15 (10.3%), ICT services mostly in towns 14 (9.6%) and the least among the challenges was restricted external borrower status 11 (7.5%).

4.8.1. Challenges facing the Provision of library and alternative information services as expressed by Librarians

In the interview schedule (See Appendix D) the study sought the views of librarians on the challenges facing the provision of library and alternative information services at the University of Nairobi. The findings were as follows:

- (i) Interviews with librarians indicates strong appreciation of the role of libraries in providing effective external education in the University of Nairobi. However, it was observed that the subject has not been given much attention by planners of the external degree programme.
- (ii) The survey further revealed that a variety of techniques have been used by University of Nairobi library network to provide library services to its general

students. These include the provision of access to print materials and electronic resources such as CD-ROMs and internet-based resources. However, in general terms, these methods have not been effective in the faculty of external studies due to a number of reasons. First, the librarians cited the lack of institutional policies to guide the provision of information services to external students. They observed that while there is agreement among faculty members in the external programme that access to adequate library services is essential to external students, there exists a negative attitude among the planners of the external programme towards the role of library services to external students. This has hampered the creation of viable policies to guide in designing library services to external students of the University of Nairobi.

(iii) The librarians interviewed also revealed that inadequate funding is a major challenge towards the provision of access and timely library services for external students. This implies that the University of Nairobi library system does not have sufficient funds to purchase reading materials and equipment such as computers for this category of students.

(iv) The regular use of the University of Nairobi library was further inhibited by cost and time involved in visiting the libraries. The librarians also expressed their dissatisfaction with the short loan period for books and restricted use of rare books, theses, and journals.

(v) The use of multi-media resource services was seen as a viable alternative to the provision of print materials by the librarians. However, this has been hampered

by a number of factors. In the University of Nairobi libraries, major focus is on functions such as acquisition and cataloguing. Thus the use of internet technology is still at its initial stages. In the College of Education and External Studies (C.E.E.S.) where External students are based for instance the installation of the internet is still going on. It should further be noted that even on completion this facility will only serve external students during their residential sessions on campus.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATIONS

5.0. Introduction

This chapter attempts to give the highlights of the study in summary form. It also gives the conclusion of the study as well as the recommendations and the suggestions for further study.

5.1. Summary of the Study

The purpose of this study was to evaluate the place of library and other media resource services in the external degree programme of the University of Nairobi. The information for this study was solicited from a random sample of male and female students in their Part Six of study.

Using the survey method, a questionnaire was developed and an interview conducted. The questionnaire was used to collect data from 165 students in their part six of the study in the faculty of external studies, University of Nairobi. An interview was carried out among 6 librarians who constituted their sample size. The librarians were to provide information on the problems in the use of library and media resource services in the external degree programme.

The data gathered was analysed by use of SPSS software and presented in the form of tables and text. The data gathered from the study was analysed, interpreted and discussed. The findings of the study are stated as under.

5.2. Findings of the Study

5.2.1. University of Nairobi Library Network and its Effectiveness to External Students

It was found out that University of Nairobi libraries and other libraries found across the country had no sufficient reading materials for external students. In addition, the study revealed that most public libraries did not have relevant materials which external students can use effectively.

It was also evident from the study that students' residential homes and public libraries were far apart. This also suggest that majority of students do not make good use of the libraries.

It was further evident from the study that there were no extension of university of Nairobi library at the regional centre. This implies that this category of students do not effectively use the library facilities since they spend much of their time studying from home.

5.2.2. Library use by External Students

The study established that almost half of the students (47.9%) that participated in the study did not receive induction on library use when they first joined the university. The impression one can derive on this is that a larger population of external students have difficulties in accessing library facilities.

The study also revealed that external students majorly visit the university library during residential sessions. This further explains as to why personal visits was ranked top as the most common mode of contacting libraries.

The study established that external students frequently used public libraries more than the host university library. This is because these students are rural-based and can readily access the public libraries while at home.

5.2.3. Multi-media Facilities in University Libraries

The study revealed that the University of Nairobi was still in the process of developing multi-media resource services to the general student population. At the college of education and external studies for instance, the installation of the internet services was still going on at the time the study was conducted.

The findings also indicated that most external students join their degree courses with limited knowledge about the role and how to access information using these services. This was because majority of the external students have restricted their information resources to printed materials.

The study observed from the librarians that the use of multi-media resource services was vital for the external students' successful completion of their studies. They are therefore a prerequisite given the technological advancement.

5.2.4. Where Multi-media Resource Services could be Availed to External Students of the University of Nairobi

The findings confirmed that library and other alternative information services could be availed to external students at the regional centres. This, in the students' view, would enhance proper and effective use of these facilities.

5.2.5. Challenges facing the Provision of Library and other Alternative Services to External Students of the University of Nairobi

The effective use of libraries has been hampered by absence of relevant materials, limited loan periods in most libraries, long travelling distance, minimal contacts with the university library during residential sessions and computer illiteracy among others.

The study also observed that library services to external students have not been given much attention by external programme planners. Also cited by the librarians was the lack of institutional policies to guide the provision of library facilities to external students.

The findings also revealed lack of funding as a serious challenge facing the institution. There is no funds set aside for the provision of library services to external students. This has interfered with the effective provision of both print materials as well as multi-media resource services like the use of the internet technology.

5.3. Conclusion

The following conclusions were drawn from the findings of the current study.

1. Effective library service provision for external students of the University of Nairobi has not been fully met. This is due to a number of factors: First they University of Nairobi library facilities are lacking at the regional centres. Secondly, both University of Nairobi libraries and other public libraries across the country have insufficient reading materials for external learners.

2. The external students of the University of Nairobi have difficulties in accessing the library services both at the university and other public libraries.
3. Multi-media services are lacking in the University of Nairobi libraries, hence, the need to install these services.
4. The provision of library services to external students of the University of Nairobi is hampered by:
 - (i) Lack branch libraries at the regional centres,
 - (ii) Lack of sufficient reading materials.
 - (iii) Limited loan period for external students.
 - (iv) Lack of institutional policies on external degree library services.
 - (v) Lack of funds to purchase library and alternative resource services to external students.
 - (vi) Poor methods used to provide library services to external students. This can be proved by the fact that the University of Nairobi libraries does not provide special collection services for external students.

5.4. Recommendations of the Study

On the basis of the findings from this study and the conclusions drawn, the following recommendations were pointed out which could work towards improving the provision of library and other media resource services to external students in Kenya.

1. There is need to come up with measures that ensure the external students in the University of Nairobi and Kenya as a whole are not disadvantaged in terms of library and multimedia services compared to their campus-bound colleagues. These measures should ensure this category of students gain adequate library and information experience, which would enhance their critical thinking and their degree of exposure to the latest existing knowledge in their areas of study. These methods should take into account the unique setting of external students, which is characterized by poor national library network in rural areas, the predominance of print based courses, and also the measuring predominance of e-learning through out the world.
2. There is need for the introduction of information access and delivery machines that favour external students. One way of doing this is by introducing special collection services that target external students only. The collection should include core text for each of the courses offered. These texts could be used to provide many copies given the large number of students in the programme.
3. There is need for the University administration to decentralize the library system to the regional centres. This was a feeling that featured prominently among the students and librarians. The observations revealed that one way of doing this is by shifting some of the services to the regional centres like having some reference materials placed at the regional centres besides the print media or study materials issued by the faculty of external studies. Some of the librarians interviewed suggested the use of diskettes to store information from books and put them at the regional centres. This would enable many students to store

information that they require. By use of just one computer per the regional centre, students can access a variety of information from different titles.

4. There is need to extend the borrowing periods in the University library. The 2 weeks borrowing period that University of Nairobi uses for undergraduate students should be extended, infact longer borrowing periods should be allowed for external students to avert frequent trips to the University library to borrow and renew materials.
5. Students should be allowed to photocopy materials. This is to ensure that students have access to materials that are not available for out of the library use. However, besides this the University can adopt new methods such as use of approved vouchers. This will improve distance borrowing because students do not have to visit the library in person. Also by use of postal and courier services requested materials could reach the students.
6. There was a general feeling among the librarians interviewed that majority of the library personnel in the University are not focused. This is because quite a number lack sufficient training. Therefore the need for appropriate training and restraining to ensure that the library personnel have the appropriate skills that they can use in administering their duties e.g. being acquainted with the latest information on all subjects. This was also evident from the students' observations because most them are not inducted well on the use of library facilities. The university could also introduce library courses in their curricula that could focus on techniques of the library services.

7. There should be a coordination among the planners, implementers, administrators and those providing support services such as library services in order to provide sufficient library services, there is need to have a partnership between those who plan and implement these programmes. These include teaching faculty members, directors of external degree programme and library personnel. It was discovered from this study that the University does not have clear policies that recognize the need for library services for distance learners. This has led to a situation where by the same guidelines applied to regular students are the ones used on external students. The partnership if established would create powers that will see the need for financial resources, personnel and physical facilities for external students.
8. Special arrangement should be made by the University management so as to provide library services through the introduction of mobile libraries. In this way, the extra-mural centres should be revamped with library materials. These services will benefit the external students at the regional centres.
9. Finally, as it has been observed by many scholars, the future of distance education and indeed external studies lies in the internet-based techniques of delivery. The internet can be used to mount reading materials to support each distance education course. These materials of delivery will need to be accompanied by web-based delivery machines of the relevant literature. It is important for faculty of external studies. University of Nairobi to invest in Internet facilities not only for external students learning purpose but also because it is a useful tool for management purposes. There is also the need by the

government to improve the National telecommunication infrastructure which is presently restricted to urban centres in Kenya, and largely expensive and insufficient, especially due to unfavourable government policies.

5.5. Recommendations for further Studies

From the findings of this study, the following have been recommended for further research:

1. A study should be conducted to investigate the place of library and other media resource services in the faculty of external studies University of Nairobi in relation to other variables a part from the ones used in this study e.g. Faculty of External Studies administrators and lecturers views could be incorporated into the instruments so as to provide a better insight on the topic
2. The scope of this study should be expanded to base the findings at a national level. For example conducting similar research on more than one public university.
3. Replication of the current study is recommended to ascertain whether different research instruments could yield similar results.

BIBLIOGRAPHY

- Administration of Distance Teaching Institutions (Case Studies) (1983). International Extension College.
- Ahmad N. (1984): *Audiovisual Policies in College Libraries*. Chicago: A.L.A.
- Alan T. & Roger. M. (1999): *Higher Education Through Open and Distance Learning* (ed). London: Reutledge.
- Ariadne Journal of Library and Information Sciences (March 2001) available at Web Page: URL: <http://www.ariadne.ac.uk>.
- Ary, D Jacobs L. and Cheser, L (1996): *Introduction to Research in Education*. New York, Merrill Prentice-Hall.
- Association of college and Research Libraries. (2000) *Guidelines for Distance Learning Libraries Services*. ACRL: Washington DC, pp 2-4.
- Ayoo. S.J. (2002): *Factors affecting students performance in Kenya Certificate of Secondary Education (KCSE) in public secondary schools in Maseno Division*. Unpublished M. ED Research Project University of Nairobi.
- Ayot R.M. (1995): *A Study of effectiveness and Process of Adult Literacy Education Programme in Kenya: A case Study of Siaya and Kisumu Districts of Nyanza Province*. Unpublished PhD Thesis. University of Nairobi.
- Bishop G. 1986: *Innovation in Education*. Macmillan, London.
- Borje, H. (1989): *Theory and Practice of Distance Education*. New York: Routledge 11 New Felter Lane EC4D4EE 29 West 35th Street.
- Churchill J. (1991): *Marketing Research Methodological foundations*. (5th edition) Fort worth, Dyen Press.
- Culpepper, J. (1999): *Equivalent Library Support for Distance Learning: The Key to staying in Business in the New Millennium*. Journal for Library Services for Library Services for Distance Education, 12 (1). Available: <http://www.westga.edu/~library/jslde/jslde2.1.html> (15/06/03).
- Evance, T. and Darly, N. (1996): *Opening Education*. London: Routledge 11 New Felter Lane.
- Fisher R.W. (1978): *Library services to university students in USA. A critical survey, with a comparative assessment of equivalent services in Great Britain*. London (Britain Library Research)/ Development Department.
- Gachui D. & Matiru B. (1989): *Handbook for Designing and Writing Distance Education Materials*. Nairobi: University of Nairobi Press.
- Garison (1989): *Understanding Distance Education: A Framework for the future*. London: Reutledge.
- Garrison (1989): *Understanding Distance Education: A Framework for the Future*. Routledge 11 New Felter Lane, London EC4P 4EE, 29 West 35th Street, New York, NY 10001.

- Gelfand M.A. (1968): *University Libraries for developing countries*. Paris Unesco.
- Gitau R.W. (2000): *A study of Students' attitude towards seeking guidance and counselling services in secondary schools in Kikuyu Division*. Unpublished MED Research project. University of Nairobi.
- Hartman, J.J. & Hedborn, J.H. (1979): *Preparation of Data for Analysis*. London: Greenwood Press.
- Heller-Ross, H. (1999): *Library support for Distance Learning Programs: A Distributed Model*. The Journal of Library services for Distance Education, 2(1). Available: <http://www.westga.edu/-library/jlsde/vol2/?1?Hheller-Ross.html> (14/6/03)
- Holmberg B. (1994): *Theory and practice of Distance Education*. Routledge: London, p 34.
- Keegan D. (1986): *Foundation of Distance Education*. London: Reutledge.
- Keegan D. (1986): *Foundations of Distance Education (3rd Ed)*. Routledge 11 New Felter Lane, London EC4P 4EE.
- Keegan D. (1993): *Theoretical principles of Distance Education*. Routledge 11 New Felter Lane, London EC4P 4EE.
- Keith H. (1994): *Distance Education: New Perspective*. London: Reutledge.
- Keith H. (1999): *Higher Education Through Open and Distance Learning (ed)*. London: Reutledge.
- Keith, H. (1999): *Higher Education Through Open and Distance Learning*. Routledge 11 New Felter Lane, London EC4P 4EE.
- Keith, H., Keegan, D. and Magnus, J (1994): *Distance Education: New Perspective*. London: Routledge 11 New Felter Lane.
- Kerlinger F.N. (1973): *Foundations of Behavioural Research*. New York, University of Chicago Press.
- Knowels M.S. (1970): *The modern practice of adult education*. New York. Association Press.
- Krejcie R.V. and Morgan, D (1970): *D (1970): Determining Simple size for Research Activities Education and Psychological measurements*. Vol 3 no 3, 68.
- Lessin, B.M. (1991): *Library Models for the Delivery of Support Services to Off-Campus Academic Programs*. Library Trends, 39 (Spring) 405.
- Lewis R. & Doug, S. (1986): *What is open learning*. London: Council for Educational Technology.
- Lewis, R. and Dong, S. (1986): *What is Open Learning*. Council for Educational Technology, 3 Devonshire Street, London WIN 2BA.
- Lombardi john V. (2000) *Academic Libraries in a Digital Age*. Available: <http://www.dlib/october00/lombardi/10lombardi.html> (12/12/02).

- Lorenzen M (1998): *Delivering Instruction in Cyberspace*. Available: <http://www.ala.org/acrl.resmay98.html> (12/12/02)
- Makau, B. (1993) The External Degree Programme at The University of Nairobi. In: Perraton, H (Ed.) *distance Education for teacher Training*, Routledge: London, p. 318
- Muema J.K. (2004): *Challenges in provision of Library services for distance education*. A case study of selected universities in Kenya, Nairobi.
- Mulusa T. (1998): *Evaluation Research Begmmen: A practical study Guide*, university of Nairobi. Nairobi.
- Nathan Shaw (1969 Ed): *The administration of continuing education*. Washington DC NAPC.
- Ngudo E. (1983): *Factors affecting the use of public libraries in Kenya*. Loughborough: Loughborough university of Technology, M.L.S. Theses.
- Odini, C. (2000): *The Book Chain in Kenya*. Available: <http://www.inasp.org.uk/pubs/bookchain/profiles/Kenya.html> (01/07/03)
- Odumbe J.O. & Kamau J.W. (1995): *College of Education and External Studies Faculty of External Studies: Student Handbook*. Nairobi: University of Nairobi press.
- Oluoch A.R. (1975): *Libraries with the people*. Maktaba 2.
- Opondo R. (1976): *Public Libraries in Cosmopolitan cities*. Nairobi. A case study, Maktaba 3.
- Oslo, Norway, 9-16 August 1988.
- Otiende, J.E. (1988): *Distance Education and National Development: The case of External Degree Programme of the University of Nairobi*. A paper submitted for presentation at the 14th World Conference in International Council of Education.
- Palmer, Mark T. (1995) *Interpersonal communication and virtual reality: mediating interpersonal relationships in Frank Biocca and Mark R. Levy (eds) communication in the edge of Virtual Reality*, Hillsdale, NJ:Lawrence Erlbaum Associates.
- Pitchard Ernest Percy (1961). *University Extra-mural Libraries*. London. Library Association pamphlet Volume 21.
- Ray (1988): *Theory and Practice in Social Research*. Delhi: Goyal offset printers.
- Reche G.N. (1982): *A Study of Premature Withdrawal of Students from the Extra-Mural Continuation of Classes of the University of Nairobi*. Unpublished M.ED Thesis: University of Nairobi.
- Republic of Kenya, (1981): *Report of the National Committee on Educational Objectives and Policies*. Nairobi: Government Printer, pp 32-35.
- Republic of Kenya, (1999): *Totally Integrated Quality Education and Training (TIQUET): Report of the commission of Inquiry into the Educational System in Kenya Nairobi*. Government Printer: 18 and 308.

- Roccos, L.J. (2001) *Distance Learning and distance Libraries: Where Are They Now?*
Available: <http://www.westga.edu/~distance/ojdla/fall43/roccos43.43html>
(10/02/03).
- Smith G. (1972): "At the grass Roots and in the Dusty Streets, some thoughts on the Library in the community". The new public libraries, integration and innovation (papers delivered at the 1972 weekend school of the country libraries group of the libraries association).
- Smith P. & Kelly M. (1987): *Distance Education and Mainstream*. London: Croom Helm.
- Smith, P. and Mavis, K. (1987): *Distance Education and Mainstream*. London: Croom Helm.
- Speake. Terry and Powell, James (1997): The missing link in multi-media; The times higher education supplement, 14 Nov. p. xii, multi-media.
- Stephens, K. and Unwin, L. (1997) *The Heart of the Matter: Libraries, Distance Education and Independent thinking*. Journal for library Services for Distance Education; 1 (1) 2.
- Stockey R. (1982): *Presenting the Library service (outlines of modern librarianship)*. London Clive Bingley.
- Tait, A. and Mills, R. (1999): *The Convergence of Distance and Conventional Education*. Routledge 11 New Felter Lane, London EC4P 4EE.
- Terry E. and Darl N. (1996): *Opening Education (ed)*. London: Reutledge.
- The foundation Journal of Faculty of Education (F.J.F.E.) Number 1 (2002): Nairobi: University of Nairobi Press.
- The place of Library in a university Massachusetts: Harvard university Library (1956)
- The Varsity Focus (1993): Nairobi: University of Nairobi Press.
- Thorpe M. and avid G. (1987): *Longman Open Learning: Open Learning for Adults*. U.K. Longman House. Essex CM20 2JE.
- Towsend C.E. (1969): *Adult Education in Developing Countries*. Oxford University Pergamon Press Ltd.
- Vivian E. (1987): *Beyond Distance Teaching Towards Open Learning*. England: Open University Press.
- Vivien, E. Hodgson, S.J. and Snell, R. (1987): *Beyond Distance Teaching Towards Open Learning*. Open University Press Milton Keynes MK 11 I BY, England.
- Wairimu K.L. (1984): *Towards Universal Availability of Publications, (U.A.P.) in Kenya*. Unpublished Masters Thesis, Loughborough University of Technology.
- Wiersma M. (1995): *Research methods in Education*. An introduction 9th edition, Boston: Allyn and Bacon.

APPENDICES

APPENDIX A

**LETTER OF INTRODUCTION TO MINISTRY OF EDUCATION SCIENCE
AND TECHNOLOGY**

**UNIVERSITY OF NAIROBI
COLLEGE OF EDUCATION AND EXTERNAL STUDIES
FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND PLANNING**

Telegram: "CEES"
Telephone: KARURI 32021 & 32016

P.O. BOX 30197,
NAIROBI.
OR P.O. BOX 92
KIKUYU, Kenya.

Our Ref:

16.07.2002.

The Permanent Secretary,
M.O.E.S.T.
P.O. Box 30040 – 00100,
Nairobi.

Dear Sir,

**RE: RESEARCH CLEARANCE – PETER OCHIENG GOR REG. NO.
E55/7322/03**

Enclosed please find research application forms for "Authority to conduct research in Kenya" in respect of the above named person completed for your necessary action.

Peter Ochieng Gor is a postgraduate student at this university and his proposed research has full support. Also, enclosed please find shillings 500 cash being the application fee.

I hope you will consider this request at your convenience.

Yours sincerely,

GENEVIEVE WANJALA.

CHAIRMAN,

DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND PLANNING

APPENDIX B

LETTER OF INTRODUCTION TO EXTERNAL STUDENTS, UNIVERSITY OF NAIROBI

Peter Ochieng Gor,
University of Nairobi,
P.O. Box 92,
Kikuyu.

Dear Sir/Madam,

**RE: AN EVALUATION WITH REFERENCE TO THE PLACE OF LIBRARY AND
ALTERNATIVE SERVICES IN THE EXTERNAL DEGREE PROGRAMME OF
THE UNIVERSITY OF NAIROBI.**

This questionnaire is designed to gather information on the place of library and alternative services in the external degree programme of the University of Nairobi.

The questionnaire comprises four parts. Kindly provide information to all the questionnaire items. All information will be treated with utmost confidentiality. For this reason **DO NOT** write your name on this questionnaire.

Yours faithfully,

PETER OCHIENG GOR.

APPENDIX C

QUESTIONNAIRE FOR STUDENTS

An evaluation with reference to the place of library and alternative services.

Please indicate the appropriate response in each question:

SECTION 1A: STUDENT DETAILS

1. Please indicate your gender in the box provided

(a) Male.....

(b) Female.....

2. What is your age bracket? (tick one)

Less than 40 years.....

41 – 45 years.....

46 – 50 years.....

51 – 55 years.....

56 and above years.....

3. Indicate your year of admission into the University in the space provided.....

.....

4. Indicate your regional centre (tick one)

Nairobi.....

Nakuru.....

Kisumu.....

Nyeri.....

Kakamega.....

Mombasa.....

5. In the space provided, please indicate your current occupation/profession.....

.....

.....

6. State your background training.....
.....

7. Indicate number of years in the profession (tick one).

- Not more than 5 years
- 6 – 10 years
- 11 – 15 years
- 16 years and above.....

Section I B: Library Networks & Adequacy

1. Do you have a branch of the host university library at your regional centre?

- Yes
- No.....

2. If yes what kind of library services would you categorize your library into?

- Educational and academic library
- Research and reference
- Religious
- Public library.....
- Others (specify).....
.....

3. Do these libraries have adequate reading materials?

- Yes
- No.....

4. If yes, are they relevant in terms of your subject areas and for topics?

- Yes
- No.....

5. What other libraries, outside the university do you visit or use?

- School based libraries
- National libraries.....

- Other university libraries
- Special libraries.....
- Mobile libraries.....
- Libraries in the web
- Others (specify).....

6. Are these libraries close to your regional centre?

- Yes
- No.....

7. Are these libraries within travelling distance (say 20 km radius) from where you stay?

- Yes
- No.....

8. Have you visited any of these libraries?

- Yes
- No.....

9. If yes, do they have adequate reading materials?

- Yes
- No.....

10. If yes, as in Q.9, do these libraries stock reading materials relevant to your area of study?

- Yes
- No.....

11. If you have not visited these libraries, please give reasons why.

.....

.....

.....

.....

Section 2: Usage of Library Facilities

1. When you first joined the University of Nairobi, were you given induction on the use of Library services?

Yes

No.....

2. If you were inducted, who did the induction?

Chief librarian

Senior librarian.....

College librarian.....

Library assistant.....

Library attendant.....

Lecturers

Administrations.....

Other (specify)

3. If you were inducted, in which area(s) were you inducted on?

Use of catalogue.....

Layout of schedules

Locating books.....

Lending procedures.....

Other (specify)

.....

4. What specific information did you find useful to your use of library services?

Use of catalogue.....

Layout of schedules

Locating books.....

Lending procedures.....

Other (specify)

5. When do you visit the main University Library?

During residential periods.....

During special visits.....

End of term

Beginning of term

Other (specify)

6. By what means do you access the library services (please tick).

By visiting in person

By telephone

Through another person

By online sessions.....

Other (specify)

7. Is it easy to access the library material through the loaning system?

Yes

No.....

8. If no, what are bottlenecks?

.....

.....

.....

9. For how long do you borrow books from the host institution library?

Less than two weeks

Two weeks

Between two weeks and one month.....

Other (specify)

10. Are you satisfied with the borrowing time limit?

Yes

No.....

11. If no, how long would you like to retain the borrowed material?

Less than two weeks

Two weeks

One month.....

Two months

Other (specify)

12. Apart from loaning services, what other services are provided to external students at the regional centres by the host university library?

Reference materials.....

Internet services

Electronic cataloguing

Audio-visual facilities.....

Micro-computer soft wares.....

Reading services

Other (specify)

.....

.....

13. In your opinion, do the university libraries have sufficient and relevant materials for your work?

Yes

No.....

14. If no, what problems do you experience while using the host university library?

Inadequate reading spaces.....

Inconvenient opening times

Long travelling distance.....

Poor relations with librarians

Other (specify)

15. Among the following libraries, please indicate the one you visit more frequently.

Public libraries

University of Nairobi library

Other university libraries

Special libraries.....

Other (specify)
.....
.....
.....

16. For what specific reason do you visit this library?

Book loans

Reference materials.....

Internet services

Reading services

Loan for audio-visual facilities

Book microfilm.....

Micro-computer soft wares.....

Other (specify)
.....
.....

17. Have you explored the various services offered by other libraries e.g.

Reference materials.....

Internet services

Electronic cataloguing

Audi-visual facilities.....

Micro-computer software.....

General reading services

18. If no, what do you think limits your ability to explore these services?

- (a) Have problems in gaining legitimate access to other institutions
- (b) Denied short loan collections
- (c) Lack of relevant reference materials
- (d) High cost of travelling to these libraries
- (e) Other (specify).....
.....
.....

SECTION 3: ALTERNATIVE MEDIA SERVICES:

1. The following is a list of information resource services available to library users tick/mark the ones you are conversant with.

- Television transmission facilities.....
- Teleconferencing facilities.....
- New teletexts.....
- Book microfilm
- Online services.....
- Micro-computer soft wares.....
- CDROM Databases.....

2. Which ones are you familiar with?

- Television transmission facilities.....
- Teletexts.....
- Book microfilm
- Online services.....
- Micro-computer software.....
- CD-ROM Databases

3. Which ones do you think you have used during your study?

Television transmission facilities.....

Teletexts.....

Book microfilm.....

Online services.....

Micro-computer software.....

CD-ROM Databases

4. Which ones can you learn to use with ease?

Television transmission facilities.....

Teleconferencing facilities.....

Teletexts.....

Book microfilm.....

Online services.....

Micro-computer software.....

CD-ROM Databases

Other (specify)

5. Are these facilities easily available to you in your host University library/regional centre?

Yes

No.....

6. Where do you think such facilities could be availed to you with ease?

Institutional library.....

Regional centres.....

Nearest library.....

I could install some of the facilities i.e.

personal computers

Other (specify)

Section 4: Challenges facing the Provision of Library and Alternative services in the External Degree programme

1. What are the main challenges facing external students in their attempt to use:

(a) Library

.....

.....

.....

(b) Multi-media services.....

.....

.....

.....

2. Give recommendations on how the library services can be improved to distance education students of the University of Nairobi.

.....

.....

.....

.....

THANK YOU FOR YOUR PARTICIPATION

APPENDIX D

INTERVIEW SCHEDULE FOR LIBRARIANS

1. How would you assess the role of university of Nairobi library services in the effectiveness of its external degree programme?.....
.....
.....

2. Does the University of Nairobi engage in any of the following methods in providing library services to external studies students:
 - (a) Special collection dedicated to external students.
Yes
No.....
 - (b) Internet-based information resources.
Yes
No.....
 - (c) Postal lending.
Yes
No.....
 - (d) Other Techniques.
Yes
No.....
If yes, Please specify
.....

3. How would you assess the effectiveness of methods your institution applies in providing library services to external students?.....
.....
.....

4. What are the main challenges faced by your institution in providing services to external students?.....
.....
.....

THANK YOU FOR PARTICIPATING

APPENDIX E

TABLE FOR DETERMINING SAMPLE SIZE

N	S	N	S	S	S
10	10	220	140	1,200	271
15	14	230	144	1,300	277
20	19	240	148	1,400	282
25	24	250	152	1,500	286
30	28	260	155	1,600	290
35	32	270	159	1,700	293
40	35	280	162	1,800	297
45	40	290	165	1,900	300
50	44	300	169	2,000	302
55	48	320	175	2,200	307
60	52	340	181	2,400	311
65	56	360	186	2,500	313
70	59	380	191	2,600	315
75	63	400	196	2,800	318
80	66	420	201	3,000	320
85	70	440	205	4,000	323
90	73	460	210	4,500	325
95	76	480	214	5,000	327
100	80	500	217	6,000	329
110	86	550	226	7,000	332
120	92	600	234	8,000	334
130	97	650	242	9,000	336
140	103	700	248	10,000	338
150	108	750	254	15,000	340
160	113	800	260	20,000	342
170	118	850	265	30,000	344
180	123	900	269	40,000	346
190	127	950	274	50,000	348
200	132	1,000	278	50,000	350
210	136	1,000	283	100,000	352

Note: N is population size
S is sample size

Source: R.V. Krejcie and D. Morgan, "Determining Sample Size for Research Activities", Educational and Psychological Measurement, Vol. 30 No. 3 1970 P., 605.