THE RELATIONSHIP BETWEEN PERCEIVED QUALITY DIMENSIONS AND GROWTH IN DISTANCE EDUCATION: THE CASE OF EXTERNAL DEGREE PROGRAMME OF THE UNIVERSITY OF NAIROBI, KENYA

By

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A Thesis Submitted in Fulfillment of the Requirements for the award of the Degree of Doctor of Philosophy in Distance Education of the University of Nairobi.
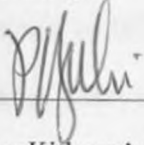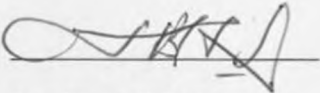
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Declaration

This thesis is my original work and has not been submitted for an award in any other University.

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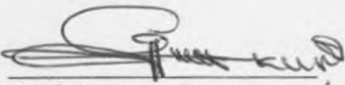Peter Kithung'a Nzuki
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Dedication

This work is dedicated to the persons who congregated at Kateiko Primary School grounds in 1977 to raise fees for my studies to join Form One at Kabete Technical School. Many have not lived to see the fruits of their labour. Specifically, I am grateful to the late Honourable James Chief Kitonga, who organized the "harambee" to raise funds, the late Kithome Mitau and others who marshaled the residents to support my education. May the Almighty God rest their souls in eternal peace!

Acknowledgements

My most sincere gratitude goes to my supervisors, Dr. Omondi Bowa, Professor. Samson Gunga and Dr. Japheth Origa for their assistance and encouragement. They devoted their time and effort to read through my draft proposal and draft reports and made useful suggestions to the final report.

My gratitude also goes to the University of Nairobi for its research grant that enabled the collection of data and compilation of the thesis report. I would also like to appreciate the contributions of M/s Teclar Kitala, Mr. Steve Mutuku and Dr. Paul Munguti for their invaluable input during the data collection period. My appreciation would not be complete if I do not mention the contributions of Mrs. Felida Asaava and Mr. Joseph Mungai who first read my concept paper and for their encouragement.

I also wish to appreciate the efforts of M/s. Cate Muia and Mr. George Kamau of the US Library for their contribution and M/s. Regina Makau, the librarian, Institute for Development Studies, for her invaluable help in tracing relevant information through the University of Nairobi Library website. I am also grateful to M/s. Angela Mumo and M/s. Shalet Mkamzungu, staff at the Kenya Science Campus for their help in accessing e-Journals. My gratitude goes to Dr. John Musingi who took time out of his busy schedule to assist in the formatting of the final report.

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I am grateful to colleagues and friends in the College of Education and External Studies and the entire University of Nairobi who kept me motivated to complete this work. I am sincerely grateful to Professor Henry Mutoro, the Principal, College of Education and External Studies for his encouragement whenever an opportunity arose to meet. Dr. Elijah Omwenga whose advise of "put your money where your mouth is" kept the fire burning in me. I am also grateful to my colleagues and students whose inspiration to graduate kept alive the spirit to get a final product. To me they were the catalyst and part of the process that bore this product.

This research would not have succeeded had it not been for the students, lecturers and Distance Education managers who took their time to respond to the survey questionnaire. My special gratitude goes to them for their truthfulness and honesty in providing the required data for the study.

Finally, I wish to acknowledge my family members for their moral support and encouragement as I worked to complete one of my professional goals. My wife, Jane whose constant reminder to complete my work was really encouraging. Thank you for walking this journey with me.

Abstract

As distance education (DE) is now accepted as a legitimate form of education and as universities and colleges attempt to meet the growing demand for courses and programmes by learners, one major concern has been the aspect of quality. This study sought to determine the influence of quality dimensions on the growth of Distance Education Programme. The Bachelor of Education degree programme offered by distance learning at the University of Nairobi was used as the unit of analysis. To achieve this goal, the study had the following objectives: to determine the relationship between tangibles dimension of the distance education degree programme and growth in Distance Education Programme; to assess the relationship between reliability of the distance education degree programme and the programme's growth pattern; to determine the relationship between responsiveness of the distance education degree programme and growth of the programme; to determine the relationship between assurance of the distance education degree programme and growth of the programme; to examine the relationship between empathy and the programme's growth and to determine the influence of moderating variables on the growth pattern of the programme. To achieve these objectives, the study targeted students registered for the Bachelor of Education (Arts) degree at the University of Nairobi in their 2nd and 3rd years of study. Also targeted for the study was staff involved in the provision of the programme. The staff included were lecturers (tutors) and resident lecturers (located at the regional centres). The students were first stratified on the basis of their study centres and then by sex. Systematic sampling was then used to select a sample of 327 student respondents. Purposive sampling was also used to select the staff. A response rate of 92.4 percent was achieved for students and 100% for staff. The techniques of data analysis used were the measures of descriptive statistics and inferential statistics. These were Chi-square test, Mann – Whitney U test and Pearson's correlation analysis. The findings revealed that the programme's responsiveness is significant at the 95% confidence level followed by programme reliability. The findings further indicated that there was a weak relationship between all the quality dimensions and the growth pattern measures of the number of students registered into the programme, the number of resident lecturers employed and the number of regional centres that have been established. In addition the study found that there was a positive and strong relationship between growth trends and the external environmental factors. The study provides a number of recommendations. First, managers of a DE programme and quality regulatory bodies should know that DE programmes can grow in spite of learners' negative perception of its quality. Secondly, the middle level managers of DE programmmes should consider the willingness of the top management to pursue a growth strategy and the market needs in formulating a growth strategy. Third, the managers of DE programmes should ensure efficient support services such as prompt marking of assignments, good teaching/learning methods, caring and individualized attention to learners, constructive feedback on assignments and affordable cost. These are key factors that determine satisfaction among distance learners. Finally, the managers of DE programmes should make improvements in out-of-class communication with tutors, currency of study materials, and availability of study materials as these were found to fail in meeting stakeholder expectations. The study also recommends that further research be conducted to correlate actual quality dimensions and perceived quality dimension since the two may be at variance. It is further recommended that a study be carried out to determine the effectiveness of the various quality dimension indicators.

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LIST OF ABBREVIATIONS

CODL - Centre for Open and Distance Learning

COL - Commonwealth of Learning

DE - Distance Education

DES - Department of Educational Studies

EDP - External Degree Programme

ODL - Open and Distance Learning

QAA - Quality Assurance Agency

QD - Quality Dimension

QDE - Quality of Distance Education

SMIS - Student Management Information System

UMIS - University Management Information System

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

One of the most significant trends in the education marketplace in recent times is the rapid growth in distance education. Mowen and Parks (1997) argue that this growth is due to the fact that academic administrators often view distance education institutions as revenue centers. Other reasons have ranged from the realization that there are many people not reached by classroom-based mode of delivery due to cost and distance constraints.

Distance education is a mode of study that takes place when a content provider and a learner are separated by physical distance. Technology acts as an interface simulating face-to-face communication thereby bridging the instructional gap (Smith and Debenham, 1998). The definition by Hedge (1982) treats distance education as learning in an environment in which tutors and learners are not, for the most part, in a face-to-face situation. According to Hedge, this definition challenges the traditional 'talk and chalk' model of learning.

Hedge's definition conforms to that of the Commonwealth of Learning (COL). COL defines distance education as the transfer of knowledge or skills to persons who are separated mostly by time and space from those who teach or train them. The teaching is done with a variety of "mediating processes" used to transmit

content, to provide tuition and to conduct assessment or measure outcomes (COL, 2009).

Holmberg (1989) makes the point that distance learners are not under continuous immediate supervision of tutors present with their students in lecture rooms or on the same premise. This suggests self-directed and independent approach to learning. It also implies a type of environment in which the learners are relaxed and comfortable, thus setting the kind of climate that is conducive to learning. This definition describes a shift towards a more 'learner- centered' approach towards the provision of education (Martin, 1997). This mode of study provides the flexibility needed to tailor education or training to the specific needs of learners.

1.1.1 Distance Education in the World

Distance Education (DE) is not a new concept. Itinerant wanderers who delivered information by word of mouth were perhaps the world's first distance educators. They brought information from afar to eager recipients whom they encountered during their travels (Willis, 2012). This century's old practice was irrevocably changed by the invention of print. Print was first put into use in distance education with the development of correspondence courses created by universities to disseminate knowledge. In the late 1800s, at the University of Chicago, the first major correspondence course programme in the United States was established in which the teacher and learner were at different locations. Before that time, particularly in preindustrial Europe, education had been available primarily to

males in higher levels of society (Gunawardena and Marina, 2008). The most effective form of instruction in those days was to bring students together in one place and one time to learn from one of the masters. That form of traditional education remains the model today. The early efforts of educators in 1890 to establish alternative modes of learning were ignored. Correspondence study, which was designed to provide educational opportunities to those individuals who were not among the elite and who could not afford full time learning at a higher educational institution, was looked down on as inferior education. Many educators regarded correspondence courses as simply business operations out to make money from willing learners. Indeed, many correspondence courses were viewed as simply poor modes of study for the traditional modes. However, the need to provide equal access to educational opportunities has always been part of the democratic ideals of modern societies. As a result, correspondence study took a new turn.

The development of correspondence study began with the development of radio during the First World War and television in the 1950s which made instruction outside of the traditional classroom find a new delivery system. Many examples of how early radio and television were used in schools to deliver instruction at a distance can be cited. For instance, Wisconsin's School of the Air was an early effort in the 1920s to affirm that the boundaries of the school were the boundaries of the state (Gunawardena and Marina, 2008).

Distance Education has experienced dramatic growth internationally since the early 1980s. It has evolved from early correspondence education to using primarily

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print based materials into a worldwide movement using various technologies (Willis, 2012). Daniel, et al (1982) points out that distance education has become a common form of education in many countries of the world. The goals of distance education have been to offer degree programmes, and to battle illiteracy in developing countries and to provide training opportunities for economic growth. A review of the literature on university education illustrates that a significant number of learners around the world receive their education through distance programmes (Brown, 2010).

1.1.2 Distance Education in North America

The United States of America was slow to enter the distance education marketplace. However, when it did, a form of distance education unique to its needs evolved (Moore, 1990). Although it did not have the economic problems observed in many countries of the world and the massive illiteracy problems of developing countries, the United States of America had problems of teacher shortage in the fields of science, mathematics, and foreign languages. These factors and the need for training in business and industry prompted the move towards the adoption of distance education. The growth of distance education was not significant since by 1987 there were fewer than 10 states offering distance education. However, by 1988, the number of states had grown to two-thirds of the states in America (Gunawardena and Marina, 2008) due to emerging technologies and societal needs.

In Canada, the responsibility for education rests at the provincial level whereas in the United States of America, the federal government plays a major responsibility in providing distance education. Distance education in Canada has developed with eleven major signatures over the ten provinces, Yukon, and the Northwestern Territories whereas in the United States, the federal government has mounted major programmes. Distance education in Canada and the United States of America has followed the emergence of satellite, fibre optic, compressed video, and broadband digital developments in carrier technology (Willis, 2012). Rapid developments in distance education technology have created a challenge in assessing the degree to which distance education learning alternatives are being used in North American educational institutions (Brown, 2010). Due to federal and state grants, most states are involved in distance education programmes in the United States of America.

A number of higher education institutions share programming across national borders as a result of integrated, shared – use, broadband distance education networks that are cost – effective among users. The networks make it possible for North Americans to use older hybrid distance education systems that employ teleconferencing, broadcast television, Instructional Television Fixed Service, computer conferencing, cable, and fibre optic with new digital based multimedia networks (Brown, 2010). The term "digital fusion" or the convergence of existing and emerging technologies into one "delivery fabric" has placed the North American learner in the "digital driver's seat" (Willis, 2012). The learner has available a wide range of programmes that include English, Spanish, Mathematics, and undergraduate and graduate courses that he/she can pursue.

In the Caribbean, distance education is focused at the University of the West Indies (UWI). The University is supported by 14 English speaking Caribbean countries. The challenge that faces UWI has been its inability to meet the needs of widely scattered, economically depressed countries in the vast islands. To overcome this challenge, UWI developed a telecommunication network supported by other forms of traditional media. UWI has programmes for community aides, technicians, teachers, nurses and a variety of other professionals (Willis, 2012).

1.1.3 Distance Education in Europe

Since the seventies open and distance higher education evolved exponentially in Europe. In some countries this was based on existing provisions such as correspondence education or extramural programmes. But the foundation of the Open University in Milton Keynes in 1969 started the discussion in many countries in Europe. Gradually other open and distance universities were created in Spain, Germany, the Netherlands and Portugal. In other countries the traditional universities built centres for open and distance education and associated them in national consortia in order to develop synergies.

The establishment of the Open University was revolutionary, both with regard to target groups and to educational method. The access to the university was open also for students who didn't fulfill the formal requirements for access to the university. The educational method took into account the conditions for home students and was based on recent learning theories. High quality learning material was used besides of an intensive tutoring programme and modern media of which television broadcasting at that time was the most spectacular one (Henderikx, et al

1996). This student centred approach and the corresponding quality requirements for learning materials affected thoroughly the practice of almost the whole field of open and distance education in Europe.

As a result, a large network of open and distance teaching provisions was created in Europe, albeit that it was more developed in the countries where a dedicated Open and Distance University was operational. This network, which is reaching even remote areas by its study centres approach, is a basic asset for a further development of lifelong learning in Europe.

Open and Distance learning in Europe began with the establishment of the Open University of the United Kingdom (OUUK) in 1969. It became one of the most important educational and social developments of the century. The University was given the power to grant degrees and to act in all student, curriculum, and research matters as would any other University (Brown, 2010). OUUK has offices in 13 regions throughout Britain. It offers undergraduate, postgraduate and continuing education degrees. Print material forms the backbone of the courses and is supported with a mix of audio cassettes, radio broadcasts, video cassettes, television broadcasts, slides, computer conferencing, field trips, tutorials and counseling. The students have formed self – help and study groups, participate in a range of activities and have a newspaper publication. There are over one hundred and fifty undergraduate courses that are on offer as well as specialized short courses and free study packs.

The Universidade Alberta (UA) of Portugal was created as a full degree granting, national distance teaching institution in 1988. The University offers in – service

teacher training, languages, and literature parallel to the other Universities in Portugal. Print – based materials are supplemented by radio and television programmes and telephone tutoring. Counselling is provided to learners from support centres that are located in institutions of higher learning. Other centres have been established to provide library services (Willis, 2012). There are other several universities involved in the provision of distance education in Europe. These include, Fernuniversitat in Germany, Universidad Nacional de Educacion a Distancia (Spain), the Open Universiteit (the Netherlands), and the Centre National de l'Enseignement a Distance of France. In nearly all the European countries where no open university has been established, conventional universities offer open and distance education in the framework of special centres or institutes where course are offered using online networks (Henderikx et al, 1996). In Europe, open and distance learning policy is demonstrated as reinforcing the ideological role that education and training play in the drive for economic success and competitiveness, and a range of frameworks for policy analysis have been explored within the unique international regime that is the European Union.

1.1.4 Distance Education in Asia

Distance education has shown tremendous potential and promise in the Asian region. Asia is the biggest of all the continents and there is a huge diversity in terms of culture, technology, infrastructure, showing both ends of development spectrum in terms of developed and developing nations (Latchem and Jung, 2010). There are more than 100 major institutions and countless smaller ones in Asia that offer distance education courses and programmes. Distance education has been

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very successful and almost all the countries of the Asian region have open universities. These are in the form of single mode, dual mode or fast emerging convergence system. Information and Communication Technology has played a pivotal role in these Open and Distance Learning institutions (Latchem and Jung, 2010).

Distance education in Asia is seen as an avenue for sharing resources among educational institutions most of which are higher educational ones. One of the countries in Asia to establish its first open learning institute was Bangladesh (Brown, 2010). The university addresses the unique needs of the entire spectrum of education (COL, 2009). Andhra Pradesh Open University of India was also established around that time to provide equality of education opportunities to a large segment of the population. It offers Bachelor's degrees in Arts, Science, Commerce and Library/Information Science. Instructional strategies include print, audio cassettes, radio broadcasts, residential schools, face –to – face tutoring, and counseling (COL, 2009). The University has 57 district centres.

A discussion of distance education in Asia cannot be complete without a mention of the other universities concerned with its provision. These universities are located in China, Japan and Indonesia among other Asian countries. The Open University System of China (OUSC) (combining former China Central Radio and TV University, which was established in 1979, with other radio and TV universities across the country) was the country's sole DE provider for 20 years. Between 1998 and 2003, the Ministry of Education (MoE) licensed 68 online colleges operating from within conventional universities such as Tsinghua University, Peking University, Beijing Normal University, and other institutions to

become online providers (Jung, et al. 2011). By 2008, the number of active distance students in China was 3,560,000 (12%) of all students in the higher education sector. Out of these, some 2,250,000 were studying through the OUSC, while 1,310,000 were in the online colleges (Jung, et al. 2011). However, due to a growing public concern over the quality of the courses and programmes offered, the MoE in 2003 ceased granting approval for new online colleges and introduced a quality assurance system that required both the OUSC and online colleges to comply with the guidelines and documents provided by the MoE. The Ministry of Education also imposed nationally standardized examinations upon them. The institutions were also required to follow the Annual Reporting and Censorship procedure, which involves annual internal reviews and external audits by the Distance and Continuing Education Office in affiliation with the Department of Higher Education of the MoE.

In Japan, The Open University of Japan (OUJ) (formerly the University of the Air) first offered bachelors' programmes in the greater Tokyo area through terrestrial television and radio and correspondence in 1985. In 1998, it went nationwide, using satellite digital broadcasts and a network of study centres (Jung, et al, 2011). In 2010, the University had a student population of almost 100,000 students. Since 2001, OUJ has been providing graduate programmes, but e-learning has not yet been mainstreamed into OUJ's system. Besides OUJ, 42 conventional universities, two cyber universities, and several graduate schools also offer DE programmes. Since 2004, all higher education institutions are supposed to be reviewed and accredited every seven years by one of three Quality Assurance agencies approved by the Ministry of Education, Culture, Sports, Science and Technology. These are the National Institute of Academic Degrees and University Evaluation (NIAD-

UE), the Japanese University Accreditation Association (JUAA), and the Japanese Institute for Higher Education Evaluation (JIHEE) (Jung, et al, 2011). Despite this, no specific quality assurance or accreditation system has been established for DE institutions or their programmes.

Since the mid-1950s, Indonesia has used DE to train teachers, but it was not until 1984, when Universitas Terbuka (UT) was established, that DE became widely accepted and recognized within the country (Jung, et al, 2011). Although it has been permissible for conventional universities to offer DE courses and programmes since 2001, Jung et al (2011) further claims that UT has remained as the only higher education institution that is entirely employing an open and distance education system in Indonesia. UT's total student body was more than 650,000 as of 2010. As a public university, UT must adhere to all of the quality standards and regulations applicable to higher education institutions in Indonesia, including the submission of semester-based self-assessment reports to the Ministry of National Education. UT has been accredited by the independent National Accreditation Board of Higher Education (BAN-PT). In addition, UT has voluntarily sought accreditation from other international organizations, including the International Council for Open and Distance Education (ICDE) and the International Organization for Standardization (ISO) for ISO 9001:2000/2008 (Jung, et al 2011).

Distance education in Asia is not only confined to the countries just mentioned. Other countries in the Asian continent involved in the provision of higher education using the distance learning mode include South Korea, Malaysia, Mongolia, Philippines, Singapore and Sri Lanka. Asia currently has more open and

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distance teaching universities and more distance learners than any other region in the world (Latchem and Jung, 2009). The ever-expanding demand and increasing availability, sophistication, and affordability of technology is encouraging governments to urge more institutions to adopt DE, seek new markets, and offer their courses online. However, the biggest challenge facing all of these institutions is how to assure and improve quality, while at the same time widening access, reducing costs, and developing the kinds of mechanisms that will best support such efforts (Jung, 2005).

1.1.5 Distance Education in Africa

The strength of a country's distance education system is directly related to the country's economic stature. It is therefore no surprise that, sub-Saharan Africa currently trails the rest of the world in DE development. In sub-Saharan Africa, DE has been used primarily "to widen access to basic education and to improve quality in the conventional school system through in-service training of teachers" (Moore & Kearsley, 2005). Even so, programmes are being created to provide college-level and vocational training to a young population that is desperately seeking to find opportunities for work and economic development in what is currently an intellectually and economically starved region. Unlike much of the rest of the world, the demographics of Africa - due to AIDS, environmental challenges, and a variety of political and historical complications - show that approximately half of the entire population of Africa is less than 20 years old and that population growth continues at an alarming rate. The result of this is that governments are unable to build school systems fast enough to absorb the increasing numbers of primary, secondary, and college-level students. These youth

are eager to find educational opportunities that will better equip them to compete in the increasingly globalized world, a need that is being addressed by successful distance programmes throughout the region.

Approximately, 70 – 80 institutions in Africa provide distance education. The University of South Africa became the world's first Open University in 1951 as a dedicated correspondence university (Brown, 2010). The other institutions were the Zambia National Correspondence College established in 1965. The University of Zambia uses a mixed – mode organizational model (Rumble, 1986). Tanzania has trained over 35,000 teachers by distance education over a 5 year period to staff a universal primary education programme.

African distance education institutions have used mostly print and face –to – face media, although national broadcast radio has been used in a number of innovative programmes. In 1965, Ethiopia established a small educational broadcasting programme directed at 12,000 viewers. This undertaking was expanded to include TV so that educational radio and TV became available nation – wide (Gupta, 2011). Distance education has been proposed to assist Africans with the educational crisis facing many countries. Recent efforts, such as the 2004 All-Africa Ministers' Conference on Open Learning and Distance Education show a common goal among educational leaders in many African countries, particularly of Burkina Faso, Ghana, Kenya, Tanzania, and Zimbabwe, to support the development of DE programmes (Leary and Berge, 2007). However, in spite of these efforts, there have been some conspicuous disappointments, including poor quality (often stemming from the lack of investment in institutions), and the failure

to reach large parts of those communities that have traditionally been marginalized by the higher education sector (Dharajan, 2001). Case studies of Zambia, Kenya and Zimbabwe suggest that critical factors for the effectiveness of distance education are the provision of adequate resources and firm political backing (Gupta, 2011).

1.1.6 Distance Education in Kenya

Distance education is not a new thing in Kenya. Private, mainly British correspondence colleges have offered courses in Kenya for many years. For instance, the University of Nairobi, through the College of Education and External Studies (formerly the College of Adult and Distance Education) has used distance education since 1967 (Holmberg, 2011). About five public universities, three private ones and five institutions have been involved in the provision of education through the distance learning model (Odumbe, 2004).

In Kenya, the pressure for distance education has been necessitated by the rapid increase in the number of applicants who meet the minimum University entry requirements but cannot be absorbed in the Public Universities due to limited space and staff. This scenario is compounded by the ever expanding secondary school enrolment and the demand for better- qualified manpower (Kamau and Odumbe, 1995). The large number of universities and institutions reflect the growing interest and concern that Kenya has in ensuring that outreach programmes are available to the many qualified Kenyans who cannot be reached by the conventional mode of delivery. Odumbe (2004) observes that the institutions

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venture into distance education even when some of them are not prepared due to a variety of reasons. These reasons include: the realization that there are people not reached by the current mode of study as a result of distance, bed capacity, time and cost; profit motive; response to specific needs such as teacher training, in – service workers; and to provide alternative mode of learning.

The universities and institutions offer programmes that are similar to those offered on campus. These programmes are information technology, Art based, Business and Science using a variety of media such as print – based, audio cassette, radio, computer and satellite mediated and a heavy face –to – face tutorial sessions. However, the distance education institutions face numerous problems among them being few professionals, lack of policy on capacity building, and a lack of fora for sharing information on open and distance learning. Other problems centre on the inadequacy of infrastructure, high cost of using electronic media, insufficient facilities, and inadequate learning resources. These problems indicate that the present provision of distance education may lead to poor quality programmes.

1.1.7 Distance Education at the University of Nairobi.

Distance education at the University of Nairobi can be traced to the first Department of Extra – Mural Studies which was founded in Makerere, Uganda, in 1953. Under this Department, the first resident tutor for Kenya was appointed in 1956. In 1963 the responsibility of organizing the extra-mural studies in Kenya was transferred to a new Extra – Mural Department of the then University College, Nairobi. In the same year, the College of Social Studies, located in Kikuyu, which

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had run as an independent centre for residential adult education since 1961 was absorbed into the University College, Nairobi (Syagga, 2001). The centre was then amalgamated with the Extra – Mural Department, thus forming the Institute of Adult Studies. In 1966, the two departments were integrated under one director and the residential centre was renamed the Adult Studies Centre.

In 1967 a Correspondence Course Unit was established as another arm of the Institute of Adult Studies. In 1983, the institute was accorded College status and became the College of Adult and Distance Education following the recommendations of the Inspection and Visitation Committee which established six Colleges of the University of Nairobi. In September, 1985 the Government of Kenya accepted the recommendations of the University Council which elevated the three divisions of the College into the Institute of Extra Mural Studies, School of Distance Studies and the Institute of Adult Studies. A new Faculty of External Studies was established. The Faculty of External Studies has a long history dating back to the Kenya Education Commission of 1965 when the need for off campus degree courses was expressed. Many working parties were charged with the task of finding ways and means of establishing a faculty which would be a Service Department within the University of Nairobi to offer distance education degrees but without success (Karani, 1981). In 1976, a Feasibility Study was carried out whose recommendations suggested that such a degree programme could be established under the then Institute of Adult Studies. However, due to the high financial implications, the report was simply received and no action was taken. From the interest expressed for such a programme and the inability of the University of Nairobi's internal departments to take all those who met University requirements, the Senate set up a Task Force Committee in 1983 to look into the

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possibilities of setting up an External Degree Programme. The Committee submitted its report in August 1983 to the Senate recommending the establishment of the Faculty of External Degree Studies (renamed Faculty of External Studies). The report was accepted by both the Senate and the Government of Kenya and in the 1985/1986 financial year, money was voted for its implementation. The Faculty's legal establishment in the University of Nairobi followed the acceptance of the new statutes governing it by the University Council in September 1985.

The Faculty comprises of three Departments namely, Educational Studies, Extra – Mural Studies and Distance Studies. The Faculty is headed by a Dean while the Departments are headed by Chairmen. The Faculty was later renamed the School of Continuing and Distance Education (SCDE) following the recommendations of the Senate on the Rationalization and Downsizing of University Programmes in 2003. In order to assist in the running of the programmes, there is provision for 32 members of staff composed of academic members, senior administrative assistant, senior technician to run printing section, clerical and other support staff. In addition to the full – time staff, SCDE has a large number of part – time staff involved in the provision of teaching and materials development services. These are recruited mainly from the internal faculties of the University of Nairobi, Kenyatta University and from other institutions of higher learning.

1.1.8 The External Degree Programme

The School of Continuing and Distance Education offers its courses by distance learning. The courses are for teachers, workers and other individuals who would wish to pursue their courses by this distance mode. The commonly pursued course is that offered to would be teachers and it is known as the External Degree

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Programme. It admits persons who are either working as untrained teachers in the Arts and Sciences or those who wish to work as teachers. The course is divided into six semesters each lasting a period of eight months. Thus, a student registered in the programme takes a minimum of four calendar years (an equivalent of three academic years) and a maximum of ten years. The programme is offered through the distance study methods with print as the main medium of instruction. The study materials are developed in units which cover an equivalent of approximately thirty lecture hours. Though they are self contained and written in a manner that makes them highly inter-active, the School has extensive student support services. These include face – to – face tutoring, learning resource centres (Regional Support Centres located in ten regions around the country), residential sessions and library services.

Residential face – to – face sessions are meant to give the learner an opportunity to interact with both his/her fellow students and lecturers. The residential sessions are mandatory and are spread over a period of four years. Since the course is divided into six semesters (commonly referred to as parts), there are three weeks of residential sessions for each semester (Kamau and Odumbe, 1995). The first residential session is for orientation (or introduction to the course), while the others are used to supplement the study units and undertake parts of the course that require face – to – face teaching and tests. The last residential session for each semester is used for revision activities to be followed by written final examinations. Residential sessions are supposed to be conducted at the University of Nairobi during the University vacations, but at times they may be conducted in hired teaching institutions around the City of Nairobi.

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Support services are also provided to students. A variety of support services are available. These include regional resource centres (Regional Support Centres), study centres, library services, audio materials, and information – sharing. Regional resource centres are located in the University's existing Extra – Mural Centres. Currently, there are about ten such centres located in Nairobi, Mombasa, Kisumu, Nyeri, Kakamega, Nakuru, Kisii, Garissa, Thika, and Meru. There are also subs – centres within the major centres. The centres are used to provide counseling services, discussion groups, dissemination of information about External Degree Programme, and for organizing and coordinating activities at the study centres. They also act as the distribution points for the study materials and marked term papers.

Library facilities stock most of the books that are listed in the study units. Students are supposed to visit the library during residential sessions or when they are at home during their free time. They use the books as reference materials. Students are also advised to visit public libraries (especially the Kenya National Library Service libraries). The University maintains an online library service where students can access both the electronic journals and ebooks.

Information sharing is another component of support service available to students registered in the External Degree Programme. This component provides the student with an opportunity to share experiences with colleagues. Important information is communicated to the students through newspapers, letters, radio and word of mouth through the staff. Students can also communicate to the tutors and support staff by letters or telephone calls on matters that are of concern.

The course is assessed through continuous assessment tests (one – hour timed tests

and term papers), and written examinations that last two hours for each subject that the student has registered. The learner is expected to take examination at the end of each semester completed. The timed tests and that are supervised are taken during the last residential sessions. There is also written assignments that a learner is supposed to write while at home and submit to the tutor during the second residential session. The timed tests and written term papers form the continuous assessment component and accounts for 30% of the final mark in each subject. The student is also supposed to write an examination at the end of the semester. The examination forms the greatest part of assessment since it accounts for 70% of the final marks. For the student to qualify for the award of the degree of the Bachelor of Education (Arts), he/she is required to sit and pass all the papers during the course of study. He/she must also pass Teaching Practice (a component of the practicals). The pass mark is 40%. If he/she passes all the requisite papers, the student is finally awarded the degree at either First Class Honours, Second Class Honours (Upper Division), Second Class Honours (Lower Division) or Pass based on the marks scored at 2nd and 3rd years of study.

1.1.8   e – Learning at the University of Nairobi

Information and communication technologies (ICTs) affect all sectors of society. Internet, originally designed for communication on research, is a regular tool for scientific information and interaction within and between universities (Henderikx, et al 1996). ICTs are characterized by their ability to be used synchronously and asynchronously, on-line and off-line, and by being able to mix several media into a multimedia environment. This means that ICTs are able to facilitate the interaction between teaching staff and students as well as between students and their peers

(collaborative learning) as never before. Moreover they can differentiate students with regard to learning content and method of instruction. Last but not least, ICTs give worldwide access to information (e.g. libraries) or learning resources (e.g. courses and programmes).

In an effort to initiate and expand e-learning and other technology-based ODL opportunities, the University of Nairobi established an Open Distance and e-Learning Centre at Kikuyu Campus. There is also Information and Communication Centre located at Chiromo Campus to manage e – Learning activities at the University. Among these activities is an Interactive Self – Learning Materials that is available on the e – Learning platform. It is a multimedia portal that allows learners to register for courses and to access course materials. The portal is available at htt://learning.uonbi.ac.ke/claroline.

As distance education becomes more accepted as a legitimate form of education and as colleges and universities attempt to meet the growing demand for courses and programmes for distance learners, one major concern is the aspect of quality. According to Dharanajan (2002), the primary issue for distance learning institutions, like for conventional ones, is quality and the assurance that students are being provided with the best possible education or training with the highest possible standards. The quality of distance education varies, like any other form of education. Its quality can be the result of a variety of factors, some internal and others external to distance education organizations. Some of these factors include the levels of skills and expertise of staff, the amount of resources available, weak or strong leadership, efficiency of its administration systems, or the communications infrastructure in a country (Robinson, 1995).

Quality in open and distance learning (ODL) is often judged in terms of the learning materials whatever the medium (Robinson, 1995). However, a programme is more than just the materials; it is also the totality of experience of the learner. Mowen and Parks (1997) argue that there are serious questions about the integrity of distance education programmes and how students perceive their overall quality. Robinson (1995) argues that the success of distance education programme depends on how well the course production, delivery and student support sub-systems function.

However, an institution's claims to quality may fail to match the performance observed or experienced by those outside and inside of it such as learners, professional bodies and policy makers. For example, excellent materials may be of little help to a learner if not delivered to him/her on time.

1.2 Problem Statement

Shrinking resources from the exchequer, the demand for a more cost-effective education and competition among Universities for students have recently motivated academic administrators in public universities to adopt strategic marketing approaches to enable them to survive. Successful institutions are defining market niches within un-served or under-served populations and are using innovative strategies that capitalize on new opportunities (Mowen and Parks, 1997). Because traditional strategies such as reliance on on-campus mode of offering educational services are not in themselves sufficient for educational institutions to survive into the 21st century, many academic administrators are

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creating new visions for their institutions and programmes. For instance, the University of Nairobi launched an external degree program to provide quality education to mature working adults who have the keenness and ability to continue their education by studying in their own time and place with far-reaching social and economic benefits (Kamau, 1984).

In Kenya, five public universities and nine tertiary level institutions have launched distance education programs. As distance education becomes more accepted as a legitimate form of education and as colleges and universities attempt to meet the growing demand for courses and programs for distance learners, one major concern is the aspect of quality. According to Dharanajan (2002), the primary issue for distance learning institutions, like for conventional ones, is quality and the assurance that students are being provided with the best possible education or training with the highest possible standards. The quality of distance education varies like any other form of education. Its quality can be the result of a variety of factors that are either internal or external to distance education organizations. Some of these factors include the levels of skills and expertise of staff, the amount of resources available, weak or strong leadership, and efficiency of its administration systems or the communication infrastructure in a country (Robinson, 1995). Dharanajan (2002) observes that the failure to ensure quality of design, product development and delivery and support services have contributed to serious negativism about the value of distance education in many parts of the developing world.

In spite of the criticisms cited, the University of Nairobi through its Department of Educational Studies intends to boost its ability to provide distance education through such strategies as the increase in enrolment and extending access to unexploited geographical areas. This implies a growth strategy that is likely to occur during the growth phase of a product lifecycle. A review of the literature shows that the number of students admitted in a semester has been declining. However, the student numbers started rising in the 2009/2010 academic year. The student enrollment for the period 2005 to 2012 is as shown in Table 1.

Table1.1: Student Enrolment for the Period 2005 – 2012

Academic Year	Enrollment
2005/2006	747
2006/2007	835
2007/2008	702
2008/2009	687
2009/2010	1,328
2010/2011	995
2011/2012	2,121

(Source: umis/smis.uonbi.ac.ke)

However, the actual number of students admitted over the same period increased from 747 in the academic year of 2005/2006 to 2,121 in the academic year of 2011/2012. The number declined dramatically from a high of 835 to 702 in the

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academic years 2006/2007 and 2007/2008 respectively. The number dropped further to 687 in the 2008/2009 academic year but picked up in the following year (Umis, 2011). The department responsible for the provision of distance education at the University of Nairobi recognizes that it has certain weaknesses such as shortage of teaching staff, shortage of physical facilities, and delays in releasing examination results to students (Strategic Plan, 2008-2013). Indeed, the Vice-chancellor of the University of Nairobi has noted that one of the major problems experienced in the external degree programme is perennial delay in the delivery of study materials to students. Added to these weaknesses is the issue of the total cost (measured by the total fees payable by a student per semester). Whereas a growth strategy calls for reduced costs (Best, 2005), the total cost of the external degree programme has been rising over time (UoN, 2011).

As Universities embark on growth strategy, it is not clear whether they have identified the external degree programme characteristics that are most valued by stakeholders and how the Universities perform against the characteristics. Indeed, these are quality issues that the Universities ought to be concerned about in order to function effectively and efficiently in a highly competitive environment (DiDomenico and Bonnici, 1996). While it is important to understand the variables that affect student satisfaction with distance education courses as it leads to significant programme improvements to meet the student needs (Kelsey, Linder and Dooley, 2002), it is equally necessary to measure students' perceptions and make recommendations on the overall quality of a distance education programme. This is also important as it leads to lower student attrition and a greater number of referrals from enrolled students.

A review of the literature shows that the University of Nairobi has pursued a growth strategy. This has been demonstrated by the opening up of four more study centres in the year 2006 to offer support services to the learners. Best (2005) notes that there is need for the analysis of target market, organizational capabilities, and current and projected environmental forces before a final strategic decision can be made. Similarly, Suganthi and Anand (2004) posit that quality of education has to be evaluated before an organization adopts its strategies. Nevertheless, available literature indicates that no study has been conducted to show the level of students' satisfaction with the University's distance education programme before any strategy was made. Murphy (1997) also posits that before any strategic option is adopted for a programme, an institution must systematically evaluate how consumers are satisfied with the programme.

This study therefore sought to answer the question: Is there a relationship between the quality dimensions of a distance education programme and strategy choice for an educational institution or does a distance education programme's quality dimensions influence an educational institution's growth strategy?

1.3 Purpose of the study

The aim of this study was to determine the relationship between the quality dimensions of a distance education programme and the strategy choice of an educational institution in higher education.

1.4 Objectives

The specific objectives of the research were as follows:

1. To determine the relationship between tangibles dimension of a degree programme and growth of the External Degree Programme

2. To assess the relationship between reliability dimension of a degree programme and growth of the External Degree Programme

3. To determine the relationship between responsiveness of a degree programme and growth of the External Degree Programme

4. To establish the relationship between assurance dimension of a degree programme and growth of the External Degree Programme

5. To establish the relationship between empathy dimension of a degree programme and growth of the External Degree Programme.

6. To determine the relationship between moderating effect of environmental factors and growth of the External Degree Programme.

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1.5 Research Hypotheses

This research was premised on the following null hypotheses:

H_1. There is no significant relationship between tangibles of a programme and growth of the External Degree Programme.

H_2. There is no significant relationship between programme's reliability and the growth of the External Degree Programme.

H_3. There is no significant relationship between programme's responsiveness and growth of the External Degree Programme.

H_4. There is no significant relationship between programme's assurance and growth of the External Degree Programme.

H_5. There is no significant relationship between a programme's empathy and growth of the External Degree Programme

H_6. There is no significant relationship between moderating environmental factors and growth of the External Degree Programme..

1.6 Significance of the Study

This research is on the external degree program's quality dimensions and what perceptions customers hold towards such dimensions. Additionally, the research sought to determine the effect that the perceptions may have on a growth strategy. The results of this study are intended to benefit the following parties.

First, academic administrators at distance education institutions will be able to develop an inventory of quality dimensions that would enable the institutions to define acceptable quality of service and to assess strengths and weaknesses in the

provision of education services as an aid to long term planning for quality improvement.

Secondly, the distance education program's providers (faculties, institutes, and departments) are informed on the most important quality dimensions that customers value. Such knowledge will be useful in the overall evaluation of distance education in Kenya. Finally, the distance education researchers may find the results of the study useful as reference material in academic discourse.

1.7 Delimitations

This study was carried out among the external degree students at the College of Education and External Studies of the University of Nairobi. This comprised the 2nd and 3rd year students who had sufficient experience in the programme. It also used the staff formally attached to distance education study centres as well as those who taught at a distance in various academic disciplines.

At the time of carrying out the study there were 2036 students who sat for the Continuous Assessment Tests in the April 2007 Residential Session. These were the active students in their 2nd and 3rd years of study in the programme.

In addition the study dwelt on the program quality and excluded other aspects of quality such as reputation for quality and services quality. These other dimensions of quality are broad and would require enormous resources and time to capture.

1.8 Limitations

This study exclusively examined the relationship between quality dimensions and the growth of External Degree Programme among 2nd and 3rd year Bachelor of Education degree students, tutors and resident lecturers in a single geographical location. The ability to draw conclusions on other students in the 1st year of study and other stakeholders or other geographical locations is restricted.

The other limitation is that the set of dimensions of the programme quality considered in this study may not be exhaustive. Although the model used in the study explained 62.88% of the total variation, there still may be other dimensions that have been missed out. For example, some researchers have argued for a dimension that assesses the outcome of services (Powpaka, 1996). However, educational service quality deals primarily with the processes of education (e.g. the manner in which it is provided) rather than the outcomes (e.g. skills developed, extent of learning).

1.9 Definitions of Significant Terms

In this study, the following terms were used as defined below:

Assurance: Knowledge and courtesy of employees (staff at centres and teachers) and their ability to inspire trust and confidence among students.

Customer: Individuals who have enrolled in the University to learn and are being taught in the School of Continuing and Distance Education by distance mode. In this study, the term customer and student are used synonymously.

Distance Education: A learning paradigm that is characterized by a separation between the student and other members of the course, including the instructor and other students, in time and/or place for any portion of the course. The teaching is done with a variety of "mediating processes" used to transmit content, provide tuition and to conduct assessment or measure outcomes.

Empathy: Caring, individualized attention that staff provide to the students.

External Degree Programme: Course of study by distance learning leading to the award of a degree.

Growth: Increase in the number of students registered per year, regional centres and resident lecturers employed to serve students.

Indicators: Outputs that an educational institution can point to as signs of success of failure.

Module One: Mode of study in which a student receives government-sponsorship and is resident in a University campus and learns most of the day in a face-to-face situation.

Module Two or Dual Track Programme: Mode of study in which a student does not receive any government-sponsorship (self-sponsored) and pays the full unit cost of the programme he/she is undertaking.

Perceived Quality: Customer's judgement about distance education's overall excellence or superiority.

Programme Quality: The degree to which a distance education programme's inherent characteristics fulfill expectations or meet specifications of customers.

Quality: Conformance to requirements or conformance to specifications, fitness for stated purpose.

Quality Dimensions: Inputs or factors consciously made by an institution to support its programme.

Reliability: Ability of the staff attached to distance education centres to perform the promised service dependably and accurately.

Responsiveness: Willingness of staff formally attached to distance education centres and teachers (tutors) to help students and provide them with prompt service.

Strategy: The "means" used to achieve organization's objectives. For example, growth as a strategy to generate more revenue for a distance education institution.

Tangibles: Refers to physical facilities, equipment, appearance of personnel and communication material used in the distance education programme.

1.10 Organization of the Chapters

The thesis report is presented in five chapters. The first chapter provides the background to the study, problem statement and the objectives of the study. An outline of the research questions, hypotheses and the definitions of the significant terms follow the objectives.

Chapter two is a review of the literature in the field of distance education. The key thematic areas of quality dimensions and growth strategy are presented. The conceptualization of quality within the context of distance education is presented in which it is viewed as the degree to which inherent characteristics fulfills requirements. A review of the standards, best practices or benchmarks is provided. The growth variables are presented followed by a review of current status of

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studies on the quality of Distance Education. Finally, theoretical and conceptual frameworks on which the study is anchored on are presented in this chapter.

Chapter three is on the methods utilized to achieve the study's objectives. It begins with a description of the design of the study, target population, sampling procedures, data collection methods, data collection procedure, operationalization of the variables used and a description of the instrument used to collect the data required. The reliability and validity of the research instrument is also presented together with the analytical techniques used.

Chapter four presents the results of the data analysis. Both descriptive and inferential statistics are presented. Frequency distribution tables, mean and standard deviations have been used as the descriptive statistics. The Pearson product-moment correlation technique, Mann-Whitney U test and Chi-square tests were used to test the research hypotheses.

Chapter five presents the summary of the findings, discussion of results, conclusions and recommendations. The purpose of the study was to determine the relationship between quality dimensions and growth strategy. The chapter therefore summarizes the research problem and a discussion on the implications of the findings on theory, policy and practical aspects. Recommendations arising from the conclusions are presented together with the areas for further research.

1.11 Summary

The chapter began with background information to the study in which the various views on the nature of distance education are presented as explained by different authors. The background further provides reasons why distance education has rapidly grown in Kenya. The key factors contributing to the growth are limited space in the campuses, expansion in secondary school enrolment and the demand for better-qualified manpower. As a result of the growing demand for higher education, the University of Nairobi set up a task force to examine the possibility of establishing an external degree programme. The taskforce recommended the establishment of a degree programme to be offered at a distance with conditions on admission, administration, training and learning similar to those for the internal students.

The section on background information is followed by the problem statement in which it is observed that the University of Nairobi has continued to increase its enrolment of distance learners as well as expand access to distance education by opening up centres in many geographical areas around the country albeit the growing concern over the quality of distance education.

The purpose of the study and its objectives follow the problem statement. The aim of the study was to establish the relationship, if any, between the quality dimensions of a distance education programme and the strategy choice of an educational institution in higher learning. There were six objectives that guided the

study. These objectives considered the relationship between the various quality dimensions and growth.

The next section deals with the significance of the study. The study was found to contribute to the development of an inventory of quality dimensions that would help to define acceptable quality service in distance education programmes. Additionally, the results would offer some evaluation criteria in Distance Education in Kenya.

The study covered students in their 2nd and 3rd years of study. It also involved lecturers and staff attached to regional centres. These constituted part of the population of the study as they were considered to possess the necessary knowledge and experience in distance education.

Definitions of significant terms as used in the study are presented in section 1.8. Some of the key terms in are strategy, quality dimensions, distance education and the various quality dimension concepts. This section on the definition of terms is followed by the organization of the chapters in the report.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature in the field of quality of distance education. The review deals with the various studies on quality dimensions of distance education to bring out the gaps in knowledge in the field of distance education to be filled by the present study. The theories on which this study is anchored are also presented in this chapter. The chapter ends with the conceptual framework adopted in guiding the formulation of the hypotheses for the study.

2.2 Conceptualization of Perceived Quality

The construct of quality as conceptualized in the services literature is the consumer's judgement about an entity's overall excellence or superiority (Zeithaml, 1988). Zeithaml (1988) provided a definition of perceived quality as the customer's perception of the overall quality or superiority of a product or service with respect to its intended purpose, relative to alternatives. Perceived quality is, first, a perception by customers. It thus differs from several related concepts, such as actual or objective quality, product-based quality and manufacturing quality. It is a form of attitude related but not equivalent to satisfaction, and results from a comparison of expectations with perceptions of performance.

Researchers have emphasized the difference between objective and perceived quality (Garvin, 1983; Holbrook and Corfman, 1985; Jacoby and Olson, 1985; Zeithaml, 1988). Holbrook and Corfman (1985), for example, note that consumers

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do not use the term quality in the same way as researchers and marketers, who define it conceptually. The conceptual meaning distinguishes between mechanistic and humanistic quality. Mechanistic quality involves an objective aspect or feature of a thing or event. Aaker (1991) defines objective or actual quality as the extent to which a product or service delivers superior service. Humanistic quality involves the subjective response of people to objects and is therefore a highly relativistic phenomenon that differs between judges (Holbrook and Corfman, 1985).

Garvin (1983) discusses five approaches to defining quality; including two (product-based and manufacturing-based) that refers to objective quality and one (user-based) that parallels perceived quality. Product-based quality refers to the nature and quantity of ingredients, features or services included. Manufacturing-. based quality is seen as the conformance to specifications, the "zero-defect" goal.

Olshavsky (1985) views quality as a form of overall evaluation of a product, similar in many ways to attitude. Holbrook (1985) concurs, suggesting that quality acts as a relatively global value judgement. However, Oliver (1981) summarizes current thinking on satisfaction in the following definition: "Satisfaction is a summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feeling about the consumption experience" (p. 27). This, and other definitions provided by Howard and Sheth (1969) and Hunt (1979) and most of the measures of satisfaction relate to a specific transaction. Oliver (1981) summarizes the transaction-specific nature of satisfaction and differentiates it from attitude, as follows "Attitude is the

consumer's relatively enduring affective orientation for a product, store, or process (for example, customer service) while satisfaction is the emotional reaction following a disconfirmation experience which acts on the base attitude level and is consumption-specific. In the field of distance education, satisfaction is a pleasurable and successful experience that meets one's desired learning outcomes, expectations about the educational experience, and includes adequate peer and instructor interaction; it is contentment with all facets of educational experience (Moore, 2005). Attitude is measured in terms that are more general to product or store and is less situational oriented". Consistent with the distinction between attitude and satisfaction is a distinction between service quality and satisfaction. Perceived service quality is a global judgement, or attitude, relating to the superiority of the service, whereas satisfaction is related to a specific transaction.

The writings of Sasser, et al (1978); Gronroos (1982) and Lehtinen and Lehtinen (1982) support the notion that service quality, as perceived by consumers, stems from a comparison of what they feel service firms should offer (that is, from their expectations) with their perceptions of the performance of firms providing the services. Perceived quality is therefore viewed as the degree and direction of discrepancy between consumers' perceptions and expectations.

2.3 Quality of Distance Education

Research on quality in higher education concludes that there is no single workable definition. In fact, it is argued that quality is a relative concept, meaningful only from the perspective of those judging it at the time (Fresen, 2002). The Kenya Bureau of Standards (2005) defines quality as the degree to which inherent characteristics fulfill requirements. By inherent, it means existing in something especially as a permanent characteristic. Thus, a service has certain characteristics (dimensions) that it possesses that are expected to fulfill (meet) customer requirements. In the field of education, the literature generally agrees that quality is the set of characteristics of a service that are valued by those whose needs the institutions are seeking to meet (Athiyaman and O'Donnell, 1994; Madu and Kuei, 1994). Researchers have concluded that the dimensionality of service quality is situation specific (Cromin and Taylor, 1992).

Although perceived quality dimension cannot be objectively determined in part, because it is a perception and also because judgements about what is important to customers are involved (Aaker, 1991), researchers have argued that educators should evaluate student perceptions of education service quality. Educational service quality is defined as a student's overall evaluation of services received as part of their educational experience (Holdford and Anuprita, 2003). The writers posit that student's perceptions of educational service and that of those involved in the provision of distance education should be measured because they usually participate in the production of the service.

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There is considerable dialogue throughout academia about what constitutes quality in distance education and how it be ensured. However, exploiting the potential of the distance education mode to offer a quality programme is a complex issue in itself (Stella and Gnanam, 2004). These authors argue that distance education has caused a serious concern to governments and the quality assurance agencies all over the world about the safety of the national systems, legitimacy of the providers, protecting the public from fake providers, quality of the offerings and so on, the common element being 'concern for quality'. Many quality assurance agencies have responded to this need and there is considerable dialogue about ensuring quality in distance education.

Courses offered through distance education have been criticized on account of poor quality, not being at par with regular courses and catering for lower standards of students admitted. Supporters of distance education have argued that it improves access, offers a wide choice of learning opportunities, has the possibility of competitive pricing, and the advantages of not requiring learners to leave home to take courses and the healthy competition that could be promoted to offer quality courses. The inadequacy of student support services and the missing element of interaction with teachers and other students were also issues of concern (Stella and Gnanam, 2004). Supporters of distance education brush away these reservations by reminding others of the situations in the traditional classrooms where hundreds of students move between large lecture halls of un-intellectual atmosphere without any interaction with teachers. They contend that distance education is just like any other form of traditional education; it can be done well or badly. Proponents of distance education argue that it is as good as traditional education if conducted

properly. If that is the case then, how can distance education quality be assessed and against what standards?

Several different organizations have developed principles, guidelines, or benchmarks to ensure quality of distance education. The Institute for Higher Education Policy of the United States of America has come out with 24 benchmarks that cover seven aspects considered essential to ensuring excellence in internet-based distance learning. These are institutional support, course development, teaching/learning, course structure, student support, faculty support and evaluation and assessment (CHEA, 2000). The regional accreditation commissions have agreed on certain standards against which the evaluation of electronically offered programmes will be done. The standards cover five major areas, each of which addresses a particular area of institutional activity relevant to distance education. They are institutional context and commitment, curriculum and instruction, faculty support, student support, and evaluation and assessment (CRAC, 2000).

In the United Kingdom, new guidelines for distance learning in higher education have been published by the Quality Assurance Agency (QAA, 2002). The guidelines are in six headlines namely, system design, programme design, approval and review, the management of programme delivery, student development and support, student communication, and student assessment.
Council for Higher Education Accreditation and Commonwealth Higher Education Management Service (2000) have designed and tested an alternative approach that places significant emphasis on student outcomes and delivery via distance

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education. The competency standards are organized in three main areas of institutional performance: student outcomes and attainment, responsiveness to students and organizational alignment and support.

The Commonwealth of Learning (2009) published the performance indicators for distance education programmes. These are institutional planning and management, programme design and development, course design and development, infrastructure and learning resources, learner support and progression, and learner assessment and evaluation. These performance indicators have been designed to enable distance education institutions to conduct summative self-evaluation of the performance of their processes in order to make necessary adjustments and changes for quality improvement and monitor the processes for continuous learning and ongoing improvement. In this way, the performance indicators help to achieve uniform standards and guide institutional agendas to address more directly the requirements for quality provision and to meet the expressed needs of learners.

Despite the efforts made to ensure quality, distance education institutions have been criticized on account of introducing new conditions and structures to the higher education environment. For instance, poor quality is particularly cited on the short duration of the university courses, and the lack of learning resources – such as libraries (CHEA, 1999). Adequacy of resources is a major issue especially in developing countries. For example, in India, there are distance education providers who have arrangements with local institutions to use the computer and lab facilities – especially the hardware – for the distance learners. When this exceeds the optimum utilization of resources, putting the campus and the distance

education learners at a disadvantage, it results in the criticism that the distance education providers have become parasites of the local campuses (Stella and Gnanam, 2004).

Research in distance education has not revealed much on the vital issues of concern that have gone unanswered (Phipps, 2006). For instance, while research has shown the quality dimensions of distance education, it has not added new knowledge on what an educational institution should do in developing its strategies to remain competitive. Again, the quality dimensions identified in distance education deal only with programmes offered on-line.

2.4 Growth

A growing body of evidence suggests that the future of distance education is characterized by increasing competitive intensity. In light of this trend, distance educators need to adopt strategic marketing orientations to attract and retain the distance education student (Mowen and Parks, 1997). Best (2005) argues that the cost of acquiring a new customer is 5 to 10 times higher than the cost of retaining a customer. Furthermore, a 2 per cent increase in loyal customers has been shown to lower marketing costs by 10 per cent. These benefits can only be enjoyed if distance educators treat the distance education student as a customer. This would require that distance educators strive for the highest degree of quality in those markets. Hakes (1991), asserts that quality is a customer issue.

To achieve quality, distance education institutions need to understand customers' educational needs and to provide educational services that reliably meet those needs (that is, fitness-to-need programmes). Quality assessments are defined by the institution's level of performance in delivering user benefits as expressed by target markets. Thus, service (programme) quality is a measure of how well the service (programme) level delivered matches customer expectations (Lewis and Booms, 1983). Quality assessments should almost certainly be grounded in customer evaluations and not on institution's self-evaluation (Mowen and Parks, 1997). As such, managers of educational institutions need to obtain accurate and current customer satisfaction levels regarding a programme through customer-satisfaction surveys, holding group interviews, and tracking customer perceptions of the quality of their services. The results of such assessments help in improving the quality position of an institution's programme.

The quality position (as given by how well the customer is satisfied or not) helps distance educators in choosing the strategic options to pursue. Strategic alternatives are typically grouped into four generic action categories: hold, grow, harvest, and divest. A hold strategy is undertaken when an institution strives to continue with product innovations whereas a growth strategy entails improvements in technology, faculty instruction, course design or the expansion of course offerings. Harvest strategy involves limiting the amount of resources spent in a programme. However, harvesting strategies must be implemented with care because (1) customer reactions may affect the institution's overall marketed position and (2) rapid market shifts may change the attractiveness of a programme in a short period of time (Best, 2005).

Divest strategy is pursued by management when it drops a programme entirely. It should be noted that management must first decide whether to outsource the programme from another department or institution before dropping it. A careful cost-benefit analysis should be done because nominal improvements could yield marginal revenues to sustain the programme. Similarly, changes in the external environment could cause the market to become more attractive.

The choice of any given strategy such as growth strategy depends on a number of factors. According to Johnson and Scholes (2004), an optimal strategy, that is, strategy selected by an organization to help it achieve its objectives is determined by the management's attitude toward risk, pressure from external environment, corporate culture, and the personal needs and desires of key managers. However, Pearce and Robinson (1986) argue that if the optimal strategy is that of growth and especially if it is horizontal in nature, it requires the development of an innovative service or product so that the organization can better compete in the industry. An innovative service or product in the field of distance education may relate to novelty in the process, which is, offering the service in ways that others (competitors) cannot match. For example, some of the ways may include, prompt marking of assignments, out-of-class-communication with tutors, student support services, and others.

2.5 Current Status of Distance Education Quality Research

Researchers in distance education in the past ten years have concentrated on rigorous studies that are based on theoretical foundations in the field. Among the

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researchers are Fulford and Zhang's (1993), and Sherry, Fulford and Zhang's (1998) studies on learner perception of interaction, Gunawardena's (1995) and Gunawardena and Zittle's (1995) study on the implications of social presence theory for community building in computer conferencing at the University of Hong Kong. Other researchers have dealt on interaction in asynchronous video-conferencing environment (Chen and Willit, 1999). A common theme in the studies cited and other distance education research in the past 10 years is the concept of "interaction", which indicates its centrality in conceptualizing the process of teaching and learning. Still, researches have been conducted on access and equity, especially in India (Dutt, 2003).

Recent trends in distance education research indicate a shift in focus from interaction to assessment of student learning at distance campuses (Hu and Kuh, 2002), use of instructional technologies (Brown, 2003; Benson, et al. 2002; Lucal, et al, 2003; Weiss, et al. 2002) and accessibility (Habel, 2010). Other researchers have conducted studies on the relationships between assessment and instruction preferences (Menucha, 2007), assessment of student and faculty satisfaction with DE programmes (Palmer, 2002). It is evident that these studies have focused on online environment.

An emerging trend is the attempt by distance education researchers to understand the good practices in DE and their application to professional education and training in the field of psychology (APA, 2002). In 2006, the United States Department of Education sought to identify some guidelines that would lead to more consistent and thorough assessment of DE programmes. The aim was to

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formulate some form of best practices to be used by accrediting agencies. More recently, studies have focused on students' perception of academic quality and approaches to study in distance education (Richardson, 2003). However, these attempts have been bedeviled by limitations of the research instruments and the problem of aggregating students' perceptions across different course units.

Studies on quality dimensions emerged around 1980's with Garvin's study on "quality on the line" in 1983. Soon after, a number of studies followed. These were Bell's (1990) study on the management of service quality in education, descriptions of Open and Distance Learning in Developing countries (Daranajan, 2002), evaluative parameters of web-based courses (Brown, et al. 2002), quality indicators for distance education (Chaney, 2007) and quality of Distance Education in preschool teacher training (Gultekin, 2009). These studies have been concentrated in the more developed countries and based on online courses. The countries covered by the studies have well established infrastructure and have a more literate society than is the case in the developing countries.

In Africa and the Commonwealth Countries, studies have been on the achievement of quality in Distance Education (Daniel, et al. 2008) and quality of higher education from the perspective of the university graduates (Abdolrahim, 2009). However, recent developments have seen a shift towards evaluative studies on distance education. In Zimbabwe, a study on students' perceptions on the quality and effectiveness of guidance and counseling services as a support service (Kangai, 2011) found that those students who lived and worked in the rural areas needed quality and effective guidance and counseling and general academic

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support in the following areas: distribution of learning materials (modules), management of coursework (assignments), tutorials, processing of examinations, communication, and individualized counseling. While this study is instrumental in identifying some of the indicators of the dimensions of quality, it does not define the relationship between the dimensions of quality and growth (as astrategy). Africa and the rest of developing countries like Kenya are more concerned with strategies to help in addressing the ever increasing problem of large student numbers who fail to secure University admission due to limited bed capacity. It is in this regard that Baraza (2008) carried out a study to determine the challenges of implementing Distance Education in Uganda.

The trend in research towards quality may be explained by the realization that distance education has caused a serious concern to governments and the quality assurance agencies all over the world about the safety of the national systems, legitimacy of the providers, protecting the public from fake providers, quality of the offerings and so on, the common element being 'concern for quality' (Stella and Gnanam, 2004). Many quality assurance agencies have responded to this need and there is considerable dialogue about ensuring quality in distance education.

Studies on quality of distance education have focused on student satisfaction with distance education and the identification of quality indicators of distance education (Kelsey, Linder and Dooley, 2002; DiDomenico and Bonnici, 1996; Changy, et al, 2007; Hirner, 2008). Garrison (1987) found that immediate and regular interaction with instructors was associated with student satisfaction. Wilkinson and Sherman (1991) shared a similar view when they argued that satisfaction is related to the

ability of distance education to meet individual goals and is a strong motivator for student retention. However, an exploratory student satisfaction study by St. Pierre and Olsen (1989) found that constructive and positive feedback, opportunities to apply learning to real situations, accessible and comprehensible learning materials, the relevance and helpfulness of the study guides, and interaction with support staff were positive determinants of satisfaction in an independent learning programme. Their study further established that the most important single variable for predicting student satisfaction was whether or not students would enroll in another distance education course. This variable accounted for up to 50% of the variance in determining satisfaction with distance education. A follow-up study by Tallman (1994) used a similar satisfaction instrument and found that pre-enrolment sessions, communication with support staff, course materials, timely return of assignments, and personnel/processes were the most influential in explaining levels of student satisfaction. However, these studies did not provide an operational definition of the satisfaction concept in distance education.

Using the student satisfaction construct as the students' contentedness with several components of a course and therefore as a measure of the effectiveness of distance courses, Biner, et al (1994) found five variables that predicted student satisfaction: course management, at-site personnel, promptness of material delivery, instructor, quality of instruction and out-of-class communication with the instructor. Other variables that have been found to influence students' satisfaction with distance education programmes are technology (Pilcher and Miller, 2000), interaction with the instructor on a face-to-face basis rather than through technology (Miller, et al, 1993).

Holdford and Anuprita (2003) studied the service quality dimensions of pharmaceutical education provided through distance education. A 37-item educational service quality instrument and a seven-item satisfaction scale were administered to 372 students in their final year of education. Using factor analysis, they identified five dimensions of service quality that were important in determining student satisfaction with pharmaceutical education. The dimensions were administration, resources, faculty member communication, and faculty member expertise. However, a faculty member's interpersonal behaviour was the most important factor in student satisfaction with a programme offered entirely at a distance.

In a study to determine the dimensions of programme quality in web-based adult education, Pamela (2006) found that six factors determined student satisfaction. These were quality of instruction, administration recognition, advisement, technical support, advance information and quality of course evaluation. These factors captured 65% of the variance observed in the 41 variables that were studied.

Nunan and Calvert (1992) examined quality and standards in distance education using the perceptions of particular stakeholders. Relying solely on documentation provided by institutions studied, their findings showed that development and the use of appropriate technologies, encouragement of excellence in distance teaching, course materials and interaction among lecturers and students were indicators that would foster the achievement of quality in distance education.

In a study to determine the quality indicators of courses and programmes in the field of health education, Chaney, et al (2007) found several indicators. Using desk research, the study focused on recent articles (1987 – 2005) regarding quality of distance education. The search yielded 165 articles and 12 books that were reviewed to gather information on the quality indicators and benchmarks of distance education. The indicators were student-teacher interaction, prompt feedback, student support services, course structure and appropriate tools and media. Myers (2008), in a study to determine the quality indicators within asynchronous distance education courses at accredited institutions, found that technical issues, course design, class procedures and expectations, interaction, and content delivery were factors that identify quality in distance education courses. Hirner (2008) too, carried out a study to determine the quality indicators specific to distance education programmes at community colleges as well as stakeholder's perceived importance of the indicators. He employed the Delphi technique to identify potential indicators. Twenty distance education programme administrators from community colleges and four- year institutions were used for the study. The study's findings identified eight quality indicators, chief among them being timeliness of communication with faculty and feedback on course work, reliability of technology and amount of support. It is important to note that these studies focused on online programmes.

Although the studies aforementioned do not fit the quality dimensions into the categories suggested by Parasuraman, et al (1991), the study by Bell and Shieff (1990) revealed thirteen quality dimensions that determined the nature of service quality at the University of Auckland graduate school of business. The dimensions

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were tangibles, understanding the client, peer group, qualification credibility, visibility of the school and its programmes, staff academic credibility, staff professional credibility, competence, access, reliability, networking, course content/curriculum, and course process. DiDomenico and Bonnici (1996) used the gap analysis to assess service quality within an educational environment in Midwestern University. Using a three part questionnaire, students were asked in the first part, to mark down on a Likert scale what they expected from an ideal university. The second part, a constant sum scale was used to probe students about ten categories in which they were to rate each category to the service experience by distributing one hundred points between the categories. The third and final part examined the university's actual services using a 1 to 7 scale. Twenty students were used for the study. The results showed that students appreciated tangibility of the university (as measured by the architecture). The other variables scored negative. These variables were reliability, responsiveness and competence.

The works of Bell (2003) identified the dimensions that are critical in higher education institutions and labeled them as critical factors. This study and that of DiDomenico and Bonnici (1996) matched the critical factors against those of the *servqual model* dimensions (gap model) developed by Parasuraman, et al (1991). The critical factors were physical facilities, course materials and personal presentation of staff. These dimensions were linked to the tangibles as a quality dimension. Course content, course processes, course delivery and assessment were associated with reliability. The researcher further fitted staff competence, courtesy and security into the assurance dimension. Support services, understanding the customer, feedback and access were linked to empathy as a quality dimension.

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However, the researcher failed to capture the aspect of responsiveness of a programme as a dimension of quality in distance education.

Gultekin (2009) carried out a study to evaluate Anadolu University's Preschool Teacher Training Programme in Turkey to obtain student opinions. A total of 1,026 senior students enrolled in the Preschool Education major at the Open Education Faculty in the University were used as the study subjects. A questionnaire was administered to the students and means (χ) and standard deviation (σ) were calculated to analyze the survey data. The results showed that the opinions of the students were positive on textbooks, television programmes, teaching practices and academic assistance services.

The studies cited in this review have focused on quality in distance education in the developed countries. More importantly, the studies relied on programmes offered online and not those offered using the print media, the commonly used media in the Developing Countries in Africa and Kenya in particular. Webster (1989) argues that measuring service quality in a distance education programme is a prerequisite for delivering action plans such as a growth strategy. However, little is known about the influence that the level of student satisfaction with a programme (as measured by its quality dimensions) delivered entirely at a distance has on the programme's growth. Whereas in India research has been carried out on a wide range of issues such as policy, planning and management, programmes offered, distance learners, instructional processes, and media (Dutt, 2003), research in Kenya is limited.

Most of the studies in Kenya and at the University of Nairobi have focused on learner support services (Bowa, 2008), perceptions on the affordability of distance learning programmes (Rambo and Odundo, 2007), lecturer's attitude towards adoption of DE and the use of e – Learning in teaching (Gakuu, 2007), comparison studies on the performance between DE students and traditional orthodoxy (Mboroki, 2008) and the challenges of quality assurance in the integration of ICT in Open and Distance learning (Kidombo, 2008). No study has been conducted in Kenya on the quality of Distance Education, let alone the measurement of student satisfaction with a distance education programme.

2.6 Theoretical Framework

How do consumers form their initial general attitudes towards "things"? To understand the influence of perceived distance education's quality dimensions on the growth of a DE programme, an examination of the formation of attitudes is necessary. The answers as to how consumers form attitudes towards pursuing or not pursuing a programme of study offered through the distance education mode are of vital importance to educational managers so that they can influence consumer behavior in a desired manner. The experiences of the customers in the consumption process may be used to inform the service provider whether to expand the service (programme) or not. To this end, psychologists have formulated several theories on attitude formation. Some of the theories that have dominated the literature include classical conditioning theory, instrumental conditioning theory, cognitive learning theory, cognitive dissonance theory and the attributive theory.

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2.6.1 Classical Conditioning Theory

This theory asserts that a consumer is an information seeker who uses logical and perceptual relations among events, along with his or her own preconceptions, to form a sophisticated representation of the world (Shimp, 1991). Conditioning is the learning that results from exposure to relationships among events in the environment. Such exposure creates expectations as to the structure of the environment. According to this theory, consumers would therefore, purchase a product that is associated with a favourably-viewed brand name. Their favourable attitude towards the brand name may be the result of repeated satisfaction with other products provided by the same company (Schiffman and Kanuk, 1996). Thus, students may be registering to pursue a degree by distance education mode due to the satisfaction associated with other degree programmes offered by the University of Nairobi.

2.6.2 Instrumental Conditioning Theory

This theory is associated with the American psychologist B. F. Skinner (1938). According to Skinner (1938), most individual learning occurs in a controlled environment in which individuals are "rewarded" for choosing an appropriate behavior. Thus, a favourable experience is instrumental in making the individual to repeat a specific consumption behavior. Proponents of this theory believe that learning occurs through a trial-and-error process, with habits formed as a result of repeated rewards received for certain responses or behaviours (Schiffman and Kanuk, 1996).

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Two types of rewards are worth mentioning since they influence the chances that a response will be repeated, namely positive and negative rewards. Positive reward involves events that strengthen the likelihood of a specific response. For example, if a student has been promoted in his or her place of work as a result of pursuing a distance education degree programme, then he or she is likely to register for another programme offered using a similar mode. Negative reward or reinforcement is an unpleasant outcome that also serves to encourage a specific behavior. A student who is registered to pursue on-campus degree programme and notices that external degree programme graduates also get promoted may opt to register for the external degree programme as well. Critics of instrumental learning theory point out that a considerable amount of learning takes place in the absence of direct reinforcement, either positive or negative. They therefore argue that learning is a function of thinking or a mental process. This is known as cognitive theory.

2.6.3 Cognitive Theory

Cognitive learning theory holds that the kind of learning most characteristic of human beings is a mental activity that basically involves problem solving. Thus, in a situation where consumers seek information about a service in order to solve a problem or satisfy a need, they are likely to form attitudes (either negative or positive) about services on the basis of an information search and their own cognitions, that is, knowledge and beliefs (Schiffman and Kanuk, 1996). According to this theory, consumers would obtain information from their personal experience, the influence of their family and friends, direct marketing, and mass

media. Thus, a distance education learner would form his or her attitude from brochures about the degree programme, family and close friends, staff attached to regional study centres or newspaper advertisements about the distance education programme.

The preceding explanations about attitude formation have stressed the traditional view that consumers develop their attitudes before taking action, that is, attitude precedes behavior. Consumer researchers have argued that there are alternatives that, on careful analysis, are likely to be logical and rational (Kelley, 1991). They have therefore postulated cognitive dissonance theory and attribution theory to explain attitude formation.

2.6.4 Cognitive Dissonance Theory

According to cognitive theory, discomfort or dissonance occurs when a consumer holds conflicting thoughts about a belief or an attitude-object. For instance, when a consumer has made a commitment to buy a product, particularly an expensive one, s/he begins to feel cognitive dissonance when s/he thinks of the unique, positive qualities of the brands not selected. Since the cognitive dissonance occurs after the purchase, it is referred to as post-purchase dissonance. Thus, attitude formation is an outcome of behavior (Petty, et al; 1991). The conflicting thoughts or dissonant information that follows a purchase are prime factors that induce consumers to form their attitudes so that they are consonant with their purchase behaviours. The dissonance propels consumers to take cognitive steps to reduce the unpleasant feelings created by the rival thoughts. Such steps may include rationalizing the

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decision as being wise, seeking out information that support the choice or trying to "sell" to his/her friends the positive aspects of the product.

2.6.5 Attribution Theory

This theory attempts to explain how people assign causality to events on the basis of either their own behavior (self-perception) or the behavior of others (Kelley, 1991). Self-perception holds that attitudes develop as consumers look and make judgements about their own behavior. For instance, if a student enrolls for a bachelor of education degree in his or her first year, the student may aptly conclude that s/he likes distance education programme, that is, s/he has a positive attitude towards the programme.

The behavior of others as an attitude formation factor involves two aspects, namely, attribution to others and attribution to things. Attributions towards others are where an individual would ask 'why?' about a statement or action of another person. The consumer would evaluate the words or the deeds of others to determine if the other person's motives are consistent with the consumer's best interests. If the motives are judged congruent, the consumer is likely to respond favourably. Otherwise, the consumer would reject the other person's words. Attributions towards things involve judging product performance. Specifically, the consumer would want to find out why a product meets or does not meet his or her expectations. In this regard, the consumer would attribute the product's successful performance or failure to the product itself, or to other situations (Folkes, 1988).

The theories on attitude formation are instrumental in growth strategy in a number of ways. First, students registered in the programme may recommend others to join because of the rewards associated with the programme such as promotion at their places of work (Instrumental conditioning theory). Secondly, a student's experiences gained in the programme may be used to inform a distance education institution to adopt a growth strategy (Cognitive dissonance theory). Finally, a consumer's judgement of the performance of a given service (programme) against his/her expectations (Attribution theory) is a good measure of the quality of the service (programme). Quality measures may therefore be used as the basis for undertaking an expansion (growth) strategy by the programme provider.

2.7 Moderating Influence of Environmental Factors

The relationship between the quality dimensions of a distance education programme and the growth of DE programmes may be moderated by environmental factors. For instance, consumer needs (market needs), management's attitude toward risk, the amount of competition in the market and top management's willingness to adopt Distance Education. These factors may be internal or external to the educational institution. Pearce and Robinson (1986) posit that the choice of a strategy cannot ignore the management's attitude toward risk, pressure from the needs and desires of top managers as well as the needs of the market.

2.8 Conceptual Framework

The conceptual framework presented in figure 1 was developed from the literature review. The framework is a diagrammatic representation of the relationships among the quality dimensions and growth of the DE programme.

Figure 1: Model for Quality Dimension and Growth

Independent Variables

- Political Environment
- Social Cultural Environment

Programme Dimension

Tangibles
1. Teaching / Learning Aids
2. Residential session facilitators
3. Teaching facilities
4. Study materials
5. Lectures

Reliability
1. Prompt marking of assignments
2. Currency of learning materials
3. Course relevancy

Dependent Variable

Growth

Responsiveness
1. Clarity of course objectives
2. Flexibility of programme
3. Teaching excellence
4. Responsive support staff
5. Constructive feedback on assingments

- No. of Students admitted per year

- No. of Support Service Centres

Assurance
1. Staff competence
2. Appropriate teaching techniques
3. Ease of use of materials

- No. of Support Staff

Empathy
1. Out-of-class communication
2. Courtesy of support staff
3. Cost of programme
4. Academic and personal counseling

- Consumer Needs
- Manager attitude to risk
- Competition
- Top Managements' willingness to adopt DE

Moderating Variables

Source: Author, 2012

Best (2005) argues that the primary purpose of a strategic market plan is to provide a strategic direction from which to set performance objectives and guide the development of a tactical marketing mix strategy. This requires an institution to determine how well it is meeting customer requirements (expectations). Parasuraman, et al (1988) suggest that service quality, as perceived by consumers, stems from a comparison of what they feel service firms offer (i.e. from their expectations) with their perceptions of the performance of firms providing the services. Perceived service quality is therefore viewed as the degree and direction of discrepancy between consumers' perceptions and expectations. The term "expectations" as used in the service literature refers to the desires or wants of consumers, that is, what they feel a service provider should offer rather than would offer. Exploratory research by Parasuraman, et al (1985) revealed that the criteria used by consumers in assessing service quality fit into five overlapping dimensions. These are tangibles, responsiveness, reliability, assurance, and empathy.

Murphy (1997) noted that distance education programmes must be student-centered in order to be successful. He further noted that distance education programmes must systematically evaluate student satisfaction with the programme. This becomes important since satisfying student needs in distance education is critical to the success of the programme. Thus, a programme's success is measured by how it is meeting students' needs (i.e. how its quality dimensions satisfy students' needs). The assessment of an institution's performance against student expectations is used to inform the institution on its growth. According to Best (2005), growth strategy is an offensive strategy that involves investing marketing

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resources to grow the market or a product's position in a market. Thus, a successful institution in the provision of services is bound to adopt a growth strategy. This is because the customers are satisfied with the services. However, in the event that the customers are dissatisfied with the services (i.e. an institution is not meeting their requirements) an organization is supposed to employ a harvest or divest strategy. Since the University's distance education programme has been marked by a growing number of students, regional centres and support staff, this has been used in the study as the dependent variable.

The relationship between a programme's quality dimensions and its growth may be influenced by extraneous variables such as the political and economic environments. These variables are expected to have an impact on the number of regional centres to be set up as well as the number of students expected to join the programme. For instance, the economic situation obtaining in the country may influence the student's ability to pay fees. Similarly, hard economic times may prevent an institution from spending money to set up more student support centres.

2.9 Summary

The massification of higher education in many countries is placing tremendous pressure on higher education institutions to open up their doors to increasing number of students as demand for higher education soars. Some stakeholders see this proliferation of DE providers as a welcome relief. Others, while acknowledging the necessity of using DE to promote equity and access, perceive the growth as a threat to the quality of distance higher education. This chapter has

examined the quality of distance education with a view to identify the dimensions that are used to define it. Specifically, these dimensions are multi-faceted and comprise tangibles, reliability, responsiveness, assurance and empathy (Parasuraman, et al, 1991).

A review of the studies carried out in the area of quality in distance education has shown that many have centred on the mere identification of the indicators of quality (Hirner, 2008; Commonwealth of Learning, 2009); Chaney, 2007). None of these studies has attempted to determine whether these quality indicators bear any relation to any strategy, leave alone growth. In addition, the studies have focused on online courses.

Although studies cited in the literature have been carried out in the West, they serve in providing an assessment for service quality possessed by the external degree programme. These dimensions have been used to determine whether they have any relation to the growth of DE programme. In other words, can an educational institution rely on the quality dimensions to develop its marketing strategy?

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the approach that was utilized for the collection, measurement and analysis of data. Once the design has been described the next section explains the target population from which data was collected. This is followed by the technique that was used to select a representative sample for the study. The data collection instrument is presented next together with a description of how its validity and reliability was determined. Finally, the procedures for collecting the data as well as data analysis techniques are provided.

3.2 Research Design

The research paradigm employed in this thesis is the positivist approach and uses survey research design. The positivist approach seeks the facts or causes of social phenomena, with little regard to the subjective state of the individual (Hussey and Hussey, 1997). Further, Mugenda and Mugenda (2003) posit that positivists hold the view that there exists a single tangible reality, which is fragmentable into different components. These components are distinct observable parts or concepts that can be inferred from behavior.

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Survey is a positivistic methodology whereby a sample of subjects is drawn from a population and studied to make inferences about the population. The type of survey employed in this study is analytical since the intention was to determine whether there is significant relationship between quality dimensions and the choice of a growth strategy. Thus, data were obtained by fieldwork through survey research design.

Direct observation was also utilized by the researcher. This was done to obtain qualitative data on the status of the dimensions of perceived quality. For example, the tangibles and empathy dimensions.

3.3 Target Population

Judgements about quality are appropriately made within faculties and their departments (Nunan and Ted, 1992). Indeed, Myers (2008) asserts that the quality of a course can be adversely affected by instructor, student, and administrator attitudes. In this regard, the experience of students who had pursued the programme for a period of more than one year, lecturers, and support staff involved in the management of distance education, as described in this section, were employed for the study.

Students enrolled in the Bachelor of Education degree (arts) by distance learning at the University of Nairobi were used as the first category of respondents. The sampling frame was obtained from the Registration for Examination forms for the April 2007 examination session (umis/smis, 2010). The students used were those

in their second and third year of study since they had sufficient experience in the distance education programme. First year students were excluded on account of lacking sufficient information to report on the quality of distance education since they had insufficient experience in the programme. The total number of students targeted was 2036 as shown in appendix E. For theory-testing research, a sample of students has been deemed acceptable and even desirable. A maximally homogeneous sample (for example, a student sample) has important advantages for theory validation research (Yoo, et al; 2000).

Staff formally attached to distance education centres (Regional Study Centres or Extra- mural Centres) were also targeted in the study. These are the staff involved in supporting the efforts of those teaching at a distance and commonly referred to as Resident Lecturers. They therefore, advise, teach, manage, or provide technical and administrative services to support distance teachers and external degree students. There were ten such staff attached to the ten centres around the country (DES, 2007). Two senior administrators (managers) were also included in this category. These were the Associate Dean of the School and Chairman of the Department of Educational Studies charged with the provision of distance education at the University.

In addition, the study targeted lecturers and subject coordinators within thirteen disciplines in the programme, namely Education (Psychology, Educational Foundations, Planning, Administration and Curriculum Development, and Educational Communication and Technology), Linguistics, Literature, History, Business Studies, Kiswahili, Geography, Religious Studies, Economics and

Mathematics. The number of these respondents was obtained from the List of External Degree Programme Tutors and Coordinators (DES, 2011). The teachers are the individuals charged with the responsibility of imparting knowledge to the learners during face-to-face tutorial sessions.

The subject coordinators are the academic staff who assign teaching duties to the lecturers and oversee the teaching of the learners. Some of the subject coordinators are involved in the teaching of students. Thus, they are teachers in the various academic disciplines. Perceptions of academic staff of quality of distance education were important in understanding how they see quality in distance education, that is, the factors influencing the quality of teaching and learning at a distance. The total number of the lecturers including subject coordinators was 140.

3.4 Sampling Techniques and Sample Size

The sampling frame for the students, drawn from the Registration for Examinations Forms (for the Continuous Assessment Test), was stratified on the basis of the year and semester of study to which the students were registered as well as the gender and study centre. This ensured that there was representation on the basis of characteristics of the population and level of study. There were two cohorts for the undergraduate students, that is, second and third year (Appendix E). Stratified sampling ensures that each identifiable stratum of the student population is taken into account, that is, no student member of the population is under or over represented. Systematic sampling was employed to select the respondents. The first sample respondent from a stratum, that is, female or male from one study

centre was selected randomly. The subsequent samples from the stratum were then chosen at every 6th interval since the population (N) was 2036 and the desired sample (n) was 327. Thus, when the 1st female or male was selected from the study centre, then the subsequent respondents were 6, 12, 18, and so on (Levin, et al, 2003).

According to Sekaran (1992) where samples are to be broken into sub-samples (males/females, juniors/seniors, and so on) a minimum sample size of 30 for each category is necessary. In addition, a population of about 3,500 members requires a sample of 346 (Sekaran, 1992). Since the students who registered and sat the Continuous Assessment Test were 2,036 a sample of 327 was selected in accordance with the recommendations of Krejele and Morgan (1970). This sample size was also within that employed in similar studies (Jung, 2011). All the ten staff involved in supporting the efforts of those teaching at a distance as well as the two managers of the Distance Education programme was utilized for the study.

Purposive sampling was used to select the lecturers and subject coordinators. The reason for using purposive sampling was that the teachers were employed on part-time basis and it was difficult to access the entire number of part – time lecturers. Thus, a sample of 92 lecturers and subject coordinators selected on the basis of availability was drawn across the thirteen subject disciplines. Effort was made to ensure representativeness across all the disciplines.

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3.5 Data Collection Methods

This section presents the instrument with which the necessary data was collected. The data collection methods used to collect data was a questionnaire and an observation schedule. The questionnaire was divided into three sections, A, B, and C. Section A was for the students while sections B and C were for the Regional staff and lecturers and administrators respectively.

An observation schedule was designed to capture the key variables of study.

3.5.1 Questionnaire for Students

The questionnaire contained both open-ended and closed-ended questions (Appendix B). This instrument was utilized because of the nature of the respondents. The questionnaire was considered to be more effective due to the high levels of literacy among the respondents who were students. The open-ended questions did not have a limited set of responses but provided a frame of reference for respondent's answers. For instance, the respondent was asked to name areas of dissatisfaction in the provision of distance education.

The closed-ended questions presented respondents with fixed set of choices where they would select the appropriate choice for an answer. The dimensions of quality – tangibles, reliability, responsiveness, assurance and empathy were used as the basic service quality domains from which items were derived for measurement scale. For example, the respondent was asked to judge confirmatory statements with regard to any dimension such as tangibles or responsiveness ranging from

"Strongly Agree" to "Strongly Disagree", "Highly Adequate" to "Highly Inadequate" or "Extremely Important" to "Extremely Unimportant". For instance, how important a given dimension is to a student (customer) was measured using a scale of 1 (Extremely Unimportant) to 5 (Extremely Important). The other category of respondents, were presented with statements to confirm the performance of the University against an indicator which was rated on a five-point scale in which each level was given a weighting point and a descriptor as follows: Fails to Meet the Criterion – 1, Unsatisfactory – 2, Satisfactory – 3, Good – 4, and Excellent – 5.

3.5.2 Questionnaire for Tutors, Regional Staff and Administrators

Both structured and unstructured interview questionnaires were used to collect data from staff attached to the Regional Centres, managers and teachers (Appendix C). For example, administrators at the Regional Centres were presented with questions on the promptness of marking assignments (examinations), flexibility of programme, capacity of programme to serve students and support services. The respondents were to rate the extent to which given quality dimensions indicators of a distance education programme met criteria. A 5- point scale was used. The scoring ranged from 1 for "Fails to Meet Criterion" to 5 for "Excellent". In addition, there were closed ended questions on the institution's capacity to serve students, the staff's opinion on the University's expansion strategy and the demographics of the respondents.

3.5.3 Direct Observation

The schedule was prepared in advance and it consisted of checklists against which the researcher used to evaluate the perceived quality dimension indicators (Appendix D). The schedule was used for the administrators and resident lecturers during Regional Field Visits (organized by the Department of Educational Studies as part of student support services) and during residential sessions. Tangibles were evaluated by observing the status of the learning facilities during residential sessions, the number of students who got issued with all the study units once the requite fees had been paid, availability of teaching aids. For the other dimensions, indicators were also observed both at the institution and at the regional support centres.

3.6 Instrument Validity and Reliability

The Instrument's validity and reliability coefficient were established as described in the following sections.

3.6.1 Instrument Validity

Validity is the extent to which the research findings accurately represent what is really happening in a situation. An effect or test is valid if.it demonstrates or measures what the researcher thinks or claims it does (Coolican, 1992). To ensure that the instrument did not lead to misleading measurement, pre-testing the instrument among a representative group of 30 students was done to ensure face

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validity. Coefficient alpha (Cronbach, 1951) was computed in accordance with Churchill (1979) recommendation. Because of the multidimensionality of the service – quality construct, coefficient alpha was computed for each of the dimensions to ascertain the extent to which items making up a dimension shared a common score. Ideally, the Cronbach's alpha coefficient of a scale should be above 0.7. The lecturers' questionnaire had a coefficient of 0.938 and that of learners was slightly lower than 0.7 as it stood at 0.62 (Appendix F). Cronbach alpha values are, however, quite sensitive to the number of items in a scale. With short scales (scales with fewer than thirty items), it is common to find quite low Cronbach values such as 0.5. The items making up the student questionnaire were only twenty-two and thus the coefficient of 0.6 2 was acceptable.

3.6.2 Instrument Reliability

Reliability is concerned with the findings of the research. One needs to ask him/herself whether the evidence and the conclusions stand up to the closest scrutiny (Raymondo, 1999). If a research finding can be repeated, it is reliable. In other words, if anyone was to repeat the research, then he/she would be able to obtain the same results (Hussey and Hussey, 1997). To ensure reliability of the questionnaire, split-half method was used. The questionnaires were divided into two equal halves, where responses to the first half of the questions were put into one pile and the remainder to another pile. The two piles were then correlated and the correlation coefficient of the two sets of data was computed. The correlation coefficient was 0.828 for the lecturer's questionnaire and that of students' questionnaire stood at 0.556 (Appendix F). The figures show that the questionnaire

was reliable. In addition, a short questionnaire was attached at the end of the main questionnaire in which the respondents were asked to state the questions they found ambiguous, those that they were uncomfortable with and to make any necessary comments that could improve the questionnaire. Questions that were stated as ambiguous were either removed or rephrased.

3.7 Data Collection Procedure

The researcher and his assistants, who had a master's degree in the social sciences, approached the respondents personally. Those respondents who lacked the time to answer the questions in the face-to-face interviews were handed the questionnaires to fill at their own time. Follow up phone calls were made where possible to check on their progress in filling the questionnaires and date of collection of the completed questionnaires. The data from students was collected for one month (August, 2010). Interviews with the staff involved in providing support services were carried out in their regional centres during the Field Visits that are arranged by the Department as part of student support service. Interviews with lecturers and subject coordinators were done in two weeks during the residential session periods of April, August and December, 2010. Direct observation of the dimensions was carried out both at the regional centres and at the residential session's schools.

3.8 Operational Definition of the Study Variables

The variables of this study were measured using objective indicators. The dependent variable was the growth strategy. This variable was measured by the use

of four items – institution's expenditure on promotion, student enrolment, support
centres, number of lecturers and support staff employed. The independent variable
was the quality dimension and its measures were tangibles, reliability,
responsiveness, assurance and empathy. The indicators of these variables are
described in Table 3.1.

Table 3.1: Operational Definition of Study Variables

Variable	Indicator
Tangibles	Residential session facilitators Teaching aids Study materials Physical facilities Lecturers
Reliability	Prompt marking of assignments Currency of learning materials Course relevancy
Responsiveness	Clarity of course objectives Flexibility of programme Teaching excellence Responsive support staff Constructive feedback on assignments
Assurance	Staff competence Appropriate teaching techniques Ease of learning materials
Empathy	Out-of- class communication with tutor Courtesy of support staff Cost of programme Provision of academic and personal counseling

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3.9 Data Analysis

Suganthi and Anand (2004) recommend that the tools for measuring quality in any organization are the mean, frequencies, standard deviation, and percentages. The Pearson product – moment correlation was used to answer the research questions. This is a statistical technique which is used to describe the strength and direction of the linear relationship between two variables which should be measured on interval (continuous) scale (Pallat, 2005). For example, it can be used in helping to answer a question on whether there is a relationship between tangibles and growth pattern. The Pearson correlation coefficient (r) can take values from -1 to +1. The sign indicates whether there is a positive or negative correlation. A positive sign shows that as one variable increases, so too does the other or a negative correlation indicate that as one variable increases, the other decreases. The size of the absolute value (ignoring the sign) provides information on the strength of the relationship. A perfect correlation of 1 or -1 indicates that the value of one variable can be determined exactly by knowing the value of the other variable. On the other hand, a correlation of 0 indicates no relationship. The results of the correlation were interpreted in view of the weaknesses (factors) associated with correlation analysis. These are the non-linear relationship, outliers and correlation versus causality (Pallat, 2005). The significance level of the tests was set at 0.05.

Mann-Whitney U test was also employed to test for the differences between females and males opinions on the performance of the University of Nairobi in providing distance education programme. The data analysis was done using the Statistical Package for Social Sciences (SPSS) Version 20.

3.9.1 Measurement Scales for the Variables

Table 3.2 shows the measurement scales for the independent and dependent variables for the study.

Table 3.2: Measurement Scales for the Independent and Dependent Variables

Variable	Measurement Scale
Independent Variable: Quality Dimension	
Tangibles	Interval
Reliability	Interval
Responsiveness	Interval
Assurance	Interval
Empathy	Interval
Dependent Variable: Growth	
Student enrolment	Ordinal
Support centres	Nominal
Lecturers	Nominal

3.9.2 Research Questions

The questions relating to the anticipated relationships between the quality dimensions and growth strategy were answered using the Pearson product-moment correlation test statistic. Table 3.3 shows a summary of the research questions and related hypotheses and objectives for the study.

Table 3.3: Objectives, Research Questions and Hypothesis

Objective	Question/Hypothesis	Analysis
Objective 1: To determine the relationship between tangibles dimension and growth of External Degree Programme (EDP)	Is there a significant relationship between a programme's tangibles and growth of EDP? H_1: There is no significant relationship between perceived tangibles dimension and growth of EDP.	Pearson correlation
Objective 2: To assess the relationship between reliability dimension and growth of EDP.	Could there be a significant relationship between reliability of a programme and growth of EDP? H_2: There is no significant relationship between perceived reliability dimension and growth of EDP.	Pearson correlation
Objective 3: To determine the relationship between responsiveness of a programme and growth of EDP	What is the relationship between a programme's responsiveness and growth of EDP? H_3: There is no significant relationship between the perceived responsiveness dimension and growth of EDP	Pearson correlation
Objective 4: To determine the relationship between assurance dimension and growth of EDP	Is there a significant relationship between the assurance dimension and growth of EDP? H_4: There is no significant relationship between the perceived assurance dimension and growth of EDP	Pearson correlation
Objective 5: To determine the relationship between empathy dimension and growth of EDP	What is the relationship between empathy dimension of a programme and growth of EDP? H_5: There is no significant relationship between the perceived empathy dimension and growth of EDP.	Pearson correlation
Objective 6: To determine the relationship between moderating environmental factors and growth of EDP	Do moderating environmental factors influence the relationship between quality dimensions and growth of EDP? H_6: There is no significant relationship between moderating factors and the growth of EDP	Chi-square test

3.10 Summary

This chapter has discussed the methodology employed to achieve the objectives of the study. The research design, target population, sampling procedure and sample size, data collection methods and a description of the research instruments have been presented. The chapter has also provided the reliability and validity of the research instrument as well as the operational definition of variables used in the study. Finally, the measurement scales and data analysis techniques were presented.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the data analysis and its findings. It begins with the findings on the response rate, followed by the profiles of the respondents by gender, study centres, age, experience of lecturers and their qualifications. Various statistical techniques are used to analyze the data and the findings are interpreted.

4.2 Response Rate

The sample used in this study was 327 out of a population of 2,036 students. Out of this sample, 92.4 per cent of the questionnaires were returned (from 302 student respondents). This was attributed to the presence of the research assistants and the researcher during the data collection period at the residential centres. The response rate from lecturers (both resident lecturers, administrators and part – time tutors) was 40% and that of the distance education managers was 100%.

4.3 Profile of Students

The study sample of three hundred and twenty seven (327) respondents was proportionately selected from the University's six (6) regional study (Extra- mural) centres located in Kakamega, Kisumu, Mombasa, Nairobi, Nakuru, and Nyeri. The sample split by proportion of respondents by percentage in the overall student sample is as shown in Table 4.1.

Table 4.1: Frequency Distribution for Study Centre of Students

Study Centre	f	%
Kakamega	46	15.0
Kisumu	64	21.3
Mombasa	27	9.0
Nairobi	79	26.2
Nakuru	36	12.0
Nyeri	50	16.6

$n = 302$

Table 4.1 shows that Nairobi Support centre (26.2%) and Kisumu centres (21.3%) have the largest enrolments while Mombasa centre (9.0%) and Nakurucentre (12.0%) have the lowest enrolment. The typical distance learning programme student is separated from his/her instructor during most of the time and as a consequence he/she has to attend holiday learning sessions at a designated centre. Thus, as at the time of this study, many students originated from Nairobi and Kisumu study centres (Regional Centres). The gender composition of the students is as shown in Table 4.2.

Table 4.2: Frequency Distribution for Sex of Students

Sex	f	%
Male	68	55.8
Female	134	44.2

$n = 302$

The composition of students by sex was 55.8% for males and 44.2% for females. Thus, the External Degree Programme has more male than female students.

4.4 Profiles of Tutors

The study also involved tutors and administrators (both residents and part – time). It is important to note that all resident tutors are involved in the teaching of External Degree Programme and that they also act as administrators in their regional centres. There were 92 such respondents. However, only a total of 37 tutors and administrators returned their questionnaires. The profiles of the tutors in terms of their age, sex, academic qualification and teaching experience in the External Degree Programme are shown in the frequency Tables 7, 8, 9 and 10 as presented in this section.

(a) Age of lecturers

Majority of the lecturers were aged between 36 – 45 years (45.9%) with only one lecturer being of the age over 65 years (2.7%). The age distribution of the lecturers is as shown in the frequency Table 4.3.

Table 4.3: Frequency Distribution for the Age of Lecturers

Age	f	%
Below 35 years	2	5.4
36 – 45 years	17	46.9
46 – 55 years	15	40.5
56 – 64 years	2	5.4
65 years and above	1	2.7

$n = 37$

The findings show that the tutors are mature enough to hold reasonable opinions regarding quality dimensions of the External Degree Programme.

(b) Sex of Tutors

The distribution of the sex of the tutors is as shown by the frequency Table 4.4.

Table 4.4: Frequency Distribution for the Sex of Tutors

Sex	f	%
Male	21	56.8
Female	16	43.2

$n = 37$

Majority of the respondents were males (56.8%). The quality dimensions identified are therefore associated with the males. However, the opinions of female lecturers

regarding the dimensions of quality are equally significant as they constitute 43.2% of the respondents.

(c) Qualifications of Tutors

Most tutors teaching in the distance learning programme hold master's degree 67.6%).. However, there are those holding doctorate degrees (32.4%). These findings are as shown on Table 4.5.

Table 4.5: Frequency Distribution for the Qualifications of Tutors

Qualification	f	%
Masters degree	25	67.6
Doctorate degree	12	32.4

$n = 37$

These findings are consistent with the University policy that persons to be employed to provide teaching services to undergraduate students must hold a minimum of a master's degree. The findings show that the tutors meet the requirements (they have the relevant qualifications) to teach at the University.

(d) Teaching experience of Tutors

The research sought to determine the number of years that the tutors have been involved in the provision of teaching services to the External Degree Programme students (teaching experience). This experience ranged from five years and below to those who have been teaching for a period of more than twenty five years. The

results of this analysis are as outlined in Table 4.6. The number of years was used to give an indication on the opinion of the tutors regarding the quality of the programme. It was argued that the higher the experience, the more accurate the tutor was in giving the quality of the dimensions envisaged in the programme.

Table 4.6: Frequency Distribution for Tutors' Teaching Experience

Time Period (years)	f	%
5 years and below	9	24.3
6 – 11 years	19	51.4
12 – 17 years	6	16.2
18 – 24 years	3	8.1
25 years and above	0	0.0

$n = 37$

The majority of the lecturers have taught in the External Degree Programme for a period of 6 – 11 years (51.4%). Only 3 lecturers had a teaching experience ranging between 18 – 24 years. None of the lecturers has ever taught for more than 24 years. This could be attributed to the fact that the programme was started in 1986. The lecturers have gained a lot of experience to offer reliable information on the distance education programme.

4.5 Importance of Quality Dimensions Possessed by the External Degree Programme

Respondents were asked to rank the quality dimensions possessed by the Bachelor of Education degree programme in order of how important the respondents regarded the dimensions. The scoring ranged from "5 = Most Important" to "1= Least Important" quality dimension possessed by the programme. The individual quality measures have a significant contribution to the overall perception of quality of the distance learning programme. The respective rankings of these individual quality dimension measures are as shown in Table 4.7.

Table 4.7: Mean and Standard Deviations for the Importance of Quality Dimensions

Dimension	$\dot{M}$	SD
Reliability	4.57	.509
Tangibles	4.43	.626
Responsiveness	4.61	.540
Assurance	4.53	.603
Empathy	4.41	.704

$n = 302$

Table 4.7 shows that all the quality dimensions were ranked highly in contributing to the quality of the distance learning programme. However, the quality dimension of responsiveness was ranked the most important with a mean score of 4.61 followed by reliability ($M = 4.57$), assurance ($M = 4.53$), tangibles ($M=4.43$) and empathy coming last with a mean score of 4.41. Thus, the extent to which each of

the individual quality dimensions exist in the programme contributes to overall rating of the quality of the distance learning programme. Each of the dimensions had a mean score of 4 and above. This implied that the quality dimensions were important to both female and male respondents.

4.6 Assessment of Performance of Quality Dimensions against Student Expectations

Respondents rated the performance of each of the quality dimensions against their expectations. This study used the disconfirmation model to evaluate the quality dimensions of the distance learning programme. This model is based on the disconfirmation paradigm developed by Bolton and Drew (1991) which defines quality as the gap between customers' expectations and perceptions of actual service delivered. A customer perceives quality positively only when the service provider meets or exceeds his expectations (Robledo, 2001).

The most important model developed upon this theory is SERVQUAL (Parasuraman *et al.*, 1985). In the original SERVQUAL model, specific criteria by which customers evaluate service quality are defined on the basis of five major dimensions, namely: tangibles (the appearance of physical facilities, equipment, personnel, and communications materials), reliability (the ability to perform the promised service dependably and accurately), responsiveness (the willingness to help customers and provide prompt service), assurance (the competence of the system and its credibility in providing a courteous and secure service) and empathy

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or approachability, which is the ease of access and effort taken to understand customers' (students') needs.

The model begins with the assumption that customers are able to articulate both their expectations of the general characteristics and determinants of quality service and also their perceptions of actual and current service quality for a specific service provider. The model therefore not only provides an assessment of customer views of current service quality; it also provides a yardstick in terms of customers' expectations of what that service quality should be. Table 4.8 shows the perceived-expected service gap of the distance learning programme.

Table 4.8: **Perceived - Expected Service Gap of the External Degree Programme**

Dimension	Expected Performance (%)	Perceived Performance (%)
Reliability	95	25
Tangibles	90	55
Responsiveness	95	70
Assurance	90	30
Empathy	82	65

$n = 394$

The Perceived versus Expected Service Performance Gap as depicted by Table 4.8 shows that the distance learning programme falls short of customer expectations on all the five quality dimensions. The greatest gap is noted for the quality dimensions of reliability (-70) and assurance (-60) while the gap is relatively lower

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for the quality dimensions of empathy (-17), responsiveness (-25), and tangibles (-35). This implies that the programme is currently underperforming in all the quality dimensions with the most deviation occurring with respect to the dimensions of reliability and assurance. Table 12 further shows that the gap between perception and expectation for the quality dimension of assurance is most significant on students' overall satisfaction with the programme ($p=0.049$ and is significant at the 95% confidence level). Table 4.9 shows the correlations between the various perceived quality dimensions of the External Degree Programme as reported by the respondents.

Table 4.9: Correlations between Individual Quality Dimensions

Correlations

		Importance of reliability	Importance of tangibles	Importance of responsiveness	Importance of assurance	Importance of empathy	student overall satisfaction with the provision of the B.Ed degree
Importance of reliability	Pearson Correlation	1	.277**	.285**	.411**	.241**	.065
	Sig. (2-tailed)		.000	.000	.000	.000	.263
	N	302	302	302	302	302	302
Importance of tangibles	Pearson Correlation	.277**	1	.381**	.436**	.449**	.073
	Sig. (2-tailed)	.000		.000	.000	.000	.208
	N	302	302	302	302	302	302
Importance of responsiveness	Pearson Correlation	.285**	.381**	1	.440**	.327**	-.004
	Sig. (2-tailed)	.000	.000		.000	.000	.950
	N	302	302	302	302	302	302
Importance of assurance	Pearson Correlation	.411**	.436**	.440**	1	.389**	.113*
	Sig. (2-tailed)	.000	.000	.000		.000	.049
	N	302	302	302	302	302	302
Importance of empathy	Pearson Correlation	.241**	.449**	.327**	.389*	1	.037
	Sig. (2-tailed)	.000	.000	.000	.000		.517
	N	302	302	302	302	302	302
student overall satisfaction with the provision of the B.Ed degree	Pearson Correlation	.065	.073	-.004	.113*	.037	1
	Sig. (2-tailed)	.263	.208	.950	.049	.517	
	N	302	302	302	302	302	302

**·Correlation is significant at the 0.01 level (2-tailed).
*·Correlation is significant at the 0.05 level (2-tailed).

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The gap between customer perception of the quality dimension and expectation is most significant (*p*-value = 0.113 and is significant at the 95% significance level) for the assurance dimension. This, therefore, implies that the assurance is the most important quality dimension impacting on overall student satisfaction. Thus, the starting point for improving customer satisfaction of the distance learning programme is in addressing the quality assurance dimension.

Table 4.9 shows further that correlations between individual quality dimensions are significant. This cross-relationship is possible because the components that make up a particular dimension are also responsible for defining the other dimensions, albeit with different mix compositions. The correlation coefficients between respective quality dimensions are highly significant at both the 99% and 95% confidence levels. This means that institutionalizing any one of the dimensions of reliability, assurance, empathy, responsiveness, and tangibles has a direct impact on the other dimensions.

4.7 Indicators of Quality Dimensions

The study extracted certain key dimensions of quality factors which explained 62.88% of the total variation in the programme's quality. These factors make the most significant contribution to the total basket variation in the quality dimensions of the distance learning programme. The results of the specific quality dimensions are presented in this section. The section is divided into two parts. The first part presents the descriptive statistics for each of the indicators of quality dimension identified from the literature. These quality dimensions are tangibles, reliability,

responsiveness, assurance and empathy. The second part presents the results of the analysis of the research questions and hypotheses based on each of the indicators of quality dimension.

4.7.1 Tangibles Dimension

The study sought to determine the factors that related to the tangibles dimension. The relationship between the tangibles dimension and the growth strategy was also evaluated.

(a) Indicators of Tangibles Dimension

Respondents were presented with five factors of the tangibles dimension that they were supposed to rate on the basis of how "Adequate/Satisfactory" or "Inadequate/Unsatisfactory" the factors were in the External Degree Programme. The factors to be rated were; study materials, learning facilities, learning aids, support staff and tutors/lecturers. A five point Likert Scale was used to measure the variables. The scoring ranged from "5 points for Highly Adequate" to "1 point for highly inadequate". The findings are presented in the following sections.

(i) Adequacy of Study Materials

The adequacy of study materials was rated by the respondents on the basis of how adequate or inadequate they were to the students. This was also to be corroborated by direct observation on the number of units a student was able to be issued once

the requisite fees had been paid. The study materials are printed at the Printing Section located at Kikuyu Campus after a lengthy procurement process for the newsprint. Once printed, they are stored to be later issued to the students. Some of the study units are stored in the Regional Centres for issuance to students. The study materials are used to supplement the face – to – face tutorials. They are therefore are used by the learners during the time they are physically separated from their tutors. They are therefore used during independent study (home study) when they are away in their homes or work stations. The findings on this variable are shown in Table 4.10.

Table 4.10: Frequency Distribution for the Adequacy of Study Materials

	Adequacy of Study Materials									
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	2	20.0	5	50.0	1	10.0	2	20.0
Tutor	1	3.8	10	37.0	10	37.0	6	22.2	0	0.0
Learner	45	14.9	123	40.7	109	36.1	23	7.6	2	0.7

n for the Resident Lecturers = 10, n = 27 tutors and n = 302 students

Twenty percent of the Resident Lecturers rated the study materials as inadequate or unsatisfactory with 37% of the tutors and 40.7% of the learners rating the provision of study materials as also being unsatisfactory or inadequate. An equal number of the resident lecturers (20%) rated the provision of study materials as

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excellent. Twenty percent of the tutors and 30% of the learners rated the provision of the study materials as satisfactory. However, a very minimal percentage of the learners considered the provision of study materials as being excellent (0.66%). Observations revealed that some students were not being issued with all the units for the semester. Overall, it can be concluded that the provision of study materials does not meet the expectations of the stakeholders.

(ii) Adequacy of Learning Facilities

The other tangibles dimension indicator was the learning facilities. The study sought to identify how adequate or satisfactory they were with regard to the number of learners admitted to pursue a degree offered at a distance at the University. The respondents were to rate the learning facilities on a scale that had a score of 1 point for "facilities fails to meet criterion" and 5 points for "Excellent". Observations were made on the learning facilities as the students were doing their studies. Learners undergo their learning experiences in contracted institutions located within the City of Nairobi and surrounding areas. At times, students report to Kikuyu Campus for their face – to – face tutorials sessions and for library services. The tutorial sessions are offered during the school holidays. The tutors also visit Kikuyu Campus for the purpose of collecting and marking of examination scripts or to investigate students' unrecorded marks. The results of this indicator are as shown in Table 4.11.

Table 4.11: Frequency Distribution for the Learning Facilities

	Adequacy of Learning Facilities								
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	2	20.0	5	50.0	1	10.0	2	20.0
Tutor	1	3.8	10	37.0	10	37.0	6	22.2	0	0.0
Learner	45	14.9	123	40.7	109	36.1	23	7.6	2	0.7

Only an insignificant number of tutors and learners (2.9% and 3.7% respectively) rated the adequacy of learning facilities as being excellent. None of the Resident Lecturers rated the learning facilities as excellent. However, 50% of these Resident Lecturers considered the adequacy of the facilities as being satisfactory with 74 of the learners (25.4%) rating the adequacy of the facilities as satisfactory or adequate. Thirty – three percent of the learners considered the adequacy of the learning facilities as unsatisfactory or inadequate and 2 of the resident lecturers (20%) as well as 25.9% of the tutors placed the adequacy of the learning facilities at the unsatisfactory level. The implication of these findings is that all the stakeholders consider the learning facilities as not meeting their expectations given the number of students admitted to the programme. Indeed, an observation of the facilities showed that some learners could not secure ·sitting space inside the classrooms during lessons.

(iii) Teaching/Learning Aids

The learning aids such as computers and audio cassettes that complement study materials in the provision of distance education were also rated by the stakeholders as to whether their provision was satisfactory /adequate or not. Audio cassettes are produced at the Printing Section at the College of Education and External Studies. Students use computers for desk research in writing their term papers. The tutors too utilize the computers for research into their respective disciplines. The findings on this indicator are shown in Table 4.12

Table 4.12: Frequency Distribution for the Adequacy of Teaching/Learning aids

	Adequacy of Teaching/Learning Aids									
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	1	10.0	5	50.0	3	30.0	1	10.0	0	0.0
Tutor	7	25.9	17	63.0	2	7.4	1	3.7	0	0.0
Learner	187	61.9	83	27.5	13	4.3	12	4.0	7	2.3

No Resident Lecturer or Tutor rated the adequacy of the teaching/learning resources as being excellent. Lower percentages (2.3%) of the learners consider the provision of teaching/learning resources as excellent. It is worth noting that a majority of the learners (61.9%) do not see the teaching/learning resources as

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being adequately provided. No student was being issued with a cassette while collecting the study materials.

(iv) Support Staff

The other factor of the tangibles dimension was the adequacy of support staff to coordinate and supervise the various activities of the distance education programme. These individuals are useful in the provision of distance learning. They are the persons who assist the tutors in the overall organization of the learning experience in the study centres or residential schools where learners undertake their face – to – face tutorial sessions. For example, they are the individuals who issue study materials as well as distribution of marked term papers. They are also used in the administration of examinations especially in the packing and sorting of examination booklets during residential sessions. The respondents were to rate the adequacy of the support staff on a scale ranging from "Excellent" to "fails to meet criterion". The scoring was 5 points and I point respectively. The result of the data analysis on this indicator is depicted in Table 4.13.

Table 4.13: Frequency Distribution for the Adequacy of Residential Session Facilitators/ Support Staff

	Adequacy of Residential Session Facilitators/Support Staff									
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	0	0.0	3	30.0	7	70.0	0	0.0
Tutor	0	0.0	3	11.1	8	29.6	14	51.9	2	7.4
Learner	25	8.3	53	17.5	63	20.9	147	48.7	14	4.6

The respondents were agreed that the support staff is adequate. About forty nine percent (48.7%) of the learners rated the adequacy of the support staff during the residential sessions as being good. A slightly larger percentage of the tutors. (51.9%) rated the provision of the support staff during the residential sessions to coordinate the programme's activities as good.

(v) Adequacy of Tutors

The last tangibles dimension factor to be rated by the respondents was the adequacy/sufficiency of tutors to provide teaching services to the learners during the face-to-face tutorials. The tutors are the persons charged with the responsibility of carrying out the academic discourse. They therefore teach, examine, and administer examinations and mark students' term papers and examination papers. The rating was done on a 5 – point scale in which 5 points represented "Excellent"

while I point represented "Fails to meet criterion". The finding of this analysis on the sufficiency of tutors is as presented in Table 4.14.

Table 4.14: Frequency Distribution for the Sufficiency of Tutors (Lecturers)

	Adequacy of Tutors									
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	0	0.0	4	40.0	5	50.0	1	10.0
Tutor	2	7.4	5	18.5	6	22.2	12	44.4	2	7.4
Learner	3	1.0	10	3.3	14	4.6	208	68.9	67	22.2

Three per cent of the learners (3.3%) consider the number of tutors to be insufficient. However, 44% of the tutors consider themselves as sufficient to disseminate knowledge to the large student population. About 69% of the learners consider the provision of academic staff in their learning experience to be good. Only 7% of the tutors rate their adequacy to discharge their duties as highly inadequate (the number of tutors fails to meet the sufficiency criterion).

(b) Tangibles and Growth

The first objective was to determine the relationship between the tangibles quality dimension and growth of the External Degree Programme. It was postulated that if the tangibles dimension does not satisfy the learners, then growth cannot be realized since the learners would neither register for a programme nor recommend

a colleague/friend to join in the programme. The following null hypothesis was formulated to aid in the achievement of the stated objective: H_o: There is no significant relationship between tangibles dimension of an External Degree Programme and its growth. From this key hypothesis, three other sub-hypotheses were generated based on the number of growth strategy variables. The test results of these sub-hypotheses are presented and described in the sections that follow.

The first sub - hypothesis was to determine whether there was a relationship between the tangibles dimension of the External Degree Programme and the number of students registered in the programme.

Data was collected to test this research hypothesis from the study materials, availability of learning facilities, learning aids, support staff and lecturers. A five-point scale was used to determine the extent to which these indicators of the tangibles dimension were rated by the lecturers or tutors as either being excellent or failing to meet criterion. The learners too, were to rate the extent to which the variables were adequate or inadequate in the provision of the degree programme at the University. The relationship between the tangibles and growth strategy (as measured by the number of students) was investigated using Pearson's product – moment correlation. It had been hypothesized that there was no significant relationship between tangibles and the growth as measured by the number of students enrolled. A significance level of $p < 0.05$ was utilized. The results of this regression analysis are as shown in Table 4.15

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Table 4.15: Regression for Tangibles and the Number of Students Registered.

	Lecturers	Support Staff	Learning Aids	Learning Facilities	Study Units
Pearson's Correlation	.102	.010	.062	-.060	.047
Sig. (2-tailed)	.076	.861	.280	.302	.418
n	302	302	302	302	302

Table 4.15 shows that there was a weak positive relationship between the number of students registered in the programme and the lecturers employed ($r = .102$, $n = 302$, $p=.076$), support staff ($r = .010$, $n = 302$, $p = .861$), learning aids ($r = .062$, $n = 302$, $p = .280$) and study units ($r = .047$, $n = 302$, $p = .418$). However, there was a weak negative correlation between the number of students and the learning facilities ($r = -.060$, $n = 302$, $p = .302$). The total correlation coefficient was 0.161 at 95% significance level. This implies that the number of students registered in the programme explains only 2 per cent of the variance in respondents' scores on the tangibles dimension scale. Thus, at the statistical significance level of $p<.05$, it can be concluded that there is no significant relationship between the students registered into the External Degree Programme and the tangibles dimension.

The relationship between the tangibles dimension (as measured by the adequacy of lecturers, support staff, learning aids, learning facilities and study units) and the growth of External Degree Programme (measured by the number of regional centres) was evaluated to test the following null hypothesis.

H_0: There is no significant relationship between the tangibles dimension of the External Degree Programme and the number of regional centres. The result of the Pearson's correlation coefficient is as presented in Table 4.16.

Table 4.16: Regression results for Tangibles and Number of Regional Centres

	Lecturers	Support Staff	Learning Aids	Learning Facilities	Study Units
Pearson's Correlation	-.047	.060	-.062	-.102	-.010
Sig. (2-tailed)	.418	.302	.280	.076	.861
n	302	302	302	302	302

The correlation coefficient for study units ($r = -.047$, $p = .418$), learning aids ($r = -.062$, $p = .280$), lecturers ($r = -.102$, $p = .076$) and support staff ($r = -.010$, $p = .861$) is negative but very weak. The coefficient for learning facilities is positive but also weak ($r = 060$, $p = .280$). The implication is that there is a weak relationship between the number of regional centres that have been established to offer support services to students registered in the External Degree Programme and each of the tangibles dimension variable at the $p<.05$ significance level. Hence it can be implied that there is no significant relationship between the tangible dimension and the number of regional centres established to offer support services to students.

The relationship between the tangibles dimension and the number of resident lecturers employed to offer academic support to students was also investigated using the Pearson's product-moment correlation coefficient to test the following hypothesis.

H_o: There is no significant relationship between the tangibles dimension and the number of resident lecturers employed to offer academic support.

This hypothesis was stated to help in determining whether there was a significant relationship between the tangibles dimension and growth (measured using the number of resident lecturers. Ther was a weak negative relationship between the number of resident lecturers employed at the regional centres and the tangibles dimensions of study units, learning aids, support staff and lecturers. There was also a weak positive relationship between the number of resident lecturers and the tangibles dimension of learning facilities. The results are as shown in Table 4.17.

Table 4.17: Regression results for the Tangibles and Number of Resident Lecturers

	Lecturers	Support Staff	Learning Aids	Learning Facilities	Study Units
Pearson's Correlation	-.047	.060	-.062	-.010	-.102
Sig. (2-tailed)	.418	.302	.280	.861	.076
n	302	302	302	302	302

Table 4.17 shows that the significance test values for all the growth variables fall below 0.5 except for the support staff. Since the strength of the relationship between the tangibles dimension variables and growth at $p<.05$ significance level is weak, we conclude that there is no significant relationship between the tangibles

dimension and the number of resident lecturers employed to offer academic support services at the regional centres.

4.7.2 Reliability Dimension

This quality dimension was measured using the indicators of currency of the learning materials, prompt marking of assignments and course relevancy. In addition, the reliability dimension and its relationship with growth were also explored. The findings on the analysis of the indicators and the relationship between the reliability dimension and growth of EDP are presented in the following sections.

(a) Indicators of Reliability Dimension

The indicators for the reliability dimension were rated on a scale ranging from highly disagree (fails to meet the particular feature's criterion) to highly agree (excellent). The scoring was 1 point for "Highly disagree" and 5 points for "Highly agree". The findings on these indicators are as presented in Tables 22, 23 and 24.

(i) Currency of the learning materials

Currency of study materials measured how up-to-date the learning materials (study units) that are issued to students for use while away from the learning institution. Table 4.18 shows that the learners rated them at 33% while the tutors rated them at 29.6% on the currency scale.

Table 4.18: Frequency Distribution for Currency of Learning Materials

	Currency of Learning Materials									
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	3	30.0	0	0.0	3	30.0	3	30.0	1	10.0
Tutor	1	3.8	8	29.6	1	44.4	6	22.2	0	0.0
Learner	42	13.9	101	33.4	67	22.2	68	22.5	24	7.9

n for the Resident Lecturers = 10, n for the Tutors = 27 and n for Learners = 302

Thirty – four percent of the resident lecturers and tutors and 13.9% of the learners found the learning materials as falling below the currency criterion. They were highly disagreed that the materials were up-to-date. The study materials were developed in 1986 and have not been reviewed to-date. However, the Department has taken the initiative to review the materials to ensure that they are current with the market trends. The exercise is currently on – going and is likely to end by the year 2012.

(ii) Prompt Marking of Assignments

The respondents were to rate the turn – around period for marking of assignments. Once the students write their term papers, the tutors are given one month within which they are supposed to return them to the learners. The papers are required to be submitted back to the Department for onward issuance to the learners when they

report for Residential Sessions. The rating of prompt marking of assignments by the respondents is depicted in Table 4.19.

Table 4.19: Frequency Distribution for the Promptness in Marking Assignments

	Prompt Marking of Assignments									
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	4	40.0	3	30.0	1	10.0	2	20.0
Tutor	1	3.7	2	7.4	10	37.0	12	44.4	2	7.4
Learner	11	3.6	65	21.5	42	13.9	158	52.3	26	8.6

Table 4.19 shows that 52.3% of the learners rated prompt marking of assignments as good with a further 8.6% of these learners rating this criterion as excellent. Only 21.5% of the learners who do not agree that there are prompt marking of their assignments. About 7.4% of the tutors also share this view that prompt marking of assignments is unsatisfactory. Overall, the learners are satisfied with this variable. The students are the consumers, and as such, prompt marking of assignments as part of their learning experience is satisfactory in as far as examinations are concerned.

(iii) Course Content Relevancy

The final indicator of the reliability dimension was the relevancy of the course being pursued to the learners. In other words, is the course content up-to-date and does it reflect market demand? The Programme is designed for would – be teachers. This variable was important to inform on whether the content being offered was applicable in discharging their duties as teachers in the school curricula. The finding is as presented by Table 20.

Table 4.20: Frequency Distribution for the Relevancy of Course Content

	Course Content Relevancy									
	Fails criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	2	20.0	3	30.0	4	40.0	1	10.0	0	0.0
Tutor	1	3.7	5	18.5	10	37.0	10	37.0	1	3.7
Learner	1	0.3	4	1.3	16	5.3	153	50.7	128	42.4

Table 24 shows that 42.4% and 50.7% of the learners rated the criterion of course content relevancy with respect to market demands (needs) as being both excellent and good respectively. Only 20% of the resident lecturers and 3.7% of the tutors felt that the course content does not meet the market needs criterion.

(b) Reliability and Growth

The second objective was to determine whether there was any relationship between the reliability dimension of the External Degree Programme and its growth. To achieve this objective, the following research hypothesis was formulated

H_o: There is no significant relationship between a programme's reliability dimension and its growth pattern. It had been postulated that there is no significant relationship between reliability dimension and the growth of External Degree Programme. From this main research hypothesis, two other sub - hypotheses were generated as presented in the following sections.

The first sub - hypothesis was stated to give insight on the relationship between the External Degree Programme's reliability and the number of students registered into the programme. The null hypothesis that there is no significant relationship between the reliability dimension and growth was tested.

Data for this question was obtained from the variables of up-to-date learning materials, prompt marking of assignments and relevance of course to the market needs. These variables were assessed from both the resident lecturers, tutors and the learners. The Pearson's product-moment correlation coefficients for the analysis are as given in Table 4.21. Ideally, the number of students registered in the degree programme would be affected by the quality of the programme as measured by the reliability of a programme.

Table 4.21: Correlation between Number of Students and Reliability

Measure	Up-to-date Learning Materials	Prompt Marking of Assignments	Course Relevancy
Pearson's Correlation	.037	.071	.040
Sig. (2-tailed)	.526	.217	.489
n	302	302	302

The correlation coefficient shows a weak positive relationship between the reliability dimension of an External Degree Programme and the number of students registered. There is a very small variation of the number of students that can be explained by the reliability dimension of up-to-date learning materials ($r^2 = 0.1369$), prompt marking of assignments ($r^2 = 0.005041$) and course relevance ($r^2 = 0.0016$). The results show that the correlation is not more than 0.5 at the p<0.05 significance level. It can therefore be inferred that there is no significant relationship between the reliability dimension of an External Degree Programme and the number of students registered in the programme.

The second sub – Hypothesis sought to determine whether there was a relationship between the reliability dimension and support centres established to offer support services to students while away from their learning institutions. In these support centres, students visit them to procure study units and to obtain any other relevant services such as guidance and counseling, dates for reporting to residential

sessions as well as payment of fees. They also visit the support centres to collect their marked term papers, payment receipts and information on the course.

The hypothesis was tested in order to determine whether the reliability dimension bears any relationship with the number of regional centres set up by the University to offer support services to learners pursuing the External Degree Programme. Theoretically, it can be argued that fewer numbers of Regional Support Centres established to offer support services to the distance learner would affect the quality of the programme. For instance, if students in any region cannot get the necessary services on account of fewer support centres, this would mean that the services are not forthcoming and thereby affect the programme's quality.

The results of the hypothesis test on this variable and growth strategy are presented in Table 4.22. The Pearson's product-moment correlation coefficient shows that there is a weak negative relationship between up-to-date learning materials (r = -.004, p = .945), prompt marking of assignments (r = -.071, p = .2170 and course relevancy (r = -.040, p = .489) and the number of regional centres.

Table 4.22: Correlation between Regional Centres and Reliability

Measure	Up-to-date Learning Materials	Prompt Marking of Assignments	Course Relevancy
Pearson's Correlation	.004	.071	.040
Sig. (2-tailed)	.945	.217	.489
n	302	302	302

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therefore indicates that a weak relationship exists between the number of Regional Centres and growth strategy. It can therefore be implied that there is no statistically significant relationship between the reliability dimension of an External Degree Programme and the number of regional centres established to offer support services to the learners registered in the programme.

The third and final hypothesis was stated to help in answering the question on whether there was a relationship between the numbers of resident lecturers employed to offer academic support services and the reliability dimension of the External Degree Programme? The following null hypothesis was tested.

H_o: There is no significant relationship between the number of resident lecturers and the reliability dimension.

The correlation coefficient result is as shown in Table 4.23. The number of Resident Lecturers employed at the Regional Centres would, ideally, affect the extent to which the course would be relevant, the prompt marking of assignments and the extent to which the materials would be reviewed to make them current. It should be noted that Resident Lecturers participate in the teaching of distance learners and hence mark students' assignments. They also review the study materials during Curriculum Review Workshops that are organized by the Department for the purpose of ensuring that the course content is relevant to the market needs. Their input during review workshops is important as they are in constant touch with the industry. They also interact with students while manning

market needs. Their input during review workshops is important as they are in constant touch with the industry. They also interact with students while manning the centres and get a feel of the students' concerns in discharging their teaching duties.

Table 4.23: Correlation between Reliability and the Number of Resident Lecturers

Measure	Up-to-date Learning Materials	Prompt Marking of Assignments	Course Relevancy
Pearson's Correlation	-.071	-.040	-.037
Sig. (2-tailed)	.217	.489	.526
n	302	302	302

Table 4.23 shows that there is a weak and negative relationship between the number of resident lecturers and the reliability dimension variables. Each of these variables explains less that 1% of the number of resident lecturers (prompt marking $r^2 = .5\%$, course relevancy $r^2 = .16\%$ and up-to date materials $r^2 = .13\%$). The results are valid at the p<0.05 significance level. Thus, all the reliability variables did not make a significant contribution to the number of regional centres. Hence we conclude that there is no significant relationship between the reliability dimension of the External Degree Programme and the number of resident lecturers employed to offer academic support services to the learners.

4.7.3 Responsiveness Dimension

This dimension was measured by five factors. These were clarity of course objectives, flexibility of the course, teaching excellence, support staff responsiveness in providing services and constructiveness of feedback on assignments. These responsiveness dimension indicators are evaluated together with their relationship with the growth of External Degree Programme.

(a) Indicators for Responsiveness Dimension

Respondents were to rate the indicators for the responsiveness dimension on the basis of how satisfactory or unsatisfactory the factors were on a five – point Likert scale. The agree/disagree scale used number 5 to represent "excellent or strongly agree" and number 1 to represent "fails to meet criterion or highly disagree". Thus, a respondent reporting 5 points on the scale would mean that the indicator is satisfactory whereas 1 point would imply that the factor is unsatisfactory. The findings on these indicators are as depicted in the following sections.

(i) Clarity of course objectives

Clarity of course objectives was meant to measure the extent to which the course objectives focused on the needs of the learners and the market. Respondents were to state the extent to which they agreed or disagreed with a given statement regarding the dimension or whether the statement meets the criterion or not. The course objectives are the primers that aid the learner in regard to the overall goal of

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the programme and the course being pursued. The clarity of the objectives is critical to facilitate the learner in his/her independent study. The findings on this indicator are as shown by the frequency distribution in Table 4.24.

Table 4.24: Frequency Distribution for the Clarity of Course Objectives

| | Fails Criterion | | Unsatisfactory | | Satisfactory | | Good | | Excellent | |
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	1	10.0	1	10.0	3	30.0	3	30.0	2	20.0
Tutor	1	3.7	2	7.4	11	40.7	11	40.7	2	7.4
Learner	4	1.3	5	1.7	25	8.3	179	59.3	89	29.4

Table 4.24 shows that 59% of the learners rated the clarity of the course objectives as good. A further 29% of the learners rated the factor as excellent. An equal number of tutors rated the criterion as either good (41%) or satisfactory (41%). Only a very small percentage (2%) of the learners and tutors (7.4%) did find the course objectives as unsatisfactory. However, there were respondents who found the clarity of the course objectives failing to meet the criterion. These were 10% of the resident lecturers, 3.7% of the tutors and 1.3% of the learners.

(ii) Programme Flexibility

The study also sought to determine the extent to which the programme (course) is flexible and customized to individual needs. The External Degree Programme is structured in such a manner that the learner can drop out at any given level and rejoin at a later date. This is provided for as long as the student makes a formal request by writing a deferment letter to the Dean of the School. This is the policy but some students do not follow it to the letter.

Respondents were to rate this criterion on the basis of how well they agreed or disagreed with the statement or whether the statement met the criterion or not. In other words, the respondents were to state whether the programme structure is flexible and allows for and encourages lateral entry and exit that leads to progression to higher levels or not. The scoring on a five-point scale ranged from "Excellent (highly agree = 5)" to "Fails to meet the criterion (highly disagree = 1)". The finding is as tabulated in Table4. 25.

Table 4.25: Frequency Distribution for the Flexibility of the Programme Structure

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	0	0.0	2	20.0	4	40.0	4	40.0
Tutor	1	3.7	2	7.4	11	40.7	11	40.7	2	7.4
Learner	4	1.3	5	1.7	25	8.3	179	59.3	89	29.4

Fifty – nine percent of the learners viewed the programme structure as good. A further 29.4% were of the view that the programmes's structure is excellent. None of the resident lecturers or tutors found the progrmme's structure failing to meet the criterion of flexibility. The findings therefore imply that the programme's structure is flexible and allows for and encourages lateral entry and exit (i.e. it is customized to individual needs).

(ii) Teaching Excellence

The dimension of responsiveness was also measured using the teaching/learning methods. Specifically, the extent to which the methods were consciously planned in view of the different learner abilities and needs was of particular importance. The External Degree Programme is offered using two modes of study, namely face –to – face tutorial sessions and independent study. During the face – to – face tutorial sessions, the tutors employ the lecture method. The independent study is where the learner makes use of the study material. The indicator was rated on a five-point scale to evaluate the degree of teaching excellence in the programme. Five points represented "Excellent" whereas "Fails to meet criterion" was represented by 1 point. The responses to this criterion are analyzed and depicted in Table 4.26.

Table 4.26: Frequency Distribution for Teaching/Learning Excellence

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	0	0.0	6	60.0	3	30.0	1	10.0
Tutor	2	7.4	5	18.5	13	48.2	6	22.2	1	3.7
Learner	8	2.7	34	11.2	63	20.8	150	49.7	47	15.6

About 50% (49.6%) of the learners rated the teaching/learning methods as good. A further 16% of the learners rated the methods as excellent. However, 11% of the learners and 19% of the tutors found the teaching/learning methods as being unsatisfactory. This finding presents challenges to the programme since it is the tutors who are responsible for the planning of the teaching/learning methods. Perhaps the reason why the methods are found to be unsatisfactory by the tutors could be that there is a shortage of teaching/learning aids as demonstrated under the tangibles dimension.

(iv) Support Staff Responsiveness to Student Enquiries

The responsiveness of staff to student enquiries was also used to measure the responsiveness dimension. The purpose was to determine the extent to which support staff is responsive in providing services during residential sessions since this is the time the learners interact with them on a regular basis. Students make a number of enquiries during residential sessions. Some of these enquiries include

but not limited to; examination results, on – line registration for subjects, fees payment status, missing term paper scripts and examination cards. The respondents were to rate the responsiveness of staff to their enquiries on a five – point scale. Five points were used to represent "Staff responsiveness is quite unsatisfactory (fails to meet criterion) whereas 1 point was used to represent "Excellent staff responsiveness to student enquiries". The finding to this indicator is shown in Table 4.27.

Table 4.27: Frequency Distribution for Support Staff Responsiveness to Student Enquiries

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	2	20.0	2	20.0	4	40.0	2	20.0
Tutor	1	3.7	1	3.7	12	44.4	12	44.4	1	37.0
Learner	12	4.0	21	7.0	65	21.5	181	59.9	23	7.6

Sixty per cent of the learners observed that support staff's responsiveness to their enquiries is good. Forty per cent of the resident lecturers were of the opinion that the staff is responsive with a similar percentage (44%) of the tutors opining that there is good support staff responsiveness to student enquiries. However, there may be need for improvement since about 7% of the learners felt that the staff responsiveness was unsatisfactory. Indeed, another 4% of these learners argued that the responsiveness of staff failed to meet the criterion.

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(v) Constructive Feedback on Assignments

The last measure of the responsiveness dimension was constructive feedback on assignments. The purpose was to determine how well the assessment results are recorded securely and made available to the learners for use in their learning experience. In other words, is the feedback on assignments constructive to be of any use to the learners? The assignments constitute part of the coursework. Students write the term papers during independent study usually done while the students are away from the learning institution. The term papers are assessed by the tutors and later issued back to the students during the face –to – face tutorial sessions. Respondents were presented with a five – point scale to rate how well they found the feedback on assignments constructive in aiding their academic writing skills. The scoring was such that 5 points represented "Excellent feedback" and 1 point represented "Highly unsatisfactory feedback". The results of this analysis are as shown in the Table 4.28

Table 4.28: Frequency Distribution for Constructive Feedback on Assignments

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	1	10.0	1	10.0	3	30.0	2	20.0	3	30.0
Tutor	1	3.7	2	7.4	10	37.0	10	37.0	41	4.8
Learner	28	9.2	79	26.2	73	24.2	109	36.1	13	4.3

The Table shows that 36% of the learners considered the feedback on assignments as good. 9% of the learners felt that the institution failed to meet the criterion on constructive feedback on assignments. Only 26% of the learners rated this criterion as unsatisfactory. But 37% of the tutors were of the opinion that feedback on assignments is satisfactorily constructive to the learners. Again, 30% of the resident lecturers were of the view that the feedback on assignments is constructive. The findings imply that feedback on assignments is constructive to all the stakeholders.

(b) Responsiveness and Growth

The third objective of the study was achieved by answering the question on whether there is a relationship between the responsiveness dimension and the growth of EDP. From this research question, hypotheses were generated as presented in the sections that follow.

The first hypothesis to be tested is stated as follows.

H_o: There is no significant relationship between the number of students registered in the External Degree Programme and the responsiveness dimension. Data for this hypothesis was collected on course objectives, course flexibility, teaching excellence, responsiveness of support staff and feedback on assignments. The results of the Pearson's product-moment correlation analysis are as shown in Table 4.29.

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Table 4.29: Correlation between Responsiveness and Number of Students

	Clarity of Course Objectives	Flexibility of Course	Teaching Excellence	Responsiveness of staff	Feed-back
Pearson's Correlation	.011	-.118	-.022	-.008	.095
Sig. (2 – tailed)	.845	.041	.701	.885	.100
n	302	302	302	302	302

For all the responsiveness dimension variables, only constructive feedback and course objectives had a positive relationship with the number of students enrolled in the programme although it was weak ($r = .095$ and $r = 0.011$ respectively). These variables explained only 2.2% of the number of students. The other responsiveness dimensions variables had a weak negative relationship to the number of students enrolled in the programme and explained only 2.2% of the number of students registered in the programme. The weak relationship as demonstrated by the significance value of less than .5 at the significant level of $p<0.05$ shows that the number of students enrolled in the programme is not influenced by the course objectives, course flexibility, teaching excellence, support staff responsiveness to the provision of services and feedback on assignments. We therefore conclude that there is no significant relationship between the responsiveness dimension variables and growth as measured by the number of students registered in the programme.

The second hypothesis was tested to determine whether there was any relationship between the numbers of regional centres established to offer support services to

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learners at a distance and their responsiveness in providing services, teaching excellence and constructive feedback on assignments. The hypothesis was stated as follows

H_0: There is no relationship between the number of Regional Centres and the responsiveness dimension.

Regional Centres are the points located in the country to offer academic services among other services to the distance learner. As such, it is assumed that the fewer the number of Regional Centres, the lower is the quality of the Distance Education Programme as measured by the responsiveness dimension. Similarly, the higher the quality of the responsiveness dimension, the more the number of Regional Centres to be established to cater for the increasing number of students. The correlation analysis results are depicted in Table 4.30.

Table 4.30: Correlation between Number of Regional Centres and Responsiveness

	Clarity of Course Objectives	Flexibility of Course	Teaching Excellence	Responsiveness of staff	Feed-back
Pearson's Correlation	.011	.118	.022	.008	-.095
Sig. (2 – tailed)	.845	.041	.701	.885	.100
n	302	302	302	302	302

The Pearson's product – moment correlation coefficient for all the five indicators of responsiveness is positive except for the clarity of objectives and feedback on

assignments. The relationship between these two variables and the number of regional centres is negative and weak ($r = -0.011$ and $r = -0.095$ respectively). There was a positive and weak relationship between the number of regional centres and the responsiveness dimension variables of flexibility of programme ($r = 0.118$), teaching excellence ($r = 0.022$) and support staff responsiveness to students' enquiries ($r = 0.008$). The weak relationship as demonstrated by values that are less than $p < 0.05$ implies that there is no significant relationship between the number of regional centres and the responsiveness dimension.

The third and final hypothesis on the responsiveness indicators tested was:

H_o: There is significant relationship between the number of support staff employed and the responsiveness dimension

The relationship between the responsiveness dimension (as measured by the clarity of course objectives, flexibility of the course, teaching excellence, responsiveness of support staff and constructive feedback) and the growth strategy (as measured by the number of resident lecturers employed) was investigated using Pearson's product – moment correlation technique. The result of this analysis is as shown in Table 4.31.

Table 4.31: Correlation between Responsiveness and Number of Resident Lecturers

	Clarity of Course Objectives	Flexibility of Course	Teaching Excellence	Responsiveness of staff	Feed-back
Pearson's Correlation	.011	.118	.022	.008	-.095
Sig. (2 – tailed)	.845	.041	.701	.885	.100
N	302	302	302	302	302

The results show that there was a weak negative relationship between the number of resident lecturers and the clarity of objectives ($r = -0.011$) as well as the between the number of resident lecturers and constructive feedback ($r = -0.095$). However, the relationship between the numbers of resident lecturers employed at the regional centres is positive though weak for course flexibility ($r = 0.118$), teaching excellence ($r = 0.022$) and support staff responsiveness ($r = 0.008$). The weak relationship as shown by the values at the $p<0.05$ significance level means that there is no significant relationship between the responsiveness dimension of an External Degree Programme and the number of resident lecturers employed at the regional centres to offer support services to the distance learner.

4.7.4 Assurance Dimension

The assurance dimension was measured using the following indicators – competence of academic staff, teaching techniques, and learning materials. These

indicators are presented in this section together with the assurance dimension's relationship with growth of the External Degree Programme.

(a) Indicators for Assurance Dimension

Respondents were to rate the factors related to the assurance dimension on the basis of the extent to which the factor was either excellent or failed to meet the criterion. Using a five – point scale whose values ranged from 5 points for "Strongly agree/excellent" to 1 point for "Strongly disagree/fails to meet criterion; respondents were presented with three such indicators to rate. The indicators evaluated were academic staff competence in regard to Open and Distance Learning, teaching strategies employed and ease of use of the learning materials. The findings on this dimension's indicators are as reported in the frequency distribution Tables 4.32, 4.33 and 4.34.

(i) Academic Staff Competence

Academic staff competence referred to the extent to which the academic staff possessed sufficient knowledge to discharge their teaching duties. This was used to measure the qualifications, skills and expertise possessed by the academic staff and that was related to Open and Distance Learning. The finding on this factor is shown in Table 4.32.

Table 4.32: Frequency Distribution for Academic Staff Competence

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	1	10.0	3	30.0	1	10.0	3	30.0	2	20.0
Tutor	1	3.7	3	11.1	11	40.7	8	29.6	4	14.8
Learner	0	0.0	0	0.0	24	7.9	35	11.6	243	80.5

From Table 4.32, it can be noted that 80% of the learners rated the competence of the tutors (lecturers) as excellent. Another 11.5% of the students rated the competence of academic staff as good. The tutors rated their own competence as good (29.6) while 40.7% of these tutors found their own competence as being satisfactory. Only 11% and 30% of the tutors and resident lecturers respectively rated the competence of academic staff (qualifications, skills and expertise) in distance learning to deal with distance learners unsatisfactory. These findings are supported by the qualifications of the tutors since 67.6% of them were master's degree holders while 32.4% were holders of doctorate degrees.

The study also sought to determine whether the teaching strategies of the programme are structured to facilitate the achievement of the intended outcomes.

The programme is structured in a way that enables learners to interact with their tutors three times in a semester. Each time they interact, there are several activities that are lined up for the learners, chief among them being tuition. Other activities

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include writing of term papers, sitting for tests and end of semester examinations. This finding is contained in Table 4.33.

Table 4.33: Frequency Distribution for Structure of the Teaching Strategies.

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	1	10.0	0	0.0	5	50.0	2	20.0	2	20.0
Tutor	0	0.0	3	11.1	11	40.7	11	40.7	2	7.4
Learner	11	3.7	35	11.6	51	16.9	154	50.9	51	16.9

Fifty per cent of the learners found the structure of the teaching strategies good. A further 16.9% of the learners rated the structure as excellent. However, there is some dissatisfaction with the structure by about 4% (3.7%) of the learners who found it to fail to meet the criterion and a further 11.6% of the learners who rated the structure as unsatisfactory. The tutors were satisfied with the structure as 40.7% of the tutors rated the structure of the teaching strategies as satisfactory or good. This finding is consistent with the literature as majority of the learners are also employed.

Finally, the assurance dimension was also measured on the basis of how easy the learners found the learning materials to be during home study. Home study refers to the period when learners are separated from tutors in time and space. The tutors also use the instructional materials when teaching. The materials are written in a

conversational language in which the content is presented in small manageable chunks. The indicator on the ease of use of the study materials was evaluated and the results are reported in Table 4.34.

Table 4.34: Frequency Distribution for Ease of Instructional Materials

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	3	30.0	3	30.0	3	30.0	0	0.0	1	10.0
Tutor	8	29.6	11	40.7	3	11.1	5	18.5	0	0.0
Learner	42	13.9	103	34.1	66	21.9	67	22.2	24	7.9

Thirty-four per cent of the learners disagreed with the assertion that the instructional materials are easy to use. Another 13.9% of the learners found the materials failing to meet the criterion on the ease of use of the study materials. Indeed, 40.7% of the tutors found this factor unsatisfactory. A further 29.6% of the tutors shared the view that the study materials fails to meet the criterion.

(b) Assurance Dimension and Growth

The relationship between the quality assurance dimension and growth of the External Degree Programme was investigated. The main research hypothesis from which subsequent hypotheses were derived is stated as follows.

Ho: There is no significant relationship between the assurance dimension of the External Degree Programme and its growth

The results of the tests of hypotheses are presented in the following sections.

The first hypothesis tested was to determine whether there was a relationship between the numbers of students registered in the External Degree Programme and the assurance dimension. The following null hypothesis was therefore tested.

H_0: There is no relationship between the assurance dimension and the number of students enrolled in the External Degree Programme.

The following constructs were used to obtain data on the assurance dimension, namely; staff possession of sufficient knowledge to convey trust and confidence, techniques used in teaching are appropriate and learning materials are easy to use. The Pearson's product – moment correlation coefficient was computed and the results are shown in Table 4.35.

Table 4.35: Correlation between Number of Students and Assurance Dimension

	Staff Possession of knowledge	Appropriate techniques	Ease of course materials
Pearson's Correlation	-.011	-.050	-.111
Sig. (2-tailed)	.847	.389	.053
n	302	302	302

Table 4.35 shows that there was a weak negative relationship between the number of students registered in the External Degree Programme and all the assurance dimension variables. Knowledge possessed by support staff to convey trust contributed a negligible proportion (0.012%) of the variation in the number of students enrolled in the External Degree Programme whereas appropriate techniques used in teaching explained only 0.25% of the variance in respondents' scores on the number of students enrolled. The ease of the course materials variable explained only 1.23 per cent of the variance in the number of students. The weak relationship at $p<0.05$ significance level indicates that there is no significant relationship between the number of students enrolled in the programme and the growth strategy measured by the ease of course materials, appropriate techniques used in teaching and the knowledge possessed by the support staff.

The second hypothesis tested was to establish whether there was a relationship between the number of regional centres and the assurance dimension. The following null hypothesis was therefore tested.

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H_o: There is no significant relationship between the assurance dimension and the number of regional centres was tested.

Table 4.36 shows the results of the computed correlation coefficient for this relationship.

Table 4.36: Correlation between Assurance and Regional Centres

	Staff Possession of knowledge	Appropriate techniques	Ease of course materials
Pearson's Correlation	.011	.050	.111
Sig. (2-tailed)	.847	.389	.053
N	302	302	302

There was a weak positive relationship between the assurance dimension and the number of regional centres with low levels of assurance dimension associated with low levels of the number of regional centres. "Knowledge of staff to convey trust and confidence" explained only 0.012 per cent of the variance on the number of Regional Centres whereas appropriate techniques used in the teaching of distance learners explained another 0.25 per cent of the variance in the number of Regional Centres. The variable on the ease of course materials predicted only 1.23 per cent of the variation in the number of Regional Centres. The findings show that there is no significant relationship at $p < 0.05$ significance level between the assurance dimension (as measured by the knowledge of staff, appropriateness of teaching

techniques and ease of use of course materials) and growth strategy (as measured by the number of regional centres).

The third and final hypothesis was stated to establish whether there was a relationship between the assurance dimension and the number of resident lecturers. The significance of the relationship between the assurance dimension and the number of resident lecturers was tested at $p<0.05$ significant level.

The relationship between the assurance dimension (as measured by the knowledge of staff, appropriateness of teaching techniques and ease of use of the course materials) and the growth strategy (as measured by the number of resident lecturers) was investigated using the Pearson's product-moment correlation technique. The results are presented in Table 4.37. The findings showed that there is a weak, positive relationship between the assurance dimension and growth strategy at $p<0.05$ significance level.

Table 4.37: Correlation between Assurance and Number of Resident Lecturers

	Staff Possession of knowledge	Appropriate techniques	Ease of course materials
Pearson's Correlation	.011	.050	.111
Sig. (2-tailed)	.847	.389	.053
N	302	302	302

The assurance dimension only explains a very minimal percentage (less than 1 per cent) of the variance in respondents' scores on the number of resident lecturers employed to offer support services at the regional centres. At $p<0.05$ significance level, it can be concluded that there is no significant relationship between the assurance dimension of an External Degree Programme and the number of Resident Lecturers employed to offer support services to distance learners.

4.7.5 Empathy Dimension

This quality dimension was captured by five factors. The five factors were; out-of-class communication with tutor, courtesy of support staff, cost of the programme, and caring and individualized attention given to students by the support staff during academic and personal counseling sessions.

(a) Indicators for Empathy Dimension

The respondents were supposed to rate the empathy dimension factors on a five-point scale that ranged from 5 points for "Excellent" to 1 point for "Fails to meet criterion". The findings are presented in Tables 4.38, 4.39, 4.40, and 4.41.

(i) Out – of – class Communication

The factor on "out – of – class communication of the learner with tutor" sought to determine whether the learner has access to the tutors through a variety of media. This is important in a Distance Education Programme since the learner would want to consult the tutor on a variety of· learning issues. For instance, learners occasionally want to communicate with their tutors regarding unrecorded marks, missed lectures, permission to be away from class, and so on. Table 4.38 presents the frequency distribution results of the analysis on the communication between the learner and the tutor outside the classroom.

Table 4.38: Frequency Distribution for Out-of-class Communication with Tutor

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	4	40.0	2	20.0	2	20.0	2	20.0
Tutor	1	3.7	15	55.6	7	25.9	1	3.7	3	11.1
Learner	91	30.1	211	69.9	0	0.0	0	0.0	0	0.0

The learners felt that there was minimal interaction with the tutors outside the formal face-to-face tutorial sessions. This is supported by 70% of the learners whose opinion was that out-class-communication was unsatisfactory. Another 30% of the learners were of the view that the University was failing to meet the criterion of enabling the learners to have access to the tutors after face-to-face tutorial sessions.

The tutors too, felt that out – of – class communication is limited since 56% of these tutors rated this factor as unsatisfactory. However, the resident lecturers rated the factor on out – of – class communication with the tutor as either good or excellent (20%). This should be the case since the Resident Lecturer is stationed at the Extra - Mural Centre which the learner visits while on home study to collect instructional materials, marked assignments and for any other relevant services.

(ii) Courtesy of Support Staff

The other factor used to capture the empathy dimension was the courtesy of support staff. This aimed at identifying the extent to which the support staff is courteous when dealing with a distance learner with respect to his/her academic issues. Some of these issues include issuance of identity cards, registration for subjects and examinations among others. Table 4.39 shows the findings on this indicator.

Table 4.39: Frequency Distribution for the Courtesy of Support staff

	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	2	20.0	3	30.0	3	30.0	2	20.0
Tutor	1	3.7	3	11.1	11	40.7	9	33.4	3	11.1
Learner	17	5.6	42	13.9	81	26.8	151	50.0	11	3.7

A large number of the learners were satisfied with the manner in which services were being offered to them by the support staff. Half of the learners (50%) rated the courtesy of support staff as good while a small number (3%) rated the manner in which services were offered as excellent. Thirty percent of the Resident Lecturers found the courtesy of the support staff as either satisfactory or good although 20% did not find the courtesy of support staff as excellent.

(iii) Cost of the Programme

The cost of the programme to the learner was also assessed. The purpose was to find out how affordable the programme was to the distance learner since that determines his/her continued stay in the programme without dropping out on account of failure to pay the requisite. Students pay a total amount of Kshs. 80,000.00 as tuition fees for an academic year. This tuition fee is paid at the beginning of each academic year. Table 4.40 presents the frequency distribution for this indicator.

Table 4.40: Frequency Distribution for Cost of the Programme

	Programme's Cost								
	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	1	10.0	1	10.0	7	70.0	10	10.0
Tutor	0	0.0	4	14.8	8	29.6	11	40.8	4	14.8
Learner	4	1.3	2	0.7	24	7.9	190	62.9	82	27.2

The cost of the programme was found to be affordable to the learner as 63% of the learners rated the cost as good (inexpensive). A further 27.2% of the learners found the cost of the programme to be excellent (extremely affordable). Thirty percent of the tutors were of the view that the cost of programme is satisfactory while 70% of the resident lecturers thought that the cost was good. The implication is that all the stakeholders view the programme as affordable to the learner. A report on Distance Learning at the University of Nairobi (Syagga, 2001) found that the cost of the B. Ed programme by distance learning is half the cost of the face – to – face parallel programmes, demonstrating that the cost of distance learning is cheaper and more affordable. It is imperative to note that some resident lecturers and tutors have relatives and close friends enrolled in the programme and pay for their tuition fees.

(iv) Provision of Academic and Personal Counseling

The extent to which learners were provided with academic and personal counseling at the residential sessions was measured. The idea was to determine whether support staff conveys a caring, individualized attention in solving the learner's problems. In other words, do the learners have access to academic and personal counseling? The manner in which the learners are treated while pursuing the programme has implications on the extent to which they will continue with their learning or drop out. This result is shown in Table 4.41.

Table 4.41: Frequency Distribution for Provision of Academic and Personal Counselling

	Provision of Academic and Personal Counseling									
	Fails Criterion		Unsatisfactory		Satisfactory		Good		Excellent	
	f	%	f	%	f	%	f	%	f	%
Resident Lecturer	0	0.0	3	30.0	3	30.0	4	40.0	0	0.0
Tutor	4	14.8	9	33.3	9	33.3	4	14.8	1	3.8
Learner	18	5.9	41	13.6	65	21.5	159	52.7	19	6.3

The provision of academic and personal counseling is good as rated by the learners (50%). The tutors also rated the provision of academic and personal counseling as good (40%). However, 30% of the resident lecturers and 33% of the tutors found the provision of academic and personal counseling unsatisfactory. This is possibly because there is no person specifically attached to the distance learners to offer

both academic and personal counseling. If any academic and personal counseling is done, then it is at an individual's discretion..

(b) Empathy dimension and Growth

The relationship between empathy and growth was investigated using the Pearson's product – moment correlation technique. The objective was to determine the extent to which the empathy dimension relates with the growth of EDP. The research question that was formulated to help in attaining this objective from which three sub-questions were generated is stated as follows: What is the relationship between the empathy dimension of an External Degree Programme and the growth of EDP? The null hypothesis that there is no relationship between the empathy dimension and the growth of External Degree Programme was tested. The following sections present the results of the tests of hypotheses derived from the major research hypothesis.

The first hypothesis was stated as follows.

H_o: There is no significant relationship between the number of students enrolled in the External Degree Programme and the empathy dimension.

The data for this hypothesis was obtained from the variables of out-of-class communication with tutor, courtesy of support staff, cost of the programme and the caring and individualized attention given to students concerning academic and

personal counseling. The result of the analysis at the significance level p<0.05 is

presented in Table 4.42.

Table 4.42: Correlation between Empathy and Number of Students

	Out-of-class Communication	Staff courtesy	Cost of programme	Counseling Provision
Pearson's Correlation	.002	-.046	-.122	.086
Sig. (2-tailed)	.968	.425	.034	.135
N	302	302	302	302

There was weak, positive relationship between the out-of-class communication

with tutor (r = 0.002, p = 0.968) and costliness of the programme (r = 0.086, p =

0.135) and the number of students enrolled in the programme. The conclusion is

that there is no significant relationship between the number of students registered

into the programme and the empathy quality dimension at p<0.05 significance

level.

The second hypothesis was stated as follows.

H_o: There is no relationship between the number of Regional Centres and

empathy dimension

The data used for this hypothesis was similar to that used to test the relationship

between the number of students and empathy dimension except for the costliness

of the programme. The findings are shown in Table 4.43.

Table 4.43: Correlation between Regional Centres and Empathy

	Out-of-class Communication	Staff courtesy	Counseling Provision
Pearson's Correlation	.002	-.046	.086
Sig. (2-tailed)	.968	.425	.135
N	302	302	302

Pearson's product-moment correlation coefficient is positive for the variables of staff courtesy and the degree of staff caring in solving students' problems concerning their academic and personal issues. There was a negative correlation between the number of regional support centres and empathy. The relationship between the number of regional centres and out-of-class communication with tutor was weak ($r = -0.002$) and that of staff courtesy ($r = 0.046$). Similarly, the relationship between the number of regional support centres and the extent of staff caring was weak ($r = 0.122$). The weak correlation at p<0.05 significance level means that there is no significant relationship between the empathy dimension and the number of regional centres established to offer support services to distance learners.

The third hypothesis concerning the empathy dimension was to determine whether there was a significant relationship between the number of resident lecturers and empathy dimension. The hypothesis was tested to establish whether the empathy dimension bore any relationship with the number of resident lecturers employed to offer academic and other services at the regional offices. The reasoning in this

question is that, if the empathy dimension is low, then the number of resident lecturers would be fewer than if the empathy was high. For example, if the support staff is courteous when offering services to students, then this may lead to increased student numbers and hence the institution would employ more lectures to cater for the rise. The Pearson's product-moment correlation technique was used to investigate this relationship. The findings are shown in Table 4.44.

Table 4.44: Correlation between Resident Lecturers and Empathy Dimension

	Out-of-class Communication	Staff courtesy
Pearson's Correlation	.002	-.046
Sig. (2-tailed)	.968	.425
N	302	302

There was a weak negative relationship between the out-of-class communication with tutor and the number of resident lecturers employed to offer support services ($r = -0.002$). This variable helped to explain an insignificant percentage (0.0004%) of the variance in respondents' scores on the number of resident lecturers. Again, the relationship between staff courtesy and the number of resident lecturers was positive but weak ($r = 0.046$) and explained only 0.21 per cent of the variation. The findings help to explain that there is no significant relationship between the empathy dimension and the growth strategy (as measured by the number of resident lecturers employed to offer support services at the regional centres at $p < 0.05$ significance level.

The moderating effect of external factors was investigated. These factors comprised of top management's desire to tap the opportunity of Distance Education Programme, needs of the consumers (or market needs), attitude of the managers of DE and the degree of competition in the provision of distance education courses. Based on theoretical findings, it was held that a relationship between the growth of EDP was more likely to be observed with external factors. The following research question was, therefore, formulated on the strength of this argument: Do moderating environmental factors influence the growth of the External Degree Programme? The null hypothesis that there is no significant relationship between the moderating factors and the growth of the External Degree Programme was tested.

The relationship between the external environmental factors and the growth of EDP was investigated using the Chi-square test. Item 2 of the questionnaire for the managers of distance education was used to capture data for this question. The item consisted of top management's desire to tap the opportunity of Distance Education Programme, needs of the consumers (market needs), positive attitude of the managers of Distance Education towards the distance education programme and the competition among DE institutions. Table 4.45 presents the results of this analysis.

Table 4.45: Chi-square test for Environmental Factors and Growth Strategy

Cause of expansion	Observed N	Expected N
Top management's willingness	1	1.7
Consumer needs	2	1.7
Positive attitude	2	1.7
Chi-square	.400	
df	2	
Asymp. Sig.(2 –tailed)	.819	

The value of 0.82 is larger than the alpha value of 0.05. It can be concluded that the result is significant. This means that the external environmental factors are significant determinants of the expansion strategy that has been adopted at the University of Nairobi.

4.9 Performance of the University

Evaluation of the performance of the University of Nairobi in the provision of distance learning was necessary to establish whether it would sustain a growth strategy. Thus, every aspect of a growth strategy was to be assessed on the basis of its contribution to the programme's overall quality. The growth of a progamme entails improvements in technology, faculty instruction, course design or expansion of course offerings. However, growth's success is measured by the adequacy of the education delivery system, system's capacity to serve students, clarity of the communication techniques throughout the system and the adequacy

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of support services (Best, 2005. The respondents therefore rated the University of Nairobi against these performance indicators and the results of the analysis are shown in Table 4.46.

Table 4.46: Mean and Standard Deviation and Mann – Whitney U Scores for Performance Indicators

Variable	N	M	SD	Mann Whitney	Z	Asymp. Sig.
Capacity to serve students	302	3.68	.815	10121.0	-1.578	0.115
Education delivery system	302	3.79	.752	9493.5	-2.583	0.010
Communication techniques	302	3.56	.923	9861.5	-1.875	0.061
Support Services	302	3.16	.958	10280.0	-1.240	0.215
Sex	302	1.44	.497			

Overall, students thought that the University's performance was good ($M \approx 4$). The Z values for all the variables are less than -2.0 with a significance level of $p \le .10$ except for the education delivery system and communication techniques used. Since the probability value (p) is not less than or equal to .05, then this means that there is no statistically significant difference in the performance of the University of Nairobi scores between male and female students. However, the p value for education delivery system is less than 0.05 indicating that there is some difference in the performance using the male and female scores.

4.10 Recommendation to the University

Respondents were asked to state the kind of recommendation they could offer to the University with respect to the External Degree Programme. Responses were meant to measure whether the respondents would recommend an expansion strategy, maintenance of the current level of resources to the programme, cut down on expenditure on the programme or do nothing about the programme. The results are as reported in Table 4.47.

Table 4.47: Recommendation to the University on the External Degree Programme

	Recommendation			
	Continue with Expansion strategy %	Maintain current level %	Cut down expenditure %	Maintain status quo %
Resident Lecturer	90.0	10.0	0.0	0.0
Tutor	96.3	3.7	0.0	0.0
Learner	86.1	2.6	8.6	2.6

Ninety percent of the resident lecturers were of the view that the University should continue with its expansion strategy. Ninety – six percent of the tutors were of the opinion that the University should continue with the expansion strategy. Only a small percentage of the tutors (3.7%) recommended that the University should not spend its resources on the programme. A majority of the learners (86%) offered the recommendation that the expansion strategy should be pursued.

4.11 Summary

The chapter has dealt with analysis of data on each of the objectives of the study. The chapter began with an analysis of the profiles of the respondents. This was followed by an evaluation of importance of quality dimensions and an assessment of the importance of the dimensions against respondents' expectations. An analysis of the indicators of quality dimensions and their relationships with growth strategy was explored. The Pearson's product correlation technique was utilized to establish the relationships between each quality dimension and growth strategy.

The performance of the External Degree Programme was evaluated using the mean and standard deviation measures. Mann – Whitney U test was conducted to determine the differences in the scores between male and female respondents. The chapter concludes with an analysis on the recommendations that respondents offered the University with regard to the programme.

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CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The overall aim of this study was to investigate whether perceived quality dimensions possessed by the Distance Education Programme bear any relationship with the growth strategy adopted by the University. This chapter re-states the research objectives and a summary of the findings as well as a discussion of the findings in view of the theory underpinnings, practical implications, policy and further research in the field of distance education in Kenya.

5.2 Summary of the Findings

This study sought to fill the gap in knowledge on the dimensions of perceived quality and their relationship to strategy choice with special emphasis on growth of EDP at the University of Nairobi. The purpose was to determine whether a higher education institution will always base its expansion strategy on quality dimensions of its degree programme. Specifically, the aim was to determine the relationship, if any, between a programme's perceived quality dimensions and its growth strategy. The major research question was whether there is a relationship between a distance education programme and its growth.

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A review of the literature on programme quality indicators associated with distance education courses and programmes led to the statement of the research objectives. There were six objectives. These were:

1. To determine the relationship between tangibles dimension of a degree programme and growth of the External Degree Programme

2. To assess the relationship between reliability dimension of a degree programme and growth of the External Degree Programme

3. To determine the relationship between responsiveness of a degree programme and growth of the External Degree Programme

4. To establish the relationship between assurance dimension of a degree programme and growth of the External Degree Programme

5. To establish the relationship between empathy dimension of a degree programme and growth of the External Degree Programme.

6. To determine the relationship between moderating effect of environmental factors and growth of the External Degree Programme.

The first phase of this research began with a comprehensive review of the literature on quality indicators for distance education programmes offered using the limited face – to – face tutorial sessions and independent study. The literature helped in the identification of the current best practices, guidelines, standards and benchmarks developed by a range of higher education institutions. The standards in these guidelines often fell into one of the five categories of tangibles, reliability, responsiveness, assurance and empathy.

A questionnaire consisting of open–ended and closed-ended questions was administered to respondents. The respondents were made up of students (learners), resident lecturers and tutors. These constituted the faculty staff. The data collected was analyzed using descriptive and inferential statistics. The descriptive statistics computed included frequencies and percentages that were presented in tables. Inferential statistical techniques were used to analyze and answer the research questions as well as to test the hypotheses. The techniques used were the Pearson's product-moment correlation, chi-square test and Mann-Whitney U test.

The first perceived quality dimension to be examined was the tangibles. Data on the tangibles indicators was collected using a scale that rated the "adequacy" or "inadequacy" of the study materials, learning facilities, learning aids, support staff and lecturers. The respondents were to rate the indicators on a five – point scale in which 1 point represented "highly inadequate" (fails to meet criterion) 5 points represented "highly adequate" (excellent). The findings showed that the provision of study materials fails to meet the expectations of the stakeholders. This accounted for more than 30% of the respondents. Thirty – three percent of the learners reported that the learning facilities did not meet their expectations. Twenty percent of the Resident Lecturers and 26% of the tutors reported that the learning facilities are inadequate.

Sixty – two percent of the respondents were of the opinion that the teaching/learning resources provided in the External Degree Programme were inadequate. However, the residential session facilitators as well as the tutors were found to be adequate for the student population admitted to the programme.

On whether tangibles influence the growth strategy adopted by the University of Nairobi, the findings at the 95% significance level revealed that there was no significant relationship between the tangibles perceived quality dimension and any of the growth indicators (as measured by the number of students registered in the programme, regional centres and resident lectures employed to offer support services).

The reliability quality dimension was measured using the currency of the learning materials, promptness in marking assignments and course relevancy to the learners. On a scale of 1 to 5 on the "disagree/agree" continuum, the respondents rated the currency of the learning materials as falling below the currency criterion (that is, majority disagreed with the assertion that the learning materials were up – to – date). On the promptness of assignment marking, 52% of the respondents opined that the marking of assignments was good. Similarly, the respondents considered the course as relevant to the need of the market.

Using the Pearson's product-moment correlation technique to determine if there was any relationship between the reliability perceived quality dimension and the programme's growth, the study found that there was a weak positive relationship between reliability and the number of students admitted into the programme. However, at 95% significance level, there was a weak negative correlation between currency of the study materials, promptness in the marking of assignments and course relevance with the number of regional centres established to offer support services. Again, there was no significant relationship between the

reliability quality dimension and the number of resident lecturers employed to serve the students registered in the programme.

The third quality dimension of responsiveness was captured by collecting data on the clarity of course objectives, course flexibility, teaching excellence and support staff responsiveness in providing services to students and staff and constructive feedback on assignments. A five – point Likert scale was used to rate these indicators of responsiveness in the External Degree Progarmme. The scale ranged from 1 to 5 points on the "fail to meet criterion" and "excellent" continuum. Eighty – eight percent of the learners reported that the course objectives are clear to them. Similarly, 50% of the interviewees found the programme's structure to be highly flexible and customized to their needs. The learning/teaching methods were also found to be good. This was reported by 50% of the learners and 22% of the tutors. Again the respondents were satisfied with the manner in which the support staff responded to their enquiries. This was reported by 60% and 40% of the learners and tutors, respectively. In addition, the feedback on assignments was said to be constructive as reported by 36% of the learners and 30% of the tutors.

In order to determine whether responsiveness bore any relationship with the growth strategy, data was collected and analyzed using Pearson's product-moment correlation technique. The results showed that there was a weak and negative relationship between course flexibility, teaching methods and support staff responsiveness and the number of students admitted to the EDP. However, the relationship, though weak, was positive for the clarity of course objectives and constructive feedback on assignments. At the 95% significance level, the findings

showed that there was no significant relationship between the perceived responsiveness quality dimension and the growth of the External Degree Programme.

The perceived assurance quality dimension was measured using the indicators of competence of academic staff, teaching techniques and learning materials. The respondents were to rate each of these factors on the basis of the extent to which the indicator was excellent or failed to meet criterion (very poor). The scoring ranged from "1 = fails to meet criterion (very poor)" to "5 = excellent". Frequencies were computed for each quality dimension indicator. The findings showed that 80% of the respondents rated the competence of academic staff to teach distance learners as excellent. The programme's structure was found to be excellent by about 50% of the respondents. About 41% of the respondents (especially tutors) were agreed that the study materials required review.

The relationship between the quality assurance dimension and the growth of EDP was found to be weak and negative with respect to the number of students admitted, the number of regional centres and the resident lecturers when analyzed using the Pearson's product-moment correlation coefficient.

Empathy quality dimension was measured by collecting data on out-of-class communication with tutor, courtesy of support staff, cost of the programme, caring and individualized attention given to the student/customer by the support staff during academic and personal counseling. A five-point scale was used to rate these

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indicators of empathy dimension. The scoring was "5 = excellent" and "1 = fails to meet criterion (very poor)".

Seventy per cent of the respondents reported that there was minimal interaction with the tutors outside the formal face – to – face tutorial sessions. About 50% of the respondents were satisfied with the manner in which services were being provided to them by the support staff. Sixty two percent of the respondents reported that the programme was affordable to the distance learner. More than 50% of the interviewees agreed that support staff provided a caring and individualized attention when solving the learner's problems. The instructional materials were written in a manner that the learners found to be easy to use on their own. This finding was reported by more than 50% of the respondents.

The relationship between empathy dimension and the growth of EDP was investigated using the Pearson's product-moment correlation technique. The findings revealed that there was a weak but positive relationship between the out – of – class communication with the tutor and the costliness of the programme with the number of students admitted to pursue the distance education degree programme. Again, there was a weak but positive relationship between staff courtesy and the extent to which support staff provided a caring and individualized attention when dealing with customer/student issues and the number of regional centres. Finally, the study established that there was a weak but negative relationship between the empathy dimension and the number of resident lecturers employed to offer support services to the distance learner. The findings showed

that there was no significant relationship between the empathy dimension and any of the growth factors at p<0.05 significance level.

The study also sought to determine whether growth of the External Degree Programme could be influenced by external environmental factors such as the top management's desire to tap the opportunity of the distance education programmes, the needs of the consumers, attitudes of the managers of DE programmes and the degree of competition in the field of distance education. Chi – square test was conducted to investigate the assertion that there was no significant relationship between moderating variables and the growth strategy. The result of this analysis showed that the relationship did exist and that it was significant at p<0.05 significance level.

5:3 Discussion of the Findings

The survey generated several items related to the quality indicators associated with the External Degree Programme. The items were consistent with the quality indicators identified through the guidelines and best practices found in the literature. Students' perceptions of educational service and perceptions of those involved in the provision of distance education (faculty staff) provided a good measure of the quality of a distance education programme as a result of their experience derived over a long time.

The results of this study have reinforced much of the previous research findings in distance education surveys of students and faculty staff (Gultekin, 2009; Hirner,

2008; Chaney, et al, 2007; Koul, 1988; Nunan & Calvert, 1992). In addition, the perceptions of student and staff (tutors and resident lecturers) were similar to those identified in previous studies (Stevenson, MacKeogh & Sander, 2006; Kelsey, Linder & Dooley, 2002; DiDemenico, 1996).

The following sections describe the results of the study and the literature. The dimensions discussed are tangibles, reliability, responsiveness, assurance and empathy. Research on the dimensions of quality in distance education has concentrated on the identification of the indicators of quality. This study has identified the quality dimension indicators possessed by the External Degree Programme and their relationship to the expansion of the programme.

5.3.1 Tangibles and Growth

Previous studies on tangibles have shown that students placed a great deal of importance on course materials (Bell and Shieff, 1990; Nunan and Calvert, 1992; Tallman, 1994), instructor (Biner, et al, 1994), resources (Holdford and Anuprita, 2003), technology, appropriate technologies and appropriate tools and media (Nunan and Calvert, 1992; Pilcher and Miller, 2000; Chaney, 2007) and physical facilities (Bell, 2003). This study has confirmed that tangibles contribute to the quality of a distance education programme. Indeed, among the other dimensions of quality, it was highly ranked with a mean score of 4.43. Tangibles dimension had one of the minimal perceived-expected service gap as assessed by students.

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The respondents indicated that study materials were inadequate or unsatisfactory and that learning facilities were inadequate. Learning aids were also said to be unsatisfactorily provided in the External Degree Programme. However, support staff and the number of tutors employed to offer tutorials during the face-to-face residential sessions were found to be adequate.

The findings on the question of whether there was a relationship between the tangibles dimension indicators and growth of the programme showed that there was a weak and insignificant relationship between each of the tangible dimension indicators and the number of students registered, the number of regional centres and the number of resident lecturers. This finding is not supported by literature. Past studies have shown that when students are dissatisfied with a programme (quality of a programme), they drop out. This implies that the number of registered students has to go down and subsequently there is low enrolment that leads to fewer regional centres and resident lecturers. The finding may be attributed to the need for promotion by the learners at their places of work.

5.3.2 Reliability and Growth

The dimension of reliability involves the consistency of performance and dependability of a programme. It implies that a programme offers what it should in terms of its services. Past studies have employed the following indicators of reliability – opportunities to apply learning to real situations and relevance and usefulness of study guides (St. Pierre and Olsen, 1989), distance education meets individual goals (Wilkinson and Sherman, 1991), timely return of assignments

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(Tallman, 1994), course process and course delivery and assessments (Bell, 2003), prompt feedback (Chaney, 2007), class procedures and expectations (Myers, 2008) and reliability of technology (Hirner, 2008). This study has used the indicators of up-to-date learning materials, prompt marking of assignments and course relevance.

Respondents rated the reliability dimension as the second most important quality dimension that should be possessed by a distance education programme. This dimension produced the greatest gap in the perceived-expected service performance scale. However, only an insignificant number of respondents found the learning materials to be outdated. Prompt marking of assignments was found to be excellent as well as the relevance of the course content to the market needs. The findings confirm the literature. Prompt feedback from professors had been cited by learners as a unique coping strategy students had developed to succeed in a programme offered at a distance (Kelsey, et al, 2002). Again, students had been found to be satisfied with a programme that helped them to meet individual goals (Wilkinson and Sherman, 1991) and that aided them to apply learning to real situations (St. Pierre and Olsen, 1989).

It had been hypothesized that there was no significant relationship between the reliability of a programme and its growth. The test revealed that there was a very weak though positive relationship between reliability and growth strategy (as measured by the number of students registered in the external degree programme) at the $p < 0.05$ significance level. However, the relationship between currency of learning materials, prompt marking of assignments and course relevance was weak

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and negative against the regional study centres and the number of resident lecturers. From a theoretical perspective, it can be argued that the relationship between reliability and the number of students registered is bound to be positive since the more current the learning materials, prompt marking of assignments and relevance of the course being pursued, the more the number of students to be registered as a result of the satisfaction derived from such services. However, this finding suggests that learners are not concerned with the currency of learning materials, prompt marking of their assignments and relevancy of the course so long as it guarantees them job promotion once they complete the programme.

5.3.3 Responsiveness and Growth

The third objective was to determine the relationship between responsiveness of a degree programme and its growth. This study utilized clarity of course objectives, flexibility and customization of programme to individual needs, teaching excellence, support staff responsiveness in offering services and constructive feedback on assignments. The findings showed that responsiveness was ranked the most important quality dimension valued by students in the provision of distance education programme. The respondents found this dimension as producing the lowest gap on the perceived-expected service scale. This was reinforced by the high percentage of respondents who observed that the clarity of objectives as well as the flexibility of the programme structure was good. Similarly, the lerning or teaching methods were found to be excellent. The responsiveness of staff to student enquiries as well as the constructiveness of the feedback on assignments were rated as good.

Past studies have also found that these quality indicators provide satisfaction to students. For instance, constructive and positive feedback (St. Pierre and Olsen, 1989), course management, quality of instruction and promptness of material delivery (Biner, et al, 1994), quality of instruction (Pamela, 2006), course structure (Chaney, 2007), course design and content delivery (Myers, 2008), feedback on coursework (Hirner, 2008) and support services, feedback and understanding customer (Bell, 2003).

The study had sought to answer the question of whether there was a relationship between reliability and growth of distance education programme. It was postulated that there is no significant relationship between the perceived reliability dimensions and the growth of the External Degree Programme. The results showed that there was a positive relationship between the clarity of objectives and constructive feedback and growth. However, there was a negative relationship between the responsiveness dimension quality indicators of flexibility of the programme, teaching excellence and support staff responsiveness to student enquiries and the growth pattern. Theoretically, if there is no teaching excellence, inflexible programme and unresponsive support staff to student enquiries or problems, there should be fewer students to be registered in such an educational programme, fewer regional centres to offer support services and fewer resident lecturers to be employed. Similarly, the positive relationship between clarity of objectives and constructive feedback indicates that the more the variables are to be found in a programme, the more the number of students, regional centres and resident lecturers employed to offer support services to the increased student population. The relationship was weak implying that the responsiveness

dimension did not bring about any significant change to the number of students registered in a programme. This finding does not support the theory that the quality dimension has a strong bearing on growth of a distance education programme. This may be attributed to the fact that since the course objectives are clear and feedback is constructive, these may ease the course for the learner who may then opt to remain in the programme.

5.3.4 Assurance and Growth

Objective four sought to establish the relationship between assurance dimension of an external degree programme and its growth. The assurance dimension was ranked the third most important dimension that contributed to the quality of an external degree programme. Respondents assessed this dimension as one of the dimensions producing a high perceived-expected service gap with a p-value of 0.113 at the 95% significance level. The factors that contributed to the huge gap were the course structure and the extent to which the learning materials were up-to-date.

Three hypotheses had been generated to determine the relationship between the assurance dimension and each of the items constituting growth namely: the number of students registered in the degree programme, the number of regional support centres and the number of resident lecturers employed to offer services to the students at the regional centres. The hypothesis tested was that there was no significant relationship between assurance dimension and the growth of the External Degree Programme. The results showed that there was a negative

relationship between the number of students registered and each of the components of the assurance dimension. However, there was a positive relationship between the components of assurance dimension and the growth of the External Degree Programme. The findings also produced a very weak relationship between the assurance dimension and growth of the EDP. The findings meant that a programme's assurance quality dimension does not influence its growth.

The possible explanation for the relationship between the number of students registered in the External Degree Programme and its growth components could be attributed to the fact that techniques used in the delivery of content may not be good but learners may still opt to continue their studies on account of the benefits to be derived from acquiring the knowledge. Similarly, the course materials may not be easy to use and yet learners may choose not to discontinue with the programme since the benefits expected would be far greater than the cost of dropping out. It is important to note that during the independent study, the student relies on the study materials, library, internet (where there is connectivity) as well as self- purchased text books.

The knowledge of the staff is a key factor in the dissemination of knowledge. If students find that the staff lacks the competence necessary to teach them at a distance, they may not be willing to remain in the programme. Theoretically, the positive relationship between the number o gional centres and the number of resident lecturers employed and each of the components of assurance dimension sounds plausible. The more the number of resident lecturers with appropriate knowledge and skills to teach in the External Degree Programme, the higher the

number of such lecturers employed to offer services at the regional centres. About 68% of the tutors and resident lecturers were holders of master's degree with long teaching experience at the University.

5.3.5 Empathy and Growth

The fifth objective was stated to establish the relationship between empathy dimension and the growth of the External Degree Programme. The respondents did not consider this dimension as important in the provision of distance education at the University. Nevertheless, its perceived – expected performance gap was the lowest. The variables that contributed to the significantly low gap were courtesy of support staff, cost of the programme and ease of use of the course materials.

A hypothesis had been formulated to establish whether there was any significant relationship between empathy dimension of the External Degree Programme and its growth. It had been hypothesized that there was no significant relationship between empathy and the growth of the External Degree Programme. The results showed that there was a negative relationship between the number of students registered and the courtesy of support staff, and individualized care and attention offered to students. However, the relationship between the number of students and out-of-class communication with tutor and the cost of the programme was positive. The student – teacher interaction is used as the quality indicator in the systematic literature review. Indeed, Chaney (2007) observed that "many of the pedagogical benefits of teacher-student interaction, especially those related to motivation are relevant in classroom-based and distance education".

The relation between the number of regional centres and the number of resident lecturers was negative for the out-of-class communication with tutors. However, the relationship was positive for courtesy of support staff and the amount of care and support offered to distance learners. The findings imply that the number of students registered in the External Degree Programme is likely to be fewer if staff is discourteous and do not offer personalized and individualized attention during guidance and counseling sessions. There is a possibility that more students would join the External Degree Programme if out-of-class communication with the tutor is encouraged and the programme is made affordable to the would-be students. Once access to the programme is increased, more regional centres are bound to be opened up and more resident lecturers would be employed to offer support services to the increased student numbers. Available literature suggests that students are more concerned with out-of-class communication with tutors (Biner, et al, 1994), interaction with the instructor on a face-to-face basis (Miller, et al, 1993; Myers, 2008), interaction with support staff (St. Pierre and Olsen, 1989; Tallman, 1994) and interpersonal behavior of faculty members (Pamela, 2006).

5.3.6 Moderating Influence of External Environmental Factors

The last objective was to determine the relationship between moderating effect of environmental factors and growth of the External Degree Programme. The variables used were the top management's desire to tap the opportunity of distance education programme, needs of the consumers (market needs), positive attitude of the managers of distance education towards the programme and competition in the market.

The question intended to determine whether there was any significant relationship between the environmental factors and growth of the programme. The Chi-square test was utilized to examine the hypothesis that there was no significant relationship between the external environmental factors and growth of the distance education programme at the University. The result was that there is a significant relationship between the moderating variables and the growth of EDP.

One of the reasons for the relationship is that the External Degree Programme has emerged as the alternative mode to offer higher degrees at the University. Indeed, the top managers have adopted this mode of study in order to supplement their salaries and incomes. In addition, distance education has been employed to tap the large pool of people who have not been able to learn on a full-time basis.

Another explanation for this relationship could be associated with the needs of the consumers. Many of the students registered in the External Degree Programme are those already employed. Such persons would not wish to leave employment yet they require to be promoted in their places of work. Distance education remains the only alternative to help them achieve their goal.

Another possible explanation for the relationship between growth and environmental factors (such as the positive attitude of managers of DE) would be that it offers the managers the kind of flexibility that allows them to pursue other academic activities such as attendance of conferences and workshops either locally or globally. In addition, the External Degree Programme is often considered as a source of funds with which to run the University's activities.

5.3.7 Contribution to Knowledge

Past studies have identified that students appreciate tangibles of a programme. For instance, the works of Bell (2003) showed that the critical factors in a distance education programme were physical facilities, course materials and personal presentation of staff. This study has demonstrated that learners consider the dimensions of responsiveness and reliability as the most important in the External Degree Programme. The perceived dimension of tangibles does not seem to influence growth in a distance education programme in the School of Continuing and Distance Education contrary to empirical findings.

Another important contribution of this study is that the expansion strategy is not related to any of the dimensions of the External Degree Programme. This is contrary to theoretical reasoning in that it would be expected that growth of a degree programme would be judged by its quality dimensions. The findings therefore suggest that distance learners are not influenced by the quality of distance learning programme. This could be associated with the motivation of distance learners. A study by Nolot's (2011) on motivation of distance learners found that professional advancement was the most motivational orientation for participation in distance education by graduate students.

Finally, this study has also contributed to knowledge on the quality dimension indicators that are specific to distance education programmes in higher education as demonstrated by the University of Nairobi's External Degree Programme. The

Programme is offered through limited face-to-face tutorials and independent study. This is useful information in a developing country.

5.3.8 Policy and Practical Implications to Distance Education Managers

The findings of this study have several policy and practical implications to distance education managers in a number of ways. An understanding of the variables that affect student satisfaction with a distance learning programme can lead to significant programme improvements. Empirical data on student satisfaction has shown that students are satisfied with responsiveness and reliability dimensions in the External Degree Programme. This is useful information to the managers of distance education in several ways.

First, improving on the dissatisfiers (such as study materials, and learning facilities, teaching/learning aids) and strengthening the satisfiers may lead to lower student attrition. Some of the factors that should be strengthened include feedback on assignments, course relevance, course flexibility, learning/teaching methods and so on. Satisfied learners may be less likely to withdraw for non academic reasons. Secondly, strengthening the satisfiers may lead to the realization of greater number of referrals from enrolled students. Satisfied students are more likely to refer distance learning programmes to family members and friends. Finally, there is also greater commitment to a distance learning education programme. Satisfied students are more likely to enroll in another distance learning course and/or complete their chosen programme of study.

The other practical implication of the study is that managers of distance education should be conscious of the top management's desire to tap the opportunities of distance education programme when making strategic decisions in the provision of distance education programmes. This becomes important since the top management is the policy making organ of the University. As such, the top management may prescribe what ought to be done by any of its functional departments in order to be competitive.

5.4 Conclusions

This study tested the conceptual model on the relationship between perceived quality dimensions of an External Degree Programme and its growth factors. The data was collected from a cross-section of students, tutors and resident lecturers. The results showed that the most important quality dimensions in the external degree programme stated by students include responsiveness and reliability. The findings revealed that there is a weak relationship between all the quality dimensions and the growth measures such as the number of students registered in the programme, the number of resident lecturers employed to offer support services and the number of regional study centres that have been established. The results do not lend themselves to theory since the dimensions of a programme are considered as key factors in its growth.

The study also established that there was a significant relationship between the growth of EDP and the external environmental factors. The factors were the top management's desire to tap the opportunity of distance education, the needs of the

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market, the attitude of the managers of DE programmes and the competition in the distance education market.

It is therefore clear that the relationship between perceived quality dimensions and growth in distance education does not fit perfectly well in existing theoretical considerations. This is partly due to the powerful influence of external environmental factors. It is also possibly due to the overwhelming desire of distance learners to obtain a qualification which will enhance their chances for upward mobility in their places of work.

5.5 Recommendations

The purpose of this study was to determine the relationship between perceived quality dimensions of the External Degree Programme and its growth. Although the measures for the characteristics of effective quality dimensions have not been developed, this study has made a step towards establishing measurement scales for future research. This study has made use of the various indicators for a distance education prgramme offered through face-to-face tutorials and independent study as well as those used for the web-based programmes in higher education. The results are of important practical value to managers of distance education at higher institutions for evaluation of growth of distance education programmes.

The evidence presented by the data implies that there is no significant relationship between a programme's quality dimensions and its growth. This has implications to managers of distance education. The managers of distance education realize

increased student numbers irrespective of the quality dimensions of the programme. Arising from these findings this study offers the following recommendations.

First, the education regulatory body(ies) and education managers of distance education should not take increased enrolments as evidence of quality of a programme as this can happen even when there is insufficient learning materials and insufficient learning aids.

Secondly, the regulatory bodies and education managers also note that increased enrolments in distance education programmes may be realized as long as the institution has sufficient support staff and lecturers. It is important to consider learning materials as perceptions of inadequate study materials seemed to cause dissatisfaction among learners as demonstrated in this study.

Thirdly, institutions of higher learning should take cognizance of prompt marking of assignments and currency of learning materials. The findings from the study have shown that there is a weak positive relationship between the numbers of students enrolled in the distance education programme and the two indicators.

Fourthly, distance education programme providers should ensure that the course objectives are clearly spelt out, programme is made as flexible as possible and the staff is responsible to student enquiries. The study has established that there is a positive relationship between these responsiveness quality dimension variables and the growth indicators.

Fifthly, the study has found out that there is a positive weak relationship between the assurance dimension and the number of students registered in the External Degree Programme. It is therefore recommended that managers of distance education programmes should ensure that appropriate teaching techniques are utilized. It is also important to ensure that the course materials are made easy for students to use. This may encourage more students to be enrolled and thereby necessitate the establishment of more regional centres and resident lecturers to cater for the increased student numbers.

The sixth recommendation is that out – of – class communication with tutors should be encouraged. In addition, staff courtesy and support as well as the caring and individualized attention paid to students in solving their academic and personal problems is important in distance education programmes. Although the relationship between these variables and the empathy dimension was weak, it was positive.

Finally, the findings of this study have shown that growth in distance education programmes is determined by external environmental factors. Thus, market needs, attitudes of managers of DE towards risk as well as the top managers' willingness to adopt distance education programmes should be considered in the growth strategies of such programmes.

5.6 Suggestions for Further Research

Although the objectives of this study were achieved, several areas require further investigation. First, a study should be planned to determine the Bachelor of Education degree students' initial motivation to take a distance education programme. While the results of this study have expanded the knowledge that distance learners are not influenced by the perceived quality dimensions, it is important to find out what motivates learners to pursue a distance education programme, for example, professional advancement, the need to ensure their jobs are safe, and so on.

Secondly, it is necessary to carry out a study to examine the correlation between the actual quality dimension and perceived quality dimensions since the two variables may be at variance. The findings have shown that there is no significant relationship between most quality dimensions of a degree programme and its growth strategy. A study relating actual quality dimensions and growth strategy should therefore be conducted to show whether the results support the findings of this study. An explanation would then be sought to determine the factors that motivate a student to choose to learn at a distance in an institution of higher learning that scores poorly on the quality dimensions.

Finally, the benchmarks used in this study did not spell out the effectiveness of the characteristics possessed by the External Degree Programme. For example, the programme was said to be characterized by support staff responsiveness to student enquiries. This benchmark statement does not spell out clearly what characterizes

effective support staff. It may be necessary to carry out a study to identify the characteristics of support staff associated with responsiveness at different levels of performance either quantitatively or qualitatively in a distance education programme.

Kotler, P. and Keller, Ony (1991) Marketing Management. New York, Prentice hall.

Adams, J. (2006) Communication and accommodation, an assumption of study distance........ and teacher. Retrieved at University 2. Retrieved at February 2008 from www.icaap.org/cgi/a book

Adam, M., Rimanly, J., Smith, etc. at Tracy, M. (2002) Counseling system over to day with distance education in Audience. Overview. In Indian education at .... International. American Journal of Distance Education 3 (1)

American Evaluation and Association Publication Manual Washington DC, 1990.

Atkinson, A. and O'Donall, R. (1994) "Expecting Conferee - Assessment of the Creation of Higher Education", Journal of Institutional Research in Australian Vol 3 (1) pg 1 - 2.

Berard, D. K., Brown, R. AL. and Compton E. W. (n191) the Challenges of administrating Distance education to Creation: A Case study. The International Review of Research in Open and Distance Learning Vol 11 (1) 2.

Berard, K. and Brown, H. (1991) "We say them the place: The rare Edge improved for American's Colleges and Universities" Financial World Vol. 160 (Issue) pg. 92-6.

Betts, A. (1999) TSM onebetter chances education. The challenge of new tool on go. Washington Council Business. 3 (1)

Bit, H. (1991) "An overview of the difference and in the Gap about using Frameworks for Assessing the Quality of Higher education" American Review Education Administration Vol. 14 (2)

Bit, H. R. and MacK, G. A. R (1991) "Meaning Service Quality an Imperial Comparison Different" Mid-Journal Journal of Business and Al pg 6

Bit, H. R. and Dib and and A. Parasuram (2002) "A an Association for improving Sevier Quality from Perception." Review Journal pg 91 - 94

Bita, M. (1992) Market Force: Instrumentation American sre Quality Controlin. A manual handbook for Newley. Boston, Persian Hall.

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REFERENCES

Aaker, D. A (1991) *Managing Brand Equity* New York: The Free Press

Aaker, D. A, Kumar, V. and George Day (1998). Marketing Research New York: John Wiley& Sons.

Adams, J (2008) Understanding the factors limiting the acceptability of online courses and degrees. *International Journal on E-Learning*, 7. Retrieved on February, 2009 from http://www.editlib.org. html

Allen, M., Bourhis, J., Burrell, N., & Mabry, E. (2002) Comparing student satisfaction with distance education to traditional classrooms in higher education: A metaanalysis. *American Journal of Distance Education, 16*(2),

American Psychological Association *Publication Manual* Washington, DC, 2005

Athiyaman, A and O'Donnell B (1994) "Exploring Graduates' Perceptions of the Quality of Higher Education" *Journal of Institutional Research in Australasia* Vol 3 (1) pp 1 – 7

Baraza, C. N, Natalie, B. M, and Clayton, R. W (2010) *The Challenges of Implementing Distance Education in Uganda: A Case Study*. The International Review of Research in Open and Distance Learning Vol. 11 No. 2

Barret, K and Greene, R (1994) "No one Runs the place: The Sorry Mismanagement of America's Colleges and Universities" *Financial World* Vol. 163 (March) pp 38-45.

Bates, A (1991) Third generation distance education: The challenge of new technology. Research in Distance Education, 3 (2).

Bell D. (2003) "An Evaluation of the Effectiveness of the Gap Model as a Framework for Assessing the Quality of Higher Education" *Journal of Tertiary Education Administration* Vol. 14 (2)

Bell D, R and Sheiff, D. S. E (1990) "Managing Service Quality for Improved Competitive Performance" *New Zealand Journal of Business* Vol. 12 pp 1 - 12

Berry L. L, V.A Zeithaml and A Parasuraman (1990) "Five Imperatives for Improving Service Quality" *Sloan Management Review*, summer pp 29 – 38

Best, R. J (2005) Market – Based Management: Strategies for Growing Customer Value and Profitability New Jersey: Pearson Prentice Hall

Bibb D. D (2002) "Distance Education: A Model for Providing Services and Bibliographic Instruction" *United States Distance Learning Association Journal* Vol. 16 No. 9 pp 1 – 5

Biner P.M, Dean R.S and Mellinger A.E (1994) "Factors Underlying Distance Learner Satisfaction with Televised College-level Courses" *The American Journal of Distance Education 8(1) pp 60-71*

Bowa, O (2008). The Influence of Learner Support Services on academic performance of distance learners: The case of external degree programme of the University of Nairobi in Kenya. (Unpublished Ph. D Thesis), University of Nairobi.

Boyce, J (2003) Market Research in Practice Boston: McGraw-Hill

Briggs, S. R and Cheek, J. M (1986) The Role of factor analysis in the development and evaluation of personality scales. *Journal of Personality, 54*

Brown, S. T, Kirkpatrick, M. K & Wrisley, C. D (2002) Evaluative parameters of a Web-based nursing leadership course from the learners' perspectives. *Journal of Nursing Education, 42(3), 137 – 7.*

Brown, F. B and . Yvonne, B.(2010) Distance Education around the World. *Education and Technology.*

Chay R. F (1991) "How Marketing Researchers can Harvest the Power of Brand Equity" *Marketing Research* June pp. 30 – 37

Chaney, B. H, Eddy, J. M and Steve M. Dorman (2007) A Primer on Quality Indicators of Distance Education, Health Promotion Practice, Vol. 10 No. 2.

Churchill G. A, Jr. (1979) "A Paradigm for Developing Better Measures of Marketing Constructs" *Journal of Marketing Research*, 16 (February) 64 – 73

Cicco, G. (2007) A comparison of online instruction and in-class instruction as related to graduate students' achievement, attitudes, and learning-style preferences. Unpublished Doctoral dissertation. Retrieved from ProQuest Dissertations and Theses Database on March, 2012.

Commonwealth of Learning (2009) Quality Assurance Toolkit for Distance Education Institutions and Programmes Retrieved October 23, 2009 from http://www.col.org/resources.html

Cone, J and Foster, S (1993) Dissertation and Theses from Start to Finish, *American Psychological Association.*

Conrad, D (2002). Deep in the Hearts of Learners: Insights into the nature of online learning. *Journal of Distance Education,* 17 (1).

Coolican, R (1992) Research Methods and Statistics in Psychology. Seven Oaks: Hodder and Stoughton.

Cooper, D. R and Schindler, P. S (2003) Business Research Methods Boston: McGraw-Hill

Cooper, D. R and Emory C. W (1995) Business Research Methods Chicago: The McGraw-Hill Company

Council for Higher Education Accreditation (2000), Distance Learning in Higher Education, CHEA Update No. 3

Council of Regional Accrediting Commissions (2000) Statement of the Regional Accrediting Commissions on the Evaluation of Electronically Offered Degree and Certificate Programmes and Guidelines for the Evaluation of Electronically Offered Degree and Certificate Prgrammes.

Chowdhary, N and Chowdhary, M (2005), A Textbook of Marketing Services – The Indian Experience. New Dehli: Macmillan Indian Ltd.

Cronbach, Lee J. (1951) "Coefficient Alpha and the Internal Structure of Tests" Psychometrika, 16 (October), 297 - 334

Cromin J.J and Taylor S.A (1992) "Measuring Service Quality: A Re-examination and Extension" *Journal of Marketing Vol. 56* pp 55-68

Daniel, J .S, Stroud, M. A and Thompson, T. R (1996) Learning at a distance: A world perspective. Edmonton, Alberta: Athabasca University. Retrieved on February, 2012 from http://books.google.ac.ke/books

Daranajan, G (2002) *"Open and Distance Learning in Developing Economies"* UNESCO Conference of Ministers of Education of African Member States, December 6

DiDomenico, E and Bonnici J (1996) "Assessing Service Quality within the Educational Environment" Education, Spring

Department of Educational Studies Strategic Plan 2008 – 2013

Department of Educational Studies (2007). List of External Degree Programme Resident Lecturers.

Department of Educational Studies (2011) List of External Degree Programme Tutors and Subject Coordinators.

Donio, J., Massari, P., & Passiante, G. (2006) Customer satisfaction and loyalty in digital environment: An empirical test. *Journal of Consumer Marketing, 23*(7).

Dubin, R and Tavaggia, T (1988) The Teaching – learning paradox: A comparative analysis f college teaching methods. Retrieved on March 2012 from http://books.googles.ac.ke

Dutt, R (1986) "Distance Education in India" Journal of Higher Education Vol. II No. 2

Farquhar P. H (1989) *"Managing Brand Equity"* Marketing Research, September pp 24 – 33.

Faculty of External Studies (2006) Nominal Rolls (1999 – 2006)

Folkes Valerie S (1988) "Consumer Reactions to Product Failure: Attributional Approach" *Journal of Consumer Research 10,* March.

Fresen J (2002) "Quality in Web-supported Learning" *Educational Technology 42 (1).*

Fullerton, G., & Taylor, S. (2002) Mediating, interactive, and non-linear effects in.service quality and satisfaction with services research. *Canadian Journal of Administrative Sciences,* 19(2).

Gao, T., & Lehman, J. D. (2003) The effects of different levels of interaction on the achievement and motivational perceptions of college students in a. web-based learning environment. *Journal of Interactive Learning Research, 14*(4).

Gannon Cook, R., Ley, K., Crawford, C., & Warner, A. (2009) Motivators and inhibitors for university faculty in distance and e-learning. *British Journal of Educational Technology, 40.*

Garrison, D (1987) "Researching Dropout in Distance Education" Distance Education 8(1) 95-101

Garvin D. A (1983) *"Quality on the Line"* Harvard Business Review, 61 (September – October) pp 65 – 73

Gravetter, F. J and Wallnau, L.B (2000) Statistics for the Behavioural Sciences, Belmont, C. A: Wadsworth

Gronroos C. (1982) Strategic Management and Marketing in the Service Sector Helsingfors: Swedish School of Economics and Business Administration

Gultekin, Mehmet (2009) Quality of Distance Education in Turkey: Preschool Teacher Training Case. *International Review of Research in Open and Distance Learning, Vol. 10 Number 2.*

Gunawardena, Charlotte, N and McIsaac Marina, S (2008) Distance Education. In *Proceedings of the Distance Education Conference,* Portland: Oregon.

Hardy, D (2000) European Virtual Universities. New Learning. Retrieved on April 20, 2012 from http://book.google.ac.ke

Hakes C (1991) Total Quality Management: The Key to Business Improvement London: UK Chapman & Hall

Hambrick D. C (1980) "Operationalizing the Concept of Business – Level Strategy in Research" *Academy of Management Review Vol. 5 No. 4* pp 567 – 575

Hammer, P and Shale, D (1981) "Removing Barriers to the Participation of Adult Learners in Higher Education" Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Washington D. C.

Hara, N & Kling, R. (2001) Student distress in web-base distance education. Educause Quarterly, 24(3), 68-69

Hedge N (1996) "Balancing the Elements: A Way of Looking at Issues in Distance Education" in Going the Distance: Teaching, Learning and Research in Distance Education

Henderikx, P, Frits Hoff and David Hardy (1996) European Virtual Universities in Context. Britain: Kogan Page

Hirner, Leo J (2008) Quality Indicators for Evaluating Distance Education Programmes at Community Colleges, (Unpublished Ph. D Thesis), University of Missouri, Columbia

Hofer C. W (1976) "Research on Strategic Planning: A Survey of Past Studies and Suggestions for Future Efforts" *Journal of Economics and Business Vol. 28* pp 251 – 286

Holbrook M. B and Kim P Corfman (1985) "Quality and Value in the Consumption Experience: Phaedrus Rides Again" in Perceived Quality J. Jacoby and J. Olson eds Lexington, M A: Lexington Books 31 - 57

Holdford D. A and Anuprita P (2003) "Identification of the Service Quality Dimensions of Pharmaceutical Education" *American journal of Pharmaceutical Education* Vol 65

Holmberg, B (1985) Applications of Distance Education in Kenya. *Distance Education. Vol. 6 No. 2*

Holmberg, B (1989) Distance Education New York: The Free Press

Howard J. and Jagdish S. (1969) The Theory of Buyer Behavior New York: John Wiley and Sons in Parasuraman, et al "SERVQUAL: A Multi – Item Scale for Measuring Consumer Perceptions of Service Quality" *Journal of Retailing Vol. 64 No. 1 Spring* pp 15 – 16

Hunt K. (1979) Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, Cambridge, MA: Marketing Science Institute

Jacoby J and Jerry C. Olson (1985) Perceived Quality Lexington, MA: Lexington Books

Johnson, G. and Kevan Scholes (2004) Exploring Corporate Strategy New Delhi: Prentice-Hall of India

Jung, I. S (2005) A review of policy and Practice in virtual education: In the context of higher education in S. Korea. *Educational Studies, 47*

Jung, Insung (2011) The dimensions of e-learning: From the learner's perspective. *Educational Technology Research and Development. Vol. 50, No. 4* (August).

Kamau J. W and Odumbe J O (1995) Students Handbook, Nairobi: College of Education and External Studies

Kamau J. W (1984) External Degree Programme Training Manual Nairobi: College of Adult and Distance Education and Kenyatta University College

Karani F. A (2004) Conceptual Understanding and Current Policies and Practice in Open Learning and Distance Education, Paper Presented at the National Policy Consultative Forum on Open Learning and Distance Education

Keegan D (1986) Foundations of Distance Education. London: Croom Helm.

Keller K. L (1993) "Conceptualizing, Measuring, and Managing Customer-based Brand Equity" *Journal of Marketing Vol. 57* January pp 1 – 22.

Kelley, H. H (1991) Attribution theory in Social Psychology Lincoln: University of Nebraska

Kelsey, D. K, James R. Lindner, and Kim E. Dooley (2002) "Agricultural Education at a Distance: Let's Hear from the Students", *Journal of Agricultural Education Vol.43 No. 4.*

177

Kenya Bureau of Standards Implementation of ISO 9000 Standard Handbook, Nairobi: KEBS Training and Advisory Services, 2007

Kerlinger F. N (1992) Foundations of Behavioral Research New York: Holt, Rinehart and Winston

Kidombo, H.J (2007) Human Resource Strategic Orientation, Organizational Commitment and Firm Performance in Large Private Manufacturing Firms in Kenya, (Unpublished Ph. D Thesis), University of Nairobi

Kou, L. (1984) Methodology of Educational Research New Delhi: Vani Educational Books

Koul, B. N (1988) Professional Development of Distance Education: Why, What and How New Delhi: School of Education

Krejele, R.V & Morgan, D. (1970) "Determining Sample Size for Research Activities" *Education and Psychological Measurement Vol. 30 No. 3*

Lagrosen, S, Roxana S and Markus Leitner (2004) Examination of the Dimensions of Quality in Higher Education. *Quality Assurance in Educaation, Vol. 12 Issue 2* pp 61-69

Lehtinen U and Jarmo R. Lehtinen (1982) "Service Quality: A Study of Quality Dimensions" Unpublished Working Paper Helsinki: Service Management Institute.

Letchem, C and Jung, I (2010) Distance and Blended learning: Opening up Asia Education and Training. New York: Rutledge.

Levin R. I and David S. R. (2003) Statistics for Management New Dehli: Prentice – Hall of India

Lewis R. C and Benard H. B. (1983) *"The Marketing Aspects of Service Quality"* in Emerging Perspectives on Service Marketing, L. Berry, G. and G. Upah, eds Chicago: *American Marketing* pp 99 – 107.

Lin, Y.-M., Lin, G.-Y., & Laffey, J. M. (2008) Building a social and motivational framework for understanding satisfaction in online learning. *Journal of Educational Computing Research*, 38.

Lockee, B, et al (2002) "Measuring Success: Evaluation Strategies for Distance Education" *Educause Quarterly No. 1* pp 21 – 26

Lovelock, C. H (1980) "Towards a Classification of Services" in Theoretical Developments in Marketing, C. Lamb and P. Dunne, Eds Chicago: American Marketing, pp 72 – 76

Lovelock, C. H (1983) "Classifying Services to Gain Strategic Marketing Insights" *Journal of Marketing 47 (summer)* pp 9 – 20

Madeline, O, Ricky W. and Tracy J (2005) College Students' Perception of Quality in Distance Education: The Importance of Communication. *Quarterly Review of Distance Education, Vol. 6*

Madu, C. N and Kuei, C (1994) "Total Quality Management in the University: A Quality Code of Honour" *Total Quality Management, Vol. 5(6)*, pp. 375 – 390.

Marginson, S (2002) "Quality Assurance for Distance Learning: Issues for International Discussion and Action", CHEA International Seminar III on Academic Quality, Policy, Preferences and politics, San Francisco, January 24.

Martin R (1997) "Key Issues in Transitioning from Distance Education to Distributed Learning". *Outlining Chronicle of Distance Education and Communication Vol 12, No. 1 (spring)* pp. 1 – 6

Mbogori D. K (2007) "An Investigation of the Relationship between the Course Delivery Systems and Learners' Needs in Kenya" Unpublished Ph.D Thesis, University of Nairobi.

Mcllroy A and R. Walker (1993) "Total Quality Management: Some Implications for the Management of Distance Education" *Distance Education Vol. 14 (January)* pp 40 – 54

Miles R. E and Snow C. C (1978) Organizational Strategy, Structure and Process New York: McGraw-Hill.

Miles R. E and Cameron K. S (1982) Coffin Nails and Corporate Strategies in Ellen E. Chaffee "Three Models of Strategy" *Academy of Management Review Vo. 10 No. 1* pp 89 – 98

Miller, J.W; McKenna, M.C and Ramsey, P (1993) "An Evaluation of Student Content Learning and Affective Perceptions of a two-way interactive video learning experience" *Educational Technology 33(6)* 51-55

Mintzberg H. (1973) "Strategy – Making in Three Modes" *California Management Review Winter Vol. XVI No. 2* pp 44 – 53

Mohle, H (1983) "Higher Education and Postgraduate Studies in the GDR organized as Distance Education" *Higher Education in Europe 8 No. 3.*

Moore, J.C (2005) The Sloan Consortium quality framework and the five pillars. Retrieved from http://www.sloan-c.org on June, 2011.

Moore, J. C (2002) Elements of quality: The Sloan-C framework. Needham: Sloan Centre for online Education.

Moore, M. G (1990) Contemorary Issues in American distance education. Oxford: Pergamon Press.

Mowen Andrew. J and Sara C. Parks (1997) "Competitive Marketing of Distance Education: A Model for Placing Quality Within a Strategic Planning Context" *The American Journal of Distance Education Vol. 11 No. 3* pp 27 - 39

Mugenda Olive M and Mugenda Abel G (2003). Research Methods: Quantitative and Qualitative Approaches Nairobi: African Centre for Technology Studies

Murgatroyd S (1993) "The House of Quality: Using QFD for Instructional design in distance education" *The American Journal of Distance Education Vol. 7* February pp 34 – 48

Murphy (1997) "Key Issues in Transiting from Distance Education to Distributed Learning". *Outlining Chronicle of Distance Education and Communication, 12 No. 1 Spring.*

Myers, D. J (2008) Assessing Quality Indicators in Asynchronous Undergraduate Distance Education Courses, Dissertation, Nova Southeastern University.

National Assessment and Accreditation Council (2007) Quality Assurance Toolkit for Teacher Education Institutions: Guidelines. Bangalore: Pentaplus Printers.

Nachmias, C.F and Nachmias, A.G (1996) Research Methods in the Social Sciences, London: Arnold.

Nolot, Sandra, K. (2011) "Esploring the motivational orientation of graduate students in Distance Edcuation Programmes. Doctoral Dissertation, Ball State University.

Nunan, Ted and Calvert Jocelyn (1992) Quality and Standards in Distance Education Report to the National Distance Education Conference, Deakin University, Victoria.

Odumbe J. O (2004) Overview of the Provision of Distance Learning in Kenya. Unpublished Workshop Paper, Nakuru 15th May.

Oliver , Richard L (1981) "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions" *Journal of Marketing Research, 17 November.*

Olshavsky R. W (1985) "Perceived Quality in Consumer Decision Making: An Integrated Theoretical Perspective" in Perceived Quality, J. Jacoby and J. Olson eds Lexington, MA: Lexington.

Orodho, John, A. (2010) Techniques of Writing Research Proposal and Reports in Education and Social Sciences, Nairobi: Kanezja HP Enterprises.

Pallat, J (2006) SPSS Survival Manual, New York: Open University Press.

Pamela H (2006) "Dimensions of Program Quality in Web-based Adult Education" *American Journal of distance Education Vol. 20(1).*

Parasuraman, A et al (1991) "Understanding Customer Expectations of Service" Sloan Management Review, Spring pp 1 – 11.

Parasuraman, A et al (1990) "Guidelines for Conducting Service Quality Research" *Marketing Research December* pp 34 – 44.

Parasuraman A (1985) "A Conceptual Model of Service Quality and Its Implications for Conducting Service Quality Research" *Journal of Marketing Vol. 49* pp 41 – 50.

Parasuraman A et al (1988) "SERVQUAL: A Multi-Item Scale for Measuring Consumer Perceptions of Service Quality" *Journal of Retailing Vol. 64 No. 1.*

Parasuraman A. (1990) Delivering Quality Service: Balancing Consumer Perceptions and Expectations New York: The Free Press.

Pearce, John A. and Robinson B. R (1986) Strategic Management: Strategic Formulation and Implementation. New York: Richard D. Irwin.h

Petty, R et al (1991) "Theories of Attitude Change" in Harold Kassarjan and Thomas Robertson, eds Handbook of Consumer Theory and Research, Englewood Cliffs, N.J: Prentice Hall.

Phipps, R (2006) What's the Difference? A Review of Contemporary Research on the Effectiveness of Distance Learning in Higher Education, Washington DC: The Institute for Higher Education Policy.

Pilcher C and Miller C. (2000) "Learning Strategies for Distance Education Students" *Journal of Agricultural Education 41 (1)* pp 60-68.

Pittman, V (1991) "Rivalry for Respectability. Collegiate and Proprietary Correspondence Programmes In Second American Symposium on Research in Distance Education. University Park, PA. Pennsylvania State University.

Powpaka, S (1996) "The Role of Outcome Quality as a Determinant of Overall Service Quality I different Categories of Service Industries: An Empirical Investigation" *Journal of Service Marketing, 10*: 5-25.

Primary Research Group (2002) The Survey of Distance and Cyber-learning Programmes in Higher Education. New York: Primary Research Group

Quality Assurance Agency (2002) Distance Learning Guidelines. Retrieved March 19th 2011from http://www.qaa.ac.uk.

Rambo, C and Paul Odundo (2011) Factors that influence learner's perceptions of the distance learning programme at the University of Nairobi. Retrieved on May 21, 2012 from http://archives.uonbi.ac.ke

Raymondo, J.C (1999) Statistical Analysis in the Behavioural Sciences. Boston: McGraw – Hill College.

Robinson B. (1995) "The Management of Quality in Open and Distance Learning" in Indira Gandhi Open University, Structure and Management of Open Learning Systems. Proceedings of the Eighth Annual Conference of the Asian Association of Open Universities, New Delhi February 20 – 22 Vol. 1 pp 95 – 109

Robledo, M. A. (2001) Measuring and Managing Service Quality: Integrating Customer Expectations. *Managing Service Quality, Vol. 11, No 1,* pp. 22-31.

Rumble, G. (1986) The Planning and Management of Distance Education. London: Croom Helm.

Sasser W E Jr, R. Paul O and D. Daryl W (1978) Management of Service Operations;Text and Cases Boston: Allyn and Bacoo

Savukas R. et al (1999) "Open Universities: A Revolution in Lifelong Learning" UNESCO December, 20

Sekaran, U. (1992) Research Methods for Business: A Skill-Building Approach New York: John Wiley and Sons

Schiffman, Leon G. and Leslie L. Kanuk (1996) Consumer Behaviour New Delhi: Prentice Hall of India

Shih, C. C & Gamon, J (2001) "Web-based Learning: relationships among Student Motivation, Attitude, Learning Styles and Achievement" *Journal of Agricultural Education 42 (4)*, 12-20

Shimp, Terence A, (1991) "Neo-Pavlovian Conditioning and Its Implications for Consumer Theory and Research" in Leon G. Schiffman and Leslie

L. Kanuk, eds., Consumer Behaviour. New Delhi: Prentice Hall of India.

Skinner, B. F. (1938) The Behaviour of Organisms: An Experimental Analysis. New Jersey: Prentice-Hall.

St. Pierre S and L. K Olsen (1989) "Student Perspectives on the Effectiveness of Correspondence Instruction" *The American Journal of Distance Education Vol.5 No.3*

Smith, Gerald and Jerry Debenham (1998) "Automating University Teaching by the Year 2000" *T.H.E Journal, 21.1 (August)*, pp 71-75

Song, L, Singleton, E. S, Hill, J. R & Koh, M. H (2004) Improving online learning: Student perceptions of useful and challenging characteristics. Internet and Higher Education, 7, 59 - 70

Stanford, B. K (1987) "Distance Education: Occasional Paper N. 9 Committee of Enquiry into Education in South Australia

Stella, A. and Gnanam, A (2002) Assuring Quality and Standards in Higher Education: The Contemporary Context and Concerns, Bangalore: Allied Publisher

Stella Antony and Gnanam, A (2004) Quality Assurance in Distance Education: The Challenges to be Addressed, Higher Education, Vol. 47 No. 2

Stevenson K, Kay Mackeogh and Paul Sander (2006) Working with Student Expectations of Tutor Support in Distance Education: Testing an expectations-led quality assurance model. Open Learning, Vol. 21, No. 2 July

Suganthi, L and Anand A. Samuel (2004) Total Quality Management, New Delhi: Prentice-Hall of India

Syagga, P. M (2001) A Report on Distance Learning at the University of Nairobi. Senate Sb-Committee on Faculty of External Studies. University of Nairobi.

Sylvia, G. F and Deborah J. Willis (1987) Distance Education: Definition and Overview. *Journal of Education for Library and Information Science, Vol. 27 No. 4 (Spring)*

Tabachnick, B. G and Fidell, L. (2001) Using Multivariate Statistics, New York: Harper Collins.

Tabata, L. N., & Johnsrud, L. K. (2008) The impact of faculty attitudes toward technology, distance education, and innovation. *Research in Higher Education, 49,*

183

Tallent-Runnels, M. K., Thomas, J. A., Lan, W. Y., Cooper, S., Ahern, T. C., Shaw, S. M., & Liu, X. (2006) Teaching courses online: A review of the research. *Review of Educational Research, 76,* 93–135. Retrieved from http://rer.sagepub.com/content/by/year

Tallman, F.D (1994) "Satisfaction and Completion in Correspondence Study: The Influence of Instructional and Student-Support Services" *The American Journal of Distance Education 8(20),* pp 43-57.

Tricker, T., Rangecroft, M. Long, P. & Gilroy, P (2001) Evaluating Distance education courses: The Student Perception. Assessment & Evaluation in Higher Education, 26(2), 167 – 177.

Tuckman B. W (1994) Conducting Educational Research. Fortworth: Harcourt Brace College Publishers

Umis/smis.uonbi.ac.ke. Retrieved on March 2011.

University of Nairobi (2011) Fees Structure.

University of Nairobi (2010) Service Charter, Nairobi: Downtown Printing Works

University of Nairobi (2010) Strategic Plan. Retrieved from www.uobi.ac.ke on July 19, 2011.

Vaughan, N. (2007) Perspectives on blended learning in higher education. *International Journal on E-Learning, 6*(1), 81–94. Retrieved from http://www.editlib.org on March 20th, 2012.

Wang, M. MacArthur, D. A & Crosby, R. (2003) A descriptive study of community college teachers' attitudes toward online learning. TechTrends, 47(5), 28 – 31.

Wayland Jane P. and Cathy Owens S (2004) Distance Education: Issues and Concerns for Marketing Educators. Retrieved from Http://95sma.193.htm on February 24th, 2009

Wilkinson, Thomas W & Thomas M. Sherman (1991) "Telecommunications-Based Distance Education: Who's Doing What?" *Educational Technology, November, 54 – 59.*

Willis, Barry (2012) Distance Education: Strategies and tools. New Jersey: .Engle— d Cliffs: Retrieved on January, 12, 2012 from http:// ks.google.ac.ke

Zeithaml, V. A (1988) "Consumer Perceptions of Price, Quality and Value: A Means – End Model and Synthesis of Evidence" *Journal of Marketing* Vol. 52 pp 2 – 22.

Zygouris-Coe, V., Swan, B., & Ireland, J. (2009) Online learning and quality assurance. *International Journal of E-Learning, 8,* 127–146. Retrieved from http://www.editlib.org/j/IJEL on February12th, 2012.

APPENDICES

Appendix A: Letter to Respondent

Dear Respondent

I am a graduate student in the School of Continuing and Distance Education, University of Nairobi. In fulfillment of the requirements for a degree of Doctor of Philosophy, I am conducting a study titled "The Relationship between Perceived Quality Dimensions and Growth Strategy: The Case of External Degree Programme of the University of Nairobi, Kenya".

You have been selected to participate in the study. I am therefore requesting you to kindly help by completing the questionnaire attached to the best of your knowledge. The information sought is for academic purpose only and your responses will be treated in strict confidence and in no instance will your name be disclosed to a third party or appear in the final report.

The questionnaires are in three parts: B, C and D. Appendix B is for students while Appendices C and D are for Resident Lecturers and Tutors and managers of distance education respectively. Thus, if you are a student, complete Appendix B. For Resident lecturers and tutors, you should complete appendices C and for managers of distance education, you should complete appendix D.
Your co-operation is highly appreciated.

Thank you very much

Your truly,

Peter K. Nzuki,

Appendix B: Questionnaire for Distant Learners

For each of the following questions, please choose the right answer by placing a tick in the correct box or as appropriate.

1. Listed below are quality dimensions that distance education programmes should posses. Please rate in the order of importance the dimensions that you think the Bachelor of Education by distance learning possesses (where 5 = most important, 1 = least important)

Reliability   ____

Tangibles   ____

Responsiveness   ____

Assurance   ____

Empathy   ____

2. On a scale of 10 – 100, please rate the performance of each of the following Bachelor of Education degree programme quality dimension against your expectations (where 10= poor, 100=Excellent)

Quality Dimension	10	20	30	40	50	60	70	80	90	100
Reliability										

Tangibles							
Responsiveness							
Assurance							
Empathy							

3. How adequate are the following in the provision of Bachelor of education programme at the University of Nairobi? (Scoring is Highly adequate = 5, Adequate = 4, Neither = 3, Inadequate = 2 and Highly inadequate = 1)

Item	Highly adequate(5)	Adequate(4)	Neither adequate nor inadequate (3)	Inadequate (2)	Highly inadequate (1)
Study Units					
Availability of learning facilities					
Learning aids e.g. computers, cassettes					
Support staff					
Lecturers					

4. How responsive is the support staff in providing services during residential sessions?

Highly responsive	Responsive	Neither responsive nor irresponsive	Irresponsive	Highly irresponsive
5	4	3	2	1

5. To what extent is the support staff courteous when dealing with your academic problems?

Highly courteous	Courteous	Neither courteous nor discourteous	Discourteous	Highly discourteous
5	4	3	2	1

6. In your opinion, does academic staff possess sufficient knowledge in providing services to convey trust and confidence?

Yes ☐   No ☐   No Opinion ☐

7. To what extent does support staff convey a caring, individualized attention in solving your problems at Residential Sessions?

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Very caring	Caring	Neither caring nor uncaring	Uncaring	Very uncaring
5	4	3	2	1

8. In your opinion, does the teaching staff possess sufficient knowledge to deal with you as a distance education learner?

Yes ☐   No ☐   No opinion ☐

9. For each of the following statements, please indicate the extent to which you agree that the University of Nairobi's Bachelor of Education (External degree programme) possesses the feature described by each statement. Place a tick against your choice

Statement	Strongly agree (5)	Agree (4)	Neither agree nor disagree (3)	Disagree (2)	Highly disagree (1)
There is prompt marking of assignments					
Feedback on assignments is constructive					
Course materials					

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are easy to use				
Course objectives are clear				
Distance education program offers status or advancement outcomes				
DE program offers increased links to job promotions/hires				
Techniques used in teaching are appropriate				
Learning materials are up-to-date				
There is teaching excellence				
The course is flexible and				

customized to individual needs				
The course is relevant				

10. How costly is the Bachelor of Education (Arts) degree program?

Extremely expensive (1)	Expensive (2)	Neither expensive nor inexpensive (3)	Inexpensive (4)	Extremely inexpensive (5)

11. To what extent do you think is the performance of University of Nairobi with respect to the following:

	Very good (5)	Good (4)	Neither good nor poor (3)	Poor (2)	Very poor (1)
Capacity to serve students admitted					
Education delivery system					
Communication techniques used					

Support services					

12. In your opinion, what is the degree of competition in the provision of distance education in Kenya?

Extremely competitive (Extremely high) (1)	Competitive (High) (2)	Neither competitive nor uncompetitive (High or low) (3)	Uncompetitive (Low) (4)	Extremely Uncompetitive (Extremely low) (5)

13. Indicate your level of satisfaction with the provision of Bachelor of Education degree program at the University of Nairobi

Extremely satisfied (5)	Satisfied (4)	Neither satisfied nor dissatisfied (3)	Dissatisfied (2)	Extremely dissatisfied (1)

14. If your answer to Q. 14 is satisfied or extremely satisfied, state the areas of satisfaction from the following:

Course management ❑

Up-to-date learning materials ❑

Personnel at Residential Sessions ❑

Promptness of study material delivery ❑

Instructor/tutor ❑

The quality of instruction ❑

Out-of-class communication with a tutor ❑

Convenience of program ❑

Course Structure (Period of Residential Sessions) ❑

Program Duration (i.e. 4- year program) ❑

Any other (please specify) ❑ -------------

15. If your answer to Question 14 is dissatisfied or extremely dissatisfied, state the areas of dissatisfaction among the following

Conflict with work ❑

Feelings of isolation ❑

Lack of support services ❑

Inaccessible resources/educational materials ❑

Tutor's experience to teach at a distance ❑

Period to complete programme ❑

Any other (please specify) ❑ -------------------

16. Would you recommend a colleague to enroll in the Bachelor of Education degree programme   Yes ❑   No ❑   No Opinion ❑

17. Would you enroll for another programme offered at a distance at the University of Nairobi? Yes ❑   No ❑   Undecided   ❑

18. What recommendation would you offer to the University of Nairobi with respect to your opinion on service delivery in the Bachelor of Education degree program?

Would recommend that the University expands the programme   ❑

The University should not spend its resources in the programme   ❑

The University should cut down its expenses on the programme   ❑

Would recommend that the University maintain the status quo (do nothing to the program).   ❑

19. Gender: Female ❑   Male ❑

20. Study Centre: Kakamega ❑   Kisumu ❑   Mombasa ❑   Nairobi ❑ Nakuru ❑   Nyeri ❑

21. Were you employed by the time you registered for the programme?

          Yes   □   No □

22. Indicate the year of study 2nd Year   3rd ❑ear   □

     Thank you very much for your cooperation.

Appendix C: Questionnaire for Resident Lecturers and Tutors

1. Provided below are quality indicators of a distance education programme. Indicate by a tick (√) the extent to which the statement meets the criterion. Scoring is 1 = Fails to meet criterion, 2=Unsatisfactory, 3= Satisfactory, 4= Good, and 5 = Excellent.

Quality Indicator	Excellent	Good	Satisfactory	Unsatisfactory	Fails to meet criterion
(a) Tangibles					
Residential session facilitators/support staff are adequate					
The University employs sufficient staff to coordinate and supervise the various activities of the distance education programme					
The distance education programme has sufficient qualified academic staff					
Library services are accessible to learners					
Adequate administrative support is given to tutors to enable them to provide individual academic support for learners					
The choice of media and the technology					

to be used is appropriately integrated in the course					
Teaching aids – computers, cassettes are adequate					
Study materials are adequate					
Learning facilities are adequate					
Tutors are sufficient					
(b) Reliability					
Learning materials are up-to-date					
There is a specified procedure to receive and record return of marked assignments to learners					
The specific time frame to return assignments allows learners to benefit from formative feedback					
There is prompt marking of assignments					
Course content is up-to-date and reflects market demands					
There is a range of assessment tasks and methods for validating learning outcomes					
(c) Responsiveness					
The programme's stated objectives focus on the needs of the learners and market					

The programme structure is flexible and allows for and encourages lateral entry and exit that leads to progression to higher levels					
The programme provide sufficient flexibility for learner choices in the courses					
Teaching/learning methods are consciously planned in view of the different learner abilities and needs					
Support staff are responsive to student enquiries					
Assessment results are recorded securely and reliably and made available to learners					
(d) Assurance					
The academic staff possess appropriate qualifications, skills and expertise related to Open and Distance Learning					
The administrative (support) staff possess appropriate qualifications, skills and expertise related to Open and Distance Learning					
The teaching strategies of the programme are					

structured to facilitate the achievement of the intended learning outcomes					
The University provides support to learners through appropriately qualified staff					
The University ensures that the administrative (support) staff employed have the relevant skills and experience to deal with the learners and academic staff					
The University employs sufficient qualified and experienced support staff to support the delivery of programme to learners					
The University provides training at regular intervals to improve the skills and knowledge of support staff					
Induction and orientation training programmes are conducted for tutors before the commencement of courses					
There is a mechanism for monitoring the					

performance of tutors which informs future training programmes				
Instructional materials are reviewed every five years to ensure they meet programme standards				
(e) Empathy				
The University has formal and informal mechanisms in place to obtain feedback from learners				
Clear channels of communication are established between learners and the tutors involved in the teaching of the programme				
Teacher and learner interaction is facilitated through formal contact sessions and tutor feedback on assignments				
The University uses available technology (e.g. email, mobile phones, internet) to communicate with learners on a continuous basis				
Course materials are easy to use				
The University obtains regular feedback from tutors on the course				

materials with reference to their user friendliness and appropriateness				
Learners have access to the tutors through a variety of media.				
The University identifies and responds to learners with specific learning difficulties				
The University provides services in multiple formats to meet learners' needs				
The support staff offer services with courtesy				
Academic and personal counseling is provided to the learners				
The cost of the programme is affordable to the learners				

2. Do you think the University has the capacity to serve students admitted to a degree offered by distance learning? Yes___ No ___ No Opinion ____

3. If your answer is "No", what institutional structures would you propose to be established?

_____

4. In your opinion, is the University committing sufficient funds to the promotion of the External Degree Programme? Yes ___ No ____ No opinion _____

5. What recommendation would you offer the University with respect to the External Degree Programme. You should not tick (√) more than one recommendation

The University should expand the programme to accommodate more students ( )

University should not spend its resources on the programme   ( )

University should cut down its expenses on the programme   ( )

University should do nothing to the programme (maintain status quo)   ( )

Thank you for taking your time to respond to the questions.

Appendix D: Questionnaire for Managers of Distance Education Programme

1. Provided below are the quality indicators for a distance education programme. Indicate by a tick (√) the extent to which you agree/disagree with the statement. Scoring is Strongly agree = 5, Agree = 4, Neither agree nor disagree =3, Disagree = 2, Strongly disagree = 1

Quality Dimension	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
(a) Tangibles					
Residential session facilitators/support staff are adequate					
The distance					

education programme has sufficient qualified academic staff				
Teaching aids – computers, cassettes are adequate				
Study materials are adequate				
Learning facilities are adequate				
(b) Reliability				
Learning materials are up-to-date				
There is a specified procedure to receive and record return of marked assignments to learners				
The specific time frame to return assignments allows learners to benefit from formative feedback				
Course content is up-to-date and reflects market demands				
(c) Responsiveness				
The programme's stated objectives focus on the needs of the learners and market				
The programme structure is flexible and allows for and encourages lateral entry and exit that				

leads to progression to higher levels					
The programme provide sufficient flexibility for learner choices in the courses					
Teaching/learning methods are consciously planned in view of the different learner abilities and needs					
Support staff are responsive to student enquiries					
Assessment results are recorded securely and reliably and made available to learners					
(d) Assurance					
The academic staff possess appropriate qualifications, skills and expertise related to Open and Distance Learning					
The administrative (support) staff possess appropriate qualifications, skills and expertise related to Open and Distance Learning					
The University					

employs sufficient qualified and experienced support staff to support the delivery of programme to learners					
The University provides training at regular intervals to improve the skills and knowledge of support staff					
Induction and orientation training programmes are conducted for tutors before the commencement of courses					
There is a mechanism for monitoring the performance of tutors which informs future training programmes					
Instructional materials are easy to use					
(e) Empathy					
The University has formal and informal mechanisms in place to obtain feedback from learners					
Clear channels of communication are established					

between learners and the tutors involved in the teaching of the programme					
Teacher and learner interaction is facilitated through formal contact sessions and tutor feedback on assignments					
The University uses available technology (e.g. email, mobile phones, internet) to communicate with learners on a continuous basis					
The University obtains regular feedback from tutors on the course materials with reference to their user friendliness and appropriateness					
Learners have access to the tutors through a variety of media.					
The University identifies and responds to learners with specific learning difficulties					
The University provides services in multiple formats to meet learners'					

needs					
The support staff offer services with courtesy					
Academic and personal counseling is provided to the learners					
The cost of the programme is affordable to the learners					

2. The University is expanding the External Degree Programme. Indicate by placing a tick (√) on the cause of the expansion strategy. You may choose more than one cause.

Top Management's desire to tap the opportunity of distance education programme

( )

Needs of the consumers (market needs)   ( )

Positive attitude of the managers of distance education towards the programme( )

Competition in the provision of distance education courses   ( )

3. What is the total number of students enrolled in the External degree programme per year?

Less than 500   (   )

501 – 700   (   )

701 – 900   (   )

901 – 1100   (   )

Over 1100   (   )

4. What is the current number of Regional Centres to offer support staff?

Less than 3   ( )

3 – 5   ( )

6 – 9   ( )

More than 9   ( )

5. What is the current number of support staff involved in the provision of support services to learners/tutors?

Less than 10   ( )

11 – 19   ( )

20 – 29   ( )

30 – 39   ( )

More than 40   ( )

6. What is the total number of teaching staff (tutors) involved in the Distance Education Prgramme?

Less than 50   ( )

51 – 100   ( )

101 – 150   ( )

151 – 200   ( )

Over 200   ( )

7. How much expenditure do you incur on the marketing (promotion) of the External Degree Programme per year?

Less than Kshs 500,000   ( )

Kshs 500,001 – 1,000,000   ( )

Kshs 1,000,001 - 2,500,000   ( )

Over 2,000,000   ( )

8. What recommendation would you offer to the University's top management with regard to the External Degree programme?

Continue expanding the programme   ( )

Should not spend resources on the programme   ( )

Cut down its expenditure on the programme   ( )

Maintain the status quo (do nothing to the programme)   ( )

Thank you very much for taking your time to answer the questions.

Appendix E: Observation Schedule

The following checklist was used to evaluate the perceived quality dimension indicators at the Residential Sessions and Regional Support Centres.

1. Tangibles

    Adequacy of teaching aids such as computers, cassettes.
    Study materials- how adequate they were vis- a –vis the number of students enrolled.
    Learning facilities
    Availability of library facilities at the regions
    Sufficiency of tutors

2. Reliability
    Currency of learning materials

    Course content relevancy

    Prompt marking of assignments against time period provided for their return

3. Responsiveness
   Teaching/learning methods

   Support staff responsiveness

4. Empathy

   Ease of course materials

   Courtesy of support staff

   Cost of the programme

Appendix F: Target Population

(a) Students

Year of Study	Semester of Study	Gender	Number of Students in Each Study Centre					
			Kakamega	Kisumu	Mombasa	Nairobi	Nakuru	Nyeri
2nd	1	Females	21	37	14	68	11	51
		Males	15	44	22	37	27	12
	2	Females	39	99	24	93	28	48
		Males	75	244	41	97	54	49
3rd	1	Females	28	86	16	93	12	55
		Males	49	175	39	76	31	50
	2	Females	15	56	06	63	24	32
		Males	44	117	22	82	19	36
Total			286	452	184	575	206	333

(b) Lecturers and Subject Coordinators

Lecturers	Number
Education:	
Psychology	19
Educational Foundations	14
Planning, Admin and Curriculum	16
Educational Comm. and Tech	10
Languages and Linguistics	08
English Literature	09
Business Studies	10
History	06
Kiswahili	08

Geography		12
Religious Studies		06
Economics		04
Mathematics		05
Subject Coordinators		13
Total		140

(c) **Resident Lecturers**   10

Appendix G: Reliability Tests

(a) Lecturers' and Resident Lecturers' Questionnaire Reliability

Cronbach's Alpha	Part 1	Value	.928
		N of Items	23[a]
	Part 2	Value	.948
		N of Items	22[b]
		Total N of Items	45
Correlation Between Forms			.828
Spearman-Brown	Equal Length		.906
Coefficient	Unequal Length		.906
Guttman Split-Half Coefficient			.894

(b) Students' Questionnaire Reliability

Cronbach's Alpha	Part 1	Value	.621
		N of Items	13[a]
	Part 2	Value	.619
		N of Items	13[b]
		Total N of Items	26
Correlation Between Forms			.556
Spearman-Brown	Equal Length		.715
Coefficient	Unequal Length		.715
Guttman Split-Half Coefficient			.709