ASSESSING THE ROLE OF DISTANCE LEARNING IN PROMOTING ACCESS TO PROFESSIONAL DEVELOPMENT IN BUSINESS COURSES: A CASE STUDY OF STRATHMORE COLLEGE IN KENYA.

MURAGE MICHAEL NJAGI

A THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF MASTER OF EDUCATION IN THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION, PLANNING AND CURRICULUM DEVELOPMENT.

KENYATTA UNIVERSITY
DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

Murage Michael Njagi Date

This thesis has been submitted with my approval as university supervisor.

Prof. F.Q. Gravenir Date.

Professor, Department of Educational Administration, Planning & Curriculum Development & Director, Institute for Research & Development

Kenyatta University.
This thesis is dedicated to my parents, Mr. and Mrs. Murage for their financial efforts towards the completion of this course.
ABSTRACT

The term "distance learning" is used in referring to teaching and learning which largely but not exclusively takes place, utilizing all forms of media i.e. printed materials and tapes broadcasts. It may include "virtual" and "e-learning" including video conferencing technology in education context.

This case study was an attempt to unravel the feasibility of distance learning in promoting access to professional development in business courses. It was designed to investigate how the various determinants of enrolment which through the influence of conventional learning create barriers to accessibility to training. The study was thus geared towards investigating how these determinants of enrolment are influenced by distance learning in an attempt to promote access to further education or training by elimination of the impediments posed by conventional learning.

The determinants of enrolment, which were investigated, were income levels, direct costs, expected monetary rates of return, students' personal characteristics and time span in the completion of a course.

The review of related literature was done to support the research objectives and the research questions and identify gaps related to the research topic. Studies carried in Africa and also outside Africa have been reviewed.
The research instrument that was used to collect the required data is a questionnaire. Two sets of questionnaires were distributed. The questionnaires were designed for the administrators and for distance learning students.

The collected data was subjected to both qualitative and quantitative analysis. The analysed data is presented in a manner, which is easy to comprehend, by way of use of tables, percentages, mode, median, mean and frequencies.

The major findings of the study are that distance learning has a high potential in terms of promoting access to training. It has proved to overcome the barriers posed by the conventional learning thus favorably offering equal treatment of access to training of the unequals (Ansari, 1992). These barriers as investigated by the researcher are the direct costs of training, an estimate of the family disposable income, expected direct rates of return and the students' individual characteristics.

The study concludes that distance learning is a way of promoting training to the marginalized groups in the society through overcoming impediments posed by conventional learning. The frequency of occurrence of the different values of a variable among different groups in a population reveals distance learning as an option in terms of promoting access to training. Distance learning extends access to more students than can be internally accommodated and thus the mode can promote access to training opportunities for financially privileged and financially underprivileged students, urban, rural and remote population, students in jobs and
those without jobs, students within the country and outside the borders of a country.

In this study, Strathmore college students’ ages ranged from 19 to 50 years and above for those enrolled in the distance-learning center.

It is recommended that distance learning centers should be expanded and marketed in order:

1. To cater for the marginalized groups in the society (Individuals may be marginalized in terms of finances (income), age, geographical location, marital status).

2. Educational planners should develop and establish means of promoting distance learning for training since it is a viable means in promoting training at a lower cost.

3. To overcome the impediments posed by conventional learning.

4. Since higher training is mostly achieved through private financing distance learning would concur with the middle-income earners and also lower income earners in respect to the demand for training.
ACKNOWLEDGEMENTS

I would like to acknowledge lecturers from the Department of Education Administration, Planning & Curriculum Development whose ideas and suggestions (during seminars) have contributed very much towards the improvement of this thesis.

I specifically express gratitude to Prof. F.Q. Gravenir for his technical contributions, evaluations and ideas, which led to many improvements in this thesis together with the Late Dr. G.D. Namaswa.

I thank Mr. Kiranga Gatimu for his advice when writing the proposal and preparation for data collection. I also thank the entire Administration team of Strathmore College for assisting in getting the required information especially the Director of Distance Learning Center in the College, Ms Ellen Soriano.

I also thank all the respondents for taking time to complete my questionnaires.
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MCC: Micro-Correspondence College
CCTV: Centre for Computer Television

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LIST OF ABBREVIATIONS

BEDEP  Bachelor of Education Distance Education Program
UNESCO  United Nations, Scientific and Cultural Organization
NCI  National Correspondence Institute
INADES  Institut Africain pour le Developpement Economique et Social
COSIT  The Correspondence and Open Studies Institute
SOLU  Sudan Open Learning Unit
GNEG  Centre National d' Enseignement Generalise
CBT  Computer Based Training
IITT  Institute of In-service Teacher Training (Somalia)
MCC  Malawi Correspondence College.
CCTV  Central China Television.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 BACKGROUND TO THE STUDY

Since the dawn of the industrial revolution in the nineteenth century, advances in technology have provided people with a means for a new form of education where the student and the teacher are separated in terms of space and time. It involves application of media in education. It changes the production function of education by changing the input mix through substitution of capital for labour and thus may decrease the average cost per unit of output. “Distance mode of learning is being given a new status by the wondrous array of electronic communication technology” (Harry 1993: 1). This mode of learning provides students with complete training from enrolment to examination which is equal or higher in quality and status to that offered in conventional mode of education (Keegan, 1993).

The promise of distance mode of learning is portrayed in its ability to offer mass, quality and cost efficient training, which could effect social equality in terms of its characteristics. This mode of learning would enhance production of graduates at a lower cost than conventional mode because it allows economies of scale by avoiding recurrent capital costs and also recurrent variable costs (Perraton, 1993).

The emergence of distance learning and open learning at all levels was occasioned by the following factors among others: -

- The need to create access to education on demand and supply sides
• Provision of choice to students on what they felt was their learning needs.

• Provision of safety nets to school dropout from lapsing back in illiteracy.

Open learning provides this opportunity

• There are people who for varieties of reasons, cannot access face to face learning in conventional schools. Open and distant education programmes ease the problems associated with difficulties of access and opportunity viewed from both demand and supply sides.

In distance learning, organized learning opportunities are usually provided through a technical medium to learners who normally study individually, significantly removed from the teacher in both space and time. The increased demand for training where enrolment is done in relation to the capacity of an institution implies that some students will be locked out. The need for continuing training for the marginalized groups in the society in terms of access for career and personal development implies an alternative mode of learning than conventional learning. The dynamic world especially changes in technology would increase the technical viability of distance learning (World Bank, 2000). Distance learning influence on the cost of education is considerably immense due to the way it changes the production function in education thus influencing the cost function in education differently from conventional learning. Whereas additional students in the conventional learning would need an extra classroom and an extra teacher, a distance-learning program can enroll extra students for a modest additional cost, that is the marginal cost, which may be quite modest.
The cost function is the relationship between movements in costs and output changes. It would enable planners in determining the direct costs of any institution. Its formulae is given here below:

\[ T = SQ + C\delta + P\pi + F \]

Where

\( T \) = Total costs
\( S \) = Number of students
\( C \) = Number of courses in development
\( P \) = Number of courses in presentation
\( F \) = Fixed costs
\( \delta \) = Direct cost of developing a course
\( \Omega \) = Direct cost per student
\( \pi \) = Direct course related cost of presenting a course

(Rumble, 1986)

\[ TC = F + VN \]

Where

\( TC \) = Total costs
\( F \) = Fixed costs
\( V \) = Variable costs
\( N \) = Number of units in presentation

Thus the average cost
AV = F/N + V

In the functional form of the above equation

\[ C = a + bx + cy \]

Where

\( C \) = Total costs

\( a \) = Fixed costs

\( x \) = Number of courses

\( y \) = Number of students

Values b and c represent the average cost per course and per student respectively (Ansari, 1992).

This mode of learning can be a powerful channel for bringing training to groups that had previously been excluded in the developing world (World Bank, 2000) while in England correspondence education was termed as a business run by unscrupulous colleges taught by clergymen aimed at undeserving students and in America, high school correspondence lessons were important for pregnant schoolgirls. The French centre National de Tele enseignement has also provided education to children evacuated from their homes since 1939.

The role of educational technologies has been seen to vary widely within and among educational systems and this would enhance training for individuals seeking advanced accreditation (Hancock, 1998). This mode would enhance continual training as an essential
requisite for any dynamic and progressive society. Individuals can train without abandoning their jobs since programs in distance learning are self-paced and students can adapt the content and rhythm to their own schedule and specific needs.

London external degrees have been open to external candidates since 1836 and for nearly a century and a half have provided the only channel through which a working student could get a British university degree. Thirty-eight students in Hong Kong were studying Chinese painting through correspondence, four soldiers in Chad were taking a degree course from universite de Brazzaville and in Mauritius a course was being developed in Mauritian Creole for students in Denmark in 1945 (Perraton, 1973).

Strathmore College in Kenya started in 1961 as an A-level College. The College opened a school of Accountancy in 1966, offering full-time courses to prepare students for professional accountancy examinations. Evening courses were introduced in 1982, and correspondence courses in Accountancy in 1992. Distance learning courses in Accountancy were introduced to provide students who are unable to attend lectures at Strathmore College, due to business or domestic reasons, with the possibility of drawing on the expertise of the lecturers of the school of Accountancy, without having to attend long-term courses.

The College is a Project of Strathmore Educational Trust, a non-profit Trust incorporated in Kenya. Besides academic and professional training, the College provides its students with
human and moral training. The spiritual and moral guidance given in the College has been entrusted to Opus Dei, a prelature of the Catholic Church.

The benefits of open and distance education programmes can be summarized as follows:

- **Quantitative access to educational opportunities at all and in formal and informal settings**
- **Equal access:** this criterion is reinforced particularly when it comes to the case of disadvantaged working adults who need to study but cannot afford to become full time students. Where the use of media incorporates e-learning people with no prevalent address e.g. journalists, salesmen/women etc can access education.
- **Quality of education:** where it is true there is limited student teacher contact, however, this problem is mitigated by unavailability of teaching and learning materials not available to students learning face to face.
- **Cost-efficiency:** the largest university in the world are invariably distance education universities e.g. University of Turkey, Central China Television University etc.

**Transition rates**

In Kenya learner progression through the education system is based on selection in accordance with performance in centrally conducted examinations. Because places in the higher levels are limited, progressively smaller proportions reach the higher echelons of the
educational pyramid. About eighty eight percent of the eligible age group is admitted into primary schools. Of those who complete primary schools, about forty percent are admitted into secondary schools and only about six percent of the secondary school leavers get places in the country's public universities (Makau, 1990, Ayako, 2000).

In the secondary school admission in Kenya, some of the enrolment figures are as follows; in 1995 out of 395,765 pupils who sat for K.C.P.E only 183,287 (46.3%) were admitted in form one. In 1998 only 195,778 pupils that is 47% of the total candidates were enrolled to form one in both private and public secondary schools. In 1999 out of 446,539 pupils who sat for K.C.P.E only 198,329 (43.6%) were admitted to form one and in 2000 out of 454,544 pupils only 246,313 (54.2%) pupils were enrolled in form one in both private and public secondary schools (Daily Nation, 6th Jan 1995 pg. 1 col. 1, Kenya Times, 15th Jan 1999 pg1 col. 1; Jan 6 2000 pg. 2 col. 5).

In the university admission out of 141,817 who sat for K.C.S.E only 8390 (5.9%) were admitted in the public universities in the 1995/1996 academic year. In the 1996/1997 academic year out of 143,157 candidates who sat for K.C.S.E. only 8,319 (5.8%) were admitted. In the 1998/1999 academic year, out of 152,397 candidates only 9800 (6.4%) were admitted and out of 169,357 candidates who registered for K.C.S.E only 8,370 (4.9%) were admitted in the public universities in the 1999/2000 academic year. (East African Standard, 17th April 1999 pg. 14 col. 4-6, Daily nation 5th August 1995 pg. 5 col. 4, Kenya Times, 23rd Feb. 1995 pg. 12 col. 2-5).
The rate of termination of education across these levels of education is thus very high leaving the nation with a great volume of untrained labor force. Consequently some individuals embark in conventional learning for professional training whereas others undertake training in courses through distance learning.

Access to this professional training depends upon a number of factors that influence individual demand. The demand function is a theoretical expression showing how the demand for a product is a function of other factors, in this case education. This leads to the enrolment function in education (Mace, 1979).

1.1.2 ENROLMENT FUNCTION

Enrolment function is a theoretical expression showing how the demand for education is a function of other factors.

\[ E = f ([C_1, C_2, C_3], (I), (P_1, P_2, P_3---------), (R_1, R_2), (T)] \]

Where

\( E = \) Enrolment

\( C_1, C_2, C_3 = \) Are the direct costs, indirect costs and opportunity costs of education which reflect the price of education. The law of demand states that, in general other things being equal the lower the price of a good the greater the quantity of that good buyers are willing to purchase over a given period (Hyman, 1991). The reason for this is because the individual would enjoy additional net gains that were not possible at the higher price \( [q = f(p)] \). The problem hence arises on how to make judicious allocation of the scarce monetary resources at which alternative choices are available. These costs should be met by
students' parents through user tuition fees and non-governmental sources like industries and firms since they are the immediate beneficiaries of that training (Psacharopoulos, 1991). This would empower the consumers to demand the training they need thus improving their occupational and geographical mobility (World development report, 1996).

$I = $Income levels which are illustrated by calculating the income elasticity of demand. A cross section study that was carried of over 100 countries revealed the aggregate results as that for every one percent rise in income there was more than one percent spending in education (O'Donoghue, 1972).

$P_1, P_2, P_3 = $Personal characteristics

$R_1, R_2 = $Monetary and non monetary returns

$T = $A time trend term

The marginal private rates of return are determined empirically in terms of the net monetary benefits, which should equal the private marginal costs.

$$ r = \sum_{t=j}^T B_t (1 + r)^t = 0 $$

Where
\( r \) = Private marginal rates of return

\( A \) = Retirement age

\( B_t \) = Net benefits of additional training

\( J \) = Age at which additional training begins

Table 1.1 below is taken from First Report on Poverty reduction in Kenya 1998 (Volume II; 34) for provinces in Kenya, which shows that overall economic incentives mattered more for poor never attending school than for non-poor.

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Child helping at home/child labour</th>
<th>School expense too high</th>
<th>No School in Neighbourhood</th>
<th>No Room in School</th>
<th>Sick or Disabled</th>
<th>Not Interested</th>
<th>Traditions/cultural values</th>
<th>Others</th>
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<td>12.2</td>
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<td>31.4</td>
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Reasons For Not Attending School (Poor & Non Poor)
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<th>Region</th>
<th>Number</th>
<th>Child helping at home/child labour</th>
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<td>17.2</td>
<td>13.5</td>
<td>5.5</td>
<td>0.1</td>
<td>1.8</td>
<td>22.2</td>
<td>36.1</td>
<td>4.6</td>
</tr>
</tbody>
</table>

The study revealed that completion of primary level education post-basic educational institutions was a function of income. It would therefore not be unreasonable to expect many of the pupils currently benefiting from the abolition of user charges in attending basic education to encounter severe constraints in enrolling for education at post-basic education institutions. These constraints can in one way be overcome by alternative mode of learning, which is less costly and affordable even to the poor in order to promote their access to these post basic institutions. Behrman J and Knowles C.J. (1999) investigated the association between parental income and child's propensity to complete school grades in various levels. It was found that income elasticity of completed grades was five times the median.

Conventional learning influence on the determinants of enrolment has posed impediments in promoting access in professional training and thus an expansion of the validation about the setbacks imposed by conventional learning in meeting the diverse and ever expanding demand for professional training. The main evidence is its cost, rigidity and inflexibility to cater for the needs of some significant section of the society an antithesis of the distance-learning mode (Ansari, 1992).

1.2 STATEMENT OF THE PROBLEM

Opportunities for further training and also lifelong training should be promoted. These opportunities should be affordable to individuals in all terms in order to acquire the relevant skills, which would make them, enter the modern wage labour market and thus the
The likelihood of earning. The impartation of skills needed to perform specified functions is vital for creating the labour force needed for various production activities of the economy (Republic of Kenya, 1997-2010, 1998). Technological change propels economic restructuring compounded by the concomitant changes in the labour market thus training and retraining is one of the preponderant tasks to be promoted.

The above task through the conventional learning has exposed a number of constraints due to domestic reasons in relation to access to training. Thus the demand from the growing number of secondary school leavers who wish to take up places in higher training institutions in developing countries is increasing especially as a result of the high termination rates of education across this transition level from secondary to University in Kenya. Often the conventional learning institutions are unable to cater for that demand (Harry, 1993). This should be acted upon to promote access to professional training.

1.3 PURPOSE OF THE STUDY

The purpose of the study was to make an assessment of distance learning in promoting access to professional development in business courses in Strathmore College.

1.4 OBJECTIVES OF THE STUDY

The objectives of the study were focused on identifying the following in Strathmore College.

a). Factors that influence the individual demand to undertake training through distance learning.
b). Characteristics of students who enrol in distance learning.

c). The direct costs in distance learning and time aspect in completion of courses through distance learning.

d). Possible factors that lead to the establishment of distance learning centres.

1.5 RESEARCH QUESTIONS

The following research questions were derived from the research objectives. The researcher responded to the research questions from the data, which was got from Strathmore College.

a). What factors influence individual demand to undertake training through distance learning?

b). What students’ characteristics make distance learning the only choice in which to undertake training?

c). What are the direct costs of training through distance learning in relation to the conventional learning?

d). What are the possible factors that lead to the establishment of distance learning centres?
Knowledge in business courses like Accountancy, Sales, Production and Business administration is pertinent in understanding a country’s economy. These business courses serve as a basis for career in many professional fields thus gives the student a competitive edge in the job market. The study would enhance educational planners in understanding the feasibility of distance learning in terms of how the mode influences the determinants of enrolment. This would lead to viable plans on how distance learning could be promoted and thus promoting access to training in business courses hence meeting the high demand for those particular courses.

This study would help to determine the future prospects of training of the marginalized groups in the society in terms of accessibility to training through distance learning. The study has revealed the promise of distance learning in promoting training and continual training of the marginalized groups. The marginalized groups are the individuals who are not favoured by the determinants of enrolment in terms of access to professional training.

The study would guide planners in determining the place of distance learning in the context of the ubiquitous technological changes, thus may influence the training curriculums and the labour market trends.

Finally the study provided information, which would guide researchers and planners interested in the field of distance learning. The study provided possible testable new hypothesis to interested researchers in larger subjects.
1.7 LIMITATIONS OF THE STUDY

The researcher got the required information through self-perception or self-interest from the students and administrators based on previous knowledge and individual understanding, so there was no common measure or scale, which was applied uniformly to gather the required data.

1.8 ASSUMPTIONS OF THE STUDY

Opportunity costs of the conventional learning students is assumed to be the earnings of the on the job distance learning students and possessing the same qualifications as the conventional learning students at the point of enrolment in the institution. In calculating the expected direct monetary rates of return, three merchant middlemen businesses were assumed to be representative of the earnings thus elasticity of substitution was not taken into account. Opportunity costs of training to be evaluated, and thus determining the potential cost of training in promoting costs (Bittang, 1988).

The researcher assumed that there was no opportunity costs for distance learning students in that even if they were not on the job they were involved in other productive activities while still investing in human capital.

The researcher equates training in the two modes of delivery as the same in terms of output and acceptability in the labour market.
1.9 THEORETICAL FRAMEWORK.

During the 1960s, the dominant theory concerning human resource development was "human capital" theory. Investment in training can increase the skills and capacities, which are rare commodities that increase productivity particularly in the modern sector. Employers reward the proprietors of these commodities with earnings (Blaug, 1968, 1971). The core idea of this theory is that individuals invest for their future by making a rational estimate of the returns of training, and then orient their careers in consequence. Individuals' estimates may be transposed to the collective scale by integrating the overall costs of training as one of the determinants of enrollment to training.

Estimating the rates of return would enable the optimum development potential of various levels and forms of training to be evaluated, and thus determining the potential of any form of training in promoting access (Blaug, 1968).

1.10 CONCEPTUAL FRAMEWORK

LIFELONG LEARNING

Self-fulfilment
Technical productivity
Economic productivity
Increased earnings
Social development
Lifelong learning is a comprehensive concept, which includes formal, non-formal and informal training extended throughout the life span of an individual to attain the fullest possible development in personal, social and professional life. It aims at democratizing/universalizing training in terms of access for all members of the society (Skager, 1977).

(Jessup, 1969) quotes the 1919 report of the Committee of the Ministry of Reconstruction in Britain in relation to lifelong learning that, “The economic recovery of the nation, the sound exercise of the new spirit of assertion among the rank and file, the proper use of their responsibilities by millions of new voters, all alike depend on there being a far wider body of intelligent public opinion after the war than there was before and such a public opinion can only be created gradually by a long thorough, universal process of education continued into and throughout the life of the adult” (pg. 18).

The speed of contemporary social and technological change is the core need of lifelong training. Individuals, frequently whether in professions or in factories are made brutally aware that unless they re-train themselves they will be put out of business and thus a continuous schooling process is vital (Skager, 1977).

The concept of lifelong education has gradually become broader and has assumed new dimensions where its being used more frequently to designate all the ideas and activities whose aim is to provide a coherent and systematic view of the training process as a whole, in
order to meet more adequately the needs of individuals and groups. Traditional /conventional
training is insufficient for the needs of different individuals who will spend a lifetime in a
changing world and thus, as a result, efficient means of training in terms of access must be
made available for making training a continuous lifetime process.

1.11 DEFINITION OF SIGNIFICANT TERMS

Price elasticity of demand measures the relationship between a change in price and the
resulting change in the demand of a good in this case education.

\[
\%\Delta \text{ Volume of enrolment}
\]

\[
\%\Delta \text{ Price}
\]

Income elasticity of demand measures the relationship between a change in income and the
resulting change in the demand of a good in this case, education.

\[
\%\Delta \text{ In enrolment}
\]

\[
\%\Delta \text{ In income}
\]
Enrolment function is the relationship between enrolment and the factors determining enrolment. These factors are income levels, direct and indirect costs of education plus the opportunity cost, personal characteristics, returns to training and a time trend term (demand function in education).

Access to training is the provision of enrolment opportunities to training including the marginalized section of the society. Access to training implies overcoming the constraints posed by the different factors that inhibit enrolment to training.

Adult and continuing education are terms that imply the provision of education and training to adults and other individuals that they might pursue training on a much wider scale. An adult is any person alleged by the society as an adult, mostly above 18 years of age.

Conventional learning is the campus-based face-to-face mode of education. The teacher and the learner are present in both space and time. The students are fulltime based.

Distance learning is the mode of learning where the teacher and the learner are separated in both space and time. Educational technology is used as the medium of delivery (hardware). Training through this mode of delivery is self-paced in relation to the individual students. This mode of learning changes the production function of education.

Marginal costs are additional costs due to additional enrolment

Production function is the relationship between the level of input and the level of output in a system.

Direct costs are the costs that are directly associated with the output of a particular cost centre. e.g. tuition fees.
Indirect costs are the costs that cannot accurately, conveniently or cheaply be measured.

Opportunity costs are the costs forgone for a certain investment to be undertaken.

Unit cost is the cost of one unit of output (cost of training one student per a certain time period).

Private marginal rates of return are additional rates or return due to additional training.

Recurrent costs are the costs that recur from one accounting period to the next.
CHAPTER TWO

2.0 REVIEW OF RELATED LITERATURE.

2.1 Introduction

The literature review of the study was done to identify the potential of distance mode of learning in promoting access. It was designed to support the research objectives and research questions and identify the gaps in relation to this research and suggest solutions. The researcher intends to investigate the direct costs of training through distance learning, the distance learning students’ income levels, students’ personal characteristics, the expected monetary rates of return after training through distance learning and the time aspect of completion of courses in distance learning.

2.2 Creating opportunities for personal and career development through distance learning in African countries.

Although many countries in sub-Saharan Africa might encounter short-term constraints in creating opportunities to study for children through distance and open learning, the social benefits clearly exist.

Malawi College of Distance education had provided a good model that has provided cost-effective education alternatives to those students unable to gain admission to traditional secondary schools. Before the college close down, its examination pass rates were roughly comparable to or equivalent to traditional secondary school. While open and distance education programmes in Africa were in the past linked to proprietary private correspondence agencies from the metropolitan, in the last decade, there has been a movement to develop open
learning programmes using distance education mode of delivery in the public sector at all levels of education.

While proprietor organizations (e.g. Wolsey Hall) have as can be expected, continued to focus in areas which are most lucrative, public sector institutions in provision of distance educationist first growing at tertiary level.

In sub Saharan Africa, distance education programmes have slowly emerged in nearly all countries as can be verified by visiting the International Centre for distance learning Website. (International Centre for Distance learning Data base (1998 CD ROM edition).

(Kinyanjui, 1973) and (Makau, 1990) in their studies of the Bachelor of Education Distance Education Program (BEDEP) in the University of Nairobi identified the role of the program in in-service training of adult education and primary school teachers. The objectives of the program are to provide opportunities for learning for those who can't secure places in the existing internal faculties of the national universities. The program offers an alternative and innovative method of learning, train high level manpower, offer an opportunity for working Kenyans to attain

The choice of the method for contact delacity was distance training without removing them off from their jobs. The student intake promotes access in terms students’ entry characteristics such as age and occupational status of the students. The cost of the residential course is 3.7 times that of distance education courses (Makau, 1990). The students’ ages range from 26 years to 50
years. BEDEP distance learning curriculum is similar to that for the residential Bed program in each subject’s most study units.

Research conducted in Algeria reveals that, after independence the general exodus of French teachers, administrators and technicians from Algeria meant there was a heavy demand for qualified Algerians in all sectors of the economy. To meet this vast expansion of school enrolment and the plans to make education Arabic, the center National d’enseignement generalize (GNEG) in conjunction with United Nations Education, Scientific and Cultural Organization (UNESCO) set up two training schemes using correspondence education. One of the factory based pre-professional functional literacy programs made use of a national media to publish courses in mathematics and French for industrial workers while students written work was assessed within the factories (Perraton, 1993).

The Ministry of Agriculture Food and Fisheries in Zambia introduced Radio Farm Forum as a pilot project in 1967.

The choice of the media for content delivery was dictated by the local conditions for example in the case of Zambia like elsewhere, the radio:

- Covers great distances
- Can be listened to by both illiterate as well as the literate farmers
Radio programmes are relatively easy and cheap to produce

- It reaches its audience immediately.

On assessment of the programme, it was verified that the programme was able to disseminate information on agricultural to many people making and living in remote areas. The people could not have been reached easily due to poor roads network. The traditional practice on the village of "nasaka" that is "coming together" enhanced use of the radio by many because, the “nasaka” traditional practice of coming together made it possible for one radio set owned by one member of the village to serve as a radio for the whole village.


(Chale 1983), in his research in Tanzania observes that, the experience gained from the correspondence institute of the Moshi Co-operative Education Center in Tanzania led to the distance teaching institution, the National Correspondence Institute (NCI). The aim was to provide the professional expertise on which the teacher-training program could be build. The program adopted correspondence courses because they could train teachers without involving large expenditures as posed by the conventional mode of learning. On the effectiveness of the program (Chale, 1983) undertook a case study based on a sample of 240 teachers where 120 teachers were from the conventional mode. More specifically he found that, the examination results and on mastery of subject matter showed that the two groups of teachers were more or less equally
effective although the distance-learning teachers marginally performed better. An analysis of both overt and hidden costs shows that the unit cost in the distance-learning program was Tshs 28,281 whereas the unit cost in the conventional mode was Tshs 54,668.

(Chivore, 1990) identifies the potential of the distance program in Zimbabwe in promoting in-service training of primary school teachers in the sense that the conventional had failed to produce enough teachers in line with the enunciated ideology of socialism. There was also a need to fuse theory with practice basing this on the practical realities of learning and teaching through on-the-job training. A relatively large teaching force implied making education broader in the society. In terms of the whole final examination results pass rates there were no significant statistical differences between distance learning students and conventional mode students. On the examination failure rates, the average failure rate under distance program was 1.5% as compared to 1.1% of the conventional mode students.

INADES (Institut Africain pour le Developpement Economique et social) at Abidjan in Cote de Voire is concerned with improvement of Agriculture. West African farmers are offered courses in basic agricultural practices like cattle rearing and cultivation through correspondence. They are written in very simple vocabulary and distributed to farmers who follow courses together. INADES makes use of the existing social networks within the
villages. The correspondence courses are used to teach non-literate farmers who are assisted by literate farmers (Perraton, 1993).

The Francistown Teachers Training College in Botswana was established with the aim of upgrading all existing unqualified teachers who numbered 600 or 40% of primary school teachers. Such a large population of the teaching force could not have been removed from their jobs while they undertook the training but they had to train on the job (Kinyanjui, 1973). In this case, the best option to undertake training was through distance learning.

The Correspondence and Open Studies Institute (COSIT) is located in Lagos-Nigeria whose students are non-residential. The Objectives of the institute are to bring university education to learners at the same time enabling them to continue to provide their skills to the labour market (Cumming, 1993). The existing fields of study that reflected manpower shortages include sciences, business administration and accounting. COSIT also provided non-formal education in selected communities. Students are mainly teachers and public servants although there are employees from the private sector organisations. The minimum age of entry is 25 while the age range extends to 50. The normal maximum time for completion is eight years while for the regular students is three or four years (Cumming, 1993). COSIT Bachelor of Science (BSC) graduates cost was one third cheaper than of
regular students, graduate cost in business administration and accounting are 13 percent lower than for the regular graduates.

The Sudan Open Learning Unit (SOLU) was established among other things to provide secondary level courses for refugees. It operates two-stage secondary level course. Its approach is a private or individual study combined with a weekly two-hour tutorial service for each subject. SOLU operates in Khartoum where it has two study centers and its branches in eastern Sudan in the towns of Port Sudan, Kassala, Gedaref and Soakin. The subjects that are mainly offered are languages, practical subjects and science subjects. The courses offered are adapted to fit the Sudan School Leaving Certificate Syllabus (Inquai, 1993).

Malawi Correspondence College (MCC) provides training through distance mode of learning to students in Malawi. In considering its effectiveness it enrolls students who perform less well in the primary school leaving certificate. Studies carried show that the cost per student is lower than that for the regular students (Keegan, 1993).

2.3 Continuing education via distance education outside Africa.

There was an immediate demand for education when the Arab refugees first arrived in their host countries. UNRWA and UNESCO were solving this problem through the correspondence programs to train teachers who were incapable of being trained through the traditional methods of taking teachers out of schools to colleges. UNESCO and UNRWA in the use of distance education to train teachers in the Palestinian refugee camps in the 1960,
UNESCO report was that the cost per student in distance learning mode was $341 as compared with $820 for a comparable college course (UNESCO, 1980).

Continuing education through distance education at the Open University (The UK Open University) provides multi media courses and materials in a variety of subjects and a number of different levels (Prescott, 1987). The three major goals in its charter are to provide opportunities for adults to take degree courses, for professional and technological upgrading and for the educational improvement of the community. It provides a program of continuing education in six areas and the main medium is print media integrated with other media such as television.

Distance education in India was to expand and equalize educational opportunity. The program aims at providing education at a lesser cost. The correspondence courses catered for students who had to discontinue their formal education owing to pecuniary and other circumstances. Students in geographically remote areas, students who had to discontinue education due to lack of aptitude and motivation but later find a seat or do not wish to join a regular college or university although they have the necessary qualification to pursue higher education, individuals who look upon education as a lifelong activity and may either like to refresh their knowledge in a new area took their courses through distance mode of learning.

Distance learning also enhances the development of a rapid and more diversified structure of educational courses (Ansari, 1992).
China's distance higher education system uses radio and television as its main media to deliver teaching programs. The programs are broadcast nationally by Central China Television (CCTV) via its microwave network and by local radio and television stations all over the country. Television teaching programs are also transmitted by through satellite covering 9.6 million square kilometers thus taking into account students and their geographical locations (Keegan, 1993).

The Open University of Sri-Lanka aims at accelerating the provision of equal opportunities and cost efficient education. Sri-Lanka institute of distance education (SLIDE) attracted employed individuals who desired to further their training by obtaining theoretical instructions relevant to their occupation while still working. It was suitable for middle level technical training and graduate schoolteachers in employment and of other short-term courses (Wijeyesekera, 1990). With rapid development in science and technology the institute aimed at offering opportunities for graduates and other professionals to further their technical education. It has made an impact in democratising access to higher education in Asian countries.

In Fiji, one of the responsibilities of the University of the South pacific is to provide in-service training for unqualified teachers throughout the vast region of the scattered island territories from which its students are drawn. It introduced an external version of the non-graduate diploma of education, a qualification designed to enable school leavers to enter teaching at the junior secondary level. It was to cater for the experienced but untrained
administrative superiors (municipalities) formally agreed to increase the teachers salaries or
give them a more stable position after successful completion of the program. Teachers
studied by themselves under the supervision of learning centers set up in a few places. The
unit cost of a student completing the course in 48 months was 1988 $406.11 approximately
one quarter of the unit cost of the conventional mode program (Orivel, 1987).

The University of Phoenix in USA has failed to meet New Jersey's academic standards for
being basically profit driven. The state Commission on Higher Education May, 2003
considered UOP's application to offer six undergraduate business degrees from rented
classrooms in Jersey City, but deferred a decision until Sept. 26, 2003 amid lingering
questions about the university's library, location and number of teaching hours, said Jeanne
Oswald, the commission's deputy executive director. The school is held by the Apollo Group
of Phoenix, Airs., and a for-profit education company whose programs are tailored to
working adults. University of Phoenix subsidiary enrols 150,000 students at 126 learning
centres and campuses. Its virtual campus and the University of Phoenix Online, offers
courses over the Internet. The average age of its students is 35. The Apollo Group is making
a profit, selling higher education. The company reported a 44 percent increase in
third-quarter net income to $69.8 million, or 39 cents a share, from $48.4 million, or 27 cents
a share, a year ago. Its stock was trading at $63.45 as of July 1, compared with $30.60 per
share at the same time a year ago. UOP has campuses in 28 states including Pennsylvania
and Maryland, with plans to enter remaining states at a rate of two or three a year. It has
been eyeing New Jersey for years. It first submitted plans for a campus in Roseland five
years ago, but withdrew the application amid criticism from the powerful NJEA and other
academic groups. Susan Mitchell, UOP's vice-provost and vice president for regulatory affairs, says it's natural for the school to expand to a highly populated state like New Jersey.

It chose Jersey City, she said, because of its minority population and the increasing technological demands of the workforce. Today, 38 percent of students attending classes at UOP-Philadelphia live in New Jersey and 3,000 New Jerseyans are enrolled in UOP Online.

The university has agreements with 12 of New Jersey's 19 community colleges, allowing associate's degree recipients to receive credit toward four-year baccalaureate degrees at UOP.

An academic consulting team commissioned by the Higher Education Commission signed off on UOP's plans and two commission review panels concurred. The commission's presidents' council also recommended licensing, but attached conditions. At a meeting in late June, the Commission on Higher Education delayed its vote - the final hurdle to licensure - giving UOP the summer to settle the conditions before the application is put to a vote. The commission asked UOP to submit a proposed location for its Jersey City campus; adapt its teaching model so it complies with the number of instructional hours required in New Jersey; and to develop its plan for a library, Oswald said. New Jersey's licensing requirements stipulate that applicants have a library containing at least 50,000 volumes. Because UOP has no New Jersey library, it will pay New Jersey City University $25,000 per year so its students can use that school's library, said NJCU President Carlos Hernandez. Commission officials have asked UOP to explain how the money will be used. That's not good enough for the NJEA, which thinks library access shouldn't be bought.” We don't feel
they measure up to all the regulations other higher education institutions have to comply to," said union spokesman Steve Wollmer. For example, students meet in self-directed teams and have minimal contact with faculty, NJEA President Edith E. Fulton told the commission in June. UOP's scripted courses violate the spirit of academic freedom, she said, and its faculty is not comprised of academics dedicated to teaching and research."

This is an online university," Wollmer said. "As such, it doesn't meet some of the admittedly rigorous criteria for New Jersey certification. Why would we make exceptions for an out-of-state enterprise that is profit-driven?" Hernandez dismisses the criticisms as the territorial objections of academic traditionalists. He sees a market for no-frills degrees, and said UOP caters to an underserved, time-pressed clientele looking for an alternate course delivery system. Besides, he asks, why should academia be strictly non-profit?" The for-profit academic industry as a whole is able to offer high-quality education at costs much less than traditional institutions," Mitchell said. 

"If we were not providing a high-quality product, we would not be in business today." Hernandez agrees. "There's room for a variety of institutions to meet the variety of needs that exist in the state," he said. "I don't see this as competition. I see this as expanding the pool of people that can take advantage of higher education in New Jersey." ON THE NET University of Phoenix: http://www.phoenix.edu/

2.4 Work-place training through distance mode of learning.

2.4.1 Manufacturing Company in Britain

A large manufacturing company in Britain decided to invest in open learning centers. Employees could learn new skills, which were relevant to the company. Any member of the
company could come to the center for self-development in their own time. All the centers used Computer-Based Training (CBT) as the main medium (Davis, 1986).

2.4.2 Heavy industry in Britain
A major British heavy industry needed to train its process workers in the applications of fast developing technology. The workers were used to keyboards and videos and disliked learning. CBT and interactive videos were chosen. Packages in metallurgy and electrical engineering subjects were written and employees used these in areas adjacent to their work place. Managers also run regular informal discussion groups to consolidate individual learning (Davis, 1986).

2.4.3 Oil industry in Britain
A large oil industry in Britain wanted to make more resources available to managers wishing to engage in self-development especially after appraisal interviews. The industry bought a large wide-ranging library of open learning materials in a variety of media. Management staff who would look at the index of the materials available could borrow them. This would be delivered to them together with any necessary hardware (Davis, 1986).

2.5 Summary
In the review of related literature specific aspects of interest to the researcher were not divulged elaborating entirely the potential of distance mode of learning in promoting access to training and continual training. The study would thus unveil the total difference in
influence of the enrolment function determinants between the conventional mode and the
distance-learning mode of learning. The determinants, which will be studied, are the direct
costs, the students' income levels, students' personal characteristics, the expected monetary
rates of returns and the time aspect of completion of courses between the two modes. In the
review of related literature these determinants and how they are influenced by distance
learning was not outlined really prompting the researcher to conduct this study.

3.2 Design of the study

The case study was a form of descriptive research. A case study is a research method that
would probe beneath the surface. The data, which was gathered, can be compared with other
scale experiments already done under identical conditions to see whether the same
conclusions emerge. It was a descriptive study since it aimed at describing the role of
distance learning in promoting access to professional development. The case study was
expensive and provided the investigator with new hypotheses that can be tested later on the
larger number of subjects (Nisbet, 1979).

3.3 Rationale for selecting Strathmore College

Strathmore College was chosen because it is one of the most prominent and largest
distance learning centres of both the two modes of delivery. The college administration thus
provides a good base for a comparative study of some of the determinants of the two
modes of learning. Strathmore also offers professional training in business areas.

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CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

In this chapter the research design and methodology that was applied in the case study is presented. This chapter aimed at identifying, the sample size, the sampling procedure and the instruments that were used in the case study and how they were developed, refined and tested in the field.

3.2 Design of the study

The case study was a form of descriptive research. A case study was chosen because it would probe beneath the surface. The data, which was gathered, can be compared with other scale experiments already done under identical conditions to see whether the same conclusions emerge. It was a descriptive study since it aimed at describing the role of distance learning in promoting access to professional development. The case study was less expensive and provided the investigator with new hypothesis that can be tested later with larger number of subjects (Nisbet, 1970).

3.3 Rationale for selecting Strathmore College.

Strathmore College was chosen because it is one of the most established institutions in distance learning comprising of both the two modes of delivery under the same administration thus provides a good base for a comparative study of some aspects of the two modes of learning. Strathmore also offers professional training in business courses.
3.4 The study population

The study population was the aggregate enrolments of year 2000 in distance learning and 1999 year graduates of distance learning. The study population was 602 students for year 2000 enrolment and 504 for 1999-year graduates. Questionnaires were also distributed to 6 administrators the college distance-learning center. (See Table 3.1).

3.5 The sample population

The sample was selected from a population of year 2000 aggregate enrolments and 1999 graduates of the distance learning. A 30% sample of each population category was investigated. A sample population of 30% was found sufficient to avoid bias in sampling (Kathuri, 1993). (See Table 3.1).

3.6 Sampling procedure

Sampling frames were drawn of the students from the two courses offered through distance learning in Strathmore College. Systematic random sampling was applied to select the required sample of year 2000 enrolment students. Convenience sampling was applied to select the required sample of year 1999 graduates.

Convenience sampling was applied here as a fraction of the population because of its convenient availability.
Table 3.2 illustrates sample size of the year 1999 graduates and year 2000 enrolment

Table 3.1  Sampling Table

<table>
<thead>
<tr>
<th>Course</th>
<th>Total</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>a). CPS</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>b). KATC</td>
<td>695</td>
<td>208</td>
</tr>
<tr>
<td>Total</td>
<td>719</td>
<td>215</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Total</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>a). CPS</td>
<td>36</td>
<td>11</td>
</tr>
<tr>
<td>b). KATC</td>
<td>575</td>
<td>172</td>
</tr>
<tr>
<td>Total</td>
<td>611</td>
<td>183</td>
</tr>
</tbody>
</table>

3.7 Instrumentation

Two sets of questionnaires were used to collect the required data. One was for the distance-learning students and one for the administrators. A questionnaire was used because it is less expensive and requires less time to administer. The questionnaires consisted of open and multiple-choice questions. Ambiguity in framing of the questions was avoided. The investigator used questionnaires to obtain factual data and opinions in a structural framework from the respondents (Nisbet, 1970). The questionnaires were designed to collect data on the direct costs and students' characteristics who enrol in distance learning.
3.8 Validity & Reliability

A pilot study was conducted with ten distance-learning students and two administrators. The aim was to test the validity and reliability of the research instruments and develop suggestions on how to improve them. In testing the validity of the research instruments the researcher applied content validity where the experts’ opinions was sought. Those who were involved in the pilot study were not included in the main study. Kuder-Richardson formula 20 was used to test the reliability of the research instruments (Rosenberg 1993).

\[
K - R_{20} = \frac{K(SD^2) - \bar{x}(K - \bar{x})}{(SD^2) - (K - 1)}
\]

Where:

- \( R \) = Total test
- \( X \) = Mean of the scores
- \( K \) = Number of items in the test
- \( SD \) = Standard deviation of the scores

After computation, the reliability coefficient was found to be 0.79, showing that the instruments were reliable. The researcher went ahead for data collection.

3.9 Data collection procedure

Two sets of questionnaires were used to collect the required data. One set of questionnaire was hand delivered to the administrators. The other set of questionnaire was posted to the distance-learning students accompanied by a self-addressed envelope. A cover letter was attached on each of the questionnaires.
Table 3.2 Rate of Return of the Questionnaires

<table>
<thead>
<tr>
<th>Study population</th>
<th>719</th>
<th>611</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample population</td>
<td>215</td>
<td>183</td>
</tr>
<tr>
<td>30% of the Study population</td>
<td>215</td>
<td>183</td>
</tr>
<tr>
<td>Questionnaires sent/distributed</td>
<td>215</td>
<td>183</td>
</tr>
<tr>
<td>Questionnaires received</td>
<td>169-79% of the sample</td>
<td>150 -82% of the sample</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1999 graduates</th>
<th>Total</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>a). CPS</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>b). KATC</td>
<td>695</td>
<td>160</td>
</tr>
<tr>
<td>Total</td>
<td>719</td>
<td>169</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2000 enrolment</th>
<th>Total</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>a). CPS</td>
<td>36</td>
<td>9</td>
</tr>
<tr>
<td>b). KATC</td>
<td>575</td>
<td>141</td>
</tr>
<tr>
<td>Total</td>
<td>611</td>
<td>150</td>
</tr>
</tbody>
</table>

3.10 Method of data analysis

The investigator ensured that the questionnaires were double-checked for completeness. The raw data received from the field was categorized into information that answered the
researcher's objectives. The information was summarized and statistics derived. The data was subjected to descriptive analyses encompassing a range of both qualitative and quantitative treatments. Qualitative data was analyzed using verbal symbols to describe the researcher's objectives (Van Dalen, 1962). Quantitative data was presented in a simple way, easy to comprehend, by use of Tables, percentages, median, mean, mode and frequencies.

Descriptive analysis was used because it enabled the researcher to inspect the variables in their real world setting and it was also quite cheap especially where the information got by the researcher was from existing records. Tabulation enabled the researcher to categorize the subjects in this research. The frequencies enhanced analysis of the continuous variables (Entwistle, 1972).
4.0 DATA PRESENTATION AND ANALYSIS.

4.1 Introduction

This chapter presents the data analysis. The information collected was summarized and appropriate statistics derived. The data was subjected to descriptive analyses encompassing a range of both qualitative and quantitative treatments. Qualitative data was analyzed using verbal symbols to describe the researcher’s objectives (Van Dalen, 1962). Quantitative data was presented in an easy comprehensible way by use of Tables, percentages, mean and mode. Data analysis was based on the following research questions.

a). What factors influence individual demand to undertake training through distance learning?

b). What students’ characteristics make distance learning the only choice in which to undertake training?

c). What are the direct costs of training through distance learning in relation to the conventional learning?

d). What are the possible factors that lead to the establishment of distance learning centers.

In economics of education reduction demand function is an expression used to explicitly specify how demand for education is affected by other factors. Mace (1977:10) used the following illustration to elucidate the concept of demand.

\[ E = f [C_1, C_2, (1), (P_1, P_2, P_3), (R_1, R_2), (T)] \]

The above function shows that enrolment is affected by both direct and indirect costs \((C_1\) and \(C_2)\), Household’s income \((1)\) is a major determinant of a family’s ability to finance
direct and indirect costs. P1; P2…. Captures how personal preferences and tastes affect individual choices of career; given their ability. R1, R2 … captures expected monetary and non-monetary benefits which induce student career choice; given their ability to sustain a particular course of study. The term T captures other trends such as the rate of population growth in a country. For example, if the population growth rate is going up or down, this is likely to affect the number of pupils who are likely to seek school places in a region, district, province or a country for obvious reasons. These determinants of enrolment and students characteristics are discussed in this chapter.

4.2 Factors that influence individual demand to undertake training through distance learning and students characteristics.

4.2.1 Enrolment per course and gender

Gender is not an inhibiting factor in enrolling in distance learning. Table 4.1 shows the enrolment of students per course and gender in Strathmore College.
Based on the data on Table 4.1, it was observed that distance learning promotes access to training in business courses to both male and female almost in equal proportions. Out of the total 1999 graduates from Strathmore College 53.97 percent were male and 46.03 percent were female having a difference of only 7.93 percent to have equal numbers of female and male enrolments. In the year 2000 enrolments, 58.11 percent were male and 41.89 percent were female having a difference of 16.20 percent to have equal enrolments in both male and female. Distance learning promotes access to both female and male almost at an equal level. Both male and female especially those who may have been locked out from training through conventional learning earlier on due various reasons have almost equal chances to train through distance learning, thus gender is not a limitation in enrolling in distance learning.
4.2.2 Age of students

Distance learning in the college enrolls mostly mature age students. Table 4.2 shows the ages of students enrolled in distance learning center in Strathmore College.

Table 4.2 Number of students in terms of age and gender.

<table>
<thead>
<tr>
<th>Year</th>
<th>Age group</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>1999 graduates</td>
<td>15-24</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>24-33</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>33-42</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>50-Above</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>388</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Age group</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>2000 enrolment</td>
<td>15-24</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>24-33</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>33-42</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>50-Above</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>355</td>
</tr>
</tbody>
</table>

**NB:** In computing the mean age the highest-class interval upper limit was assumed to be 59 years.

\[
\bar{X} = A + \frac{\sum fx}{N} \times C
\]

1999 graduates = 29.8 years

2000 enrolment = 30.34 years
Mean $A = $Assumed mean

$f = $frequency

d = deviations from mean

$x = $mid points of the class intervals

$N = $number of items

$C = $class interval

\[
\text{Median} = L + \frac{\frac{N}{2} - c.f}{f} \times I
\]

Median = Med

Where $L = $lower limit of the median class

$c.f = $cumulative frequency of the class preceding the median class

$f = $frequency of the median class

$I = $the class interval of the median class

1999 graduates median age = 29.44 years

2000 enrolment median age = 31.59 years

Distance learning promotes training to students of a wide range of ages from 15-24 years interval to 50 and above as shown in Table 4.2. Those students that can be locked out of conventional training institutions due to sociological reasons take distance learning as an option for advancing their training. For the year 1999 graduates the modal age group was 15-24 years, which accounted for 32.26 percent out of the total enrolment. In the 2000-year enrolment the modal age group was 33-41 years, which accounted for 35.03 percent out of the aggregate enrolment. According to the information in Table 4.2, the mean age was found
to be 29.8 years and 30.34 years for the 1999 graduates and year 2000 enrolment respectively out of the aggregate enrolments within each year. The median age was 29.44 years and 31.59 years for 1999 graduates and 2000 enrolment respectively. The above computations for mean and median age as measures of central tendency reveals that age is not an encumbrance that can obstruct access to enrolling in distance learning. The information shows that the majority of enrollees are mature age students.

4.2.3 Students' marital status.

Distance learning promotes training for both single and married individuals. Table 4.3 shows the marital status of students, enrolled in the college.

Table 4.3 Number Of students and their marital status.

<table>
<thead>
<tr>
<th>MARITAL STATUS</th>
<th>1999 graduates</th>
<th>2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARRIED</td>
<td>355 (49.37 %)</td>
<td>272 (44.52 %)</td>
</tr>
<tr>
<td>SINGLE</td>
<td>364 (50.63 %)</td>
<td>339 (55.48 %)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>719 (100 %)</td>
<td>611 (100 %)</td>
</tr>
</tbody>
</table>

Distance learning promotes training for married individuals as presented in Table 4.3. A higher percentage of students in distance learning were single comprising of 50.63 percent and 55.48 percent out the total students for the year 1999 graduates and year 2000 enrolment respectively but a good number of students were married.
They constituted 49.37 percent and 44.52 percent for the year 1999 graduates and year 2000 enrolment respectively. Distance learning can promote training for individuals without leaving their families in case they are married as presented in Table 4.3. Marital status can be an inhibitor to access to training through conventional learning especially for the individuals who are married and are mothers or fathers who have dependants. These individuals would wish to accomplish their roles and get full satisfaction from their specified roles within their families and at the same time embark on training (Garrison, 1989). Thus distance learning offers them an opportunity to train without leaving their families.

4.2.4 Educational qualifications

Students with varying qualifications get chances to train in the college through distance learning. Table 4.4 shows the educational qualifications of students at the point of entry to the courses in the college.

<table>
<thead>
<tr>
<th>Educational Qualifications</th>
<th>1999 graduates</th>
<th>2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.C.P.E</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ordinary level (K.C.E, K.C.S.E)</td>
<td>551 (76.63 %)</td>
<td>501 (82.00 %)</td>
</tr>
<tr>
<td>Advanced level (A' Level)</td>
<td>69 (9.60 %)</td>
<td>69 (11.29 %)</td>
</tr>
<tr>
<td>Certificate/Diploma/Advanced diploma levels</td>
<td>52 (7.23 %)</td>
<td>23 (3.76 %)</td>
</tr>
<tr>
<td>Degree level</td>
<td>47 (6.54 %)</td>
<td>18 (2.95 %)</td>
</tr>
<tr>
<td>Total</td>
<td>719 (100 %)</td>
<td>611 (100 %)</td>
</tr>
</tbody>
</table>
NB: Degree level include continuing students in universities taking degree courses

Based on the data in Table 4.4 it was found that ordinary level (K.C.E, K.C.S.E) is the basic qualification for entry into distance learning programme in the college. The highest number of students enrolled in the college constitute of students with ordinary level (K.C.E, K.C.S.E) qualification. These constitute of 76.63 percent and 82.00 percent out of total enrolment for both 1999-year graduates and year 2000 enrolment respectively mostly because they want to attain higher qualifications for job placement in the labour market. Distance learning also promotes access to students with other qualifications namely advanced level (A level), Diploma level and Degree level. Distance learning enhances training for the secondary school level leavers who would wish to attain higher certification. Individuals with relevant academic qualifications have a chance of advancing their training through distance learning regardless of availability of a cohort undertaking common training in any course at any particular time and at the same level of training.

4.2.5 Geographical distribution of students in provinces

Student's province of origin (location) is not a barrier in enrolling in the college for the distance learning courses. Table 4.5 shows that students enrolled in the college and their provinces of origin or residential provinces.
Table 4.5 Geographical distributions of students by provinces.

<table>
<thead>
<tr>
<th>Province</th>
<th>1999 graduates</th>
<th>Year 2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Nairobi</td>
<td>351 (48.82 %)</td>
<td>283 (46.32 %)</td>
</tr>
<tr>
<td>b) Central</td>
<td>108 (15.02 %)</td>
<td>58 (9.49 %)</td>
</tr>
<tr>
<td>c) North Eastern</td>
<td>12 (1.67 %)</td>
<td>36 (5.89 %)</td>
</tr>
<tr>
<td>d) Nyanza</td>
<td>91 (12.66 %)</td>
<td>37 (6.06 %)</td>
</tr>
<tr>
<td>e) Western</td>
<td>32 (4.45 %)</td>
<td>28 (4.58 %)</td>
</tr>
<tr>
<td>f) Coast</td>
<td>19 (2.64 %)</td>
<td>59 (9.66 %)</td>
</tr>
<tr>
<td>g) Eastern</td>
<td>20 (2.78 %)</td>
<td>34 (5.56 %)</td>
</tr>
<tr>
<td>h) Rift Valley</td>
<td>86 (11.96 %)</td>
<td>76 (12.44 %)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>719 (100 %)</strong></td>
<td><strong>611 (100 %)</strong></td>
</tr>
</tbody>
</table>

Distance learning promotes training for students irrespective of their geographical scope as shown in Table 4.5 in terms of provinces. Nairobi province has the highest percentage enrolment comprising of 48.82 percent and 46.32 percent for 1999 graduates and year 2000 enrolment respectively. Students from Nairobi province who enroll in distance learning access the institution for learning materials directly that is the study modules with the syllabus and course content. Though at lower percentages distance-learning Center in the College also promotes access to students from other provinces in Kenya who may access other regional centers in the country for any required information and advice. North Eastern and Coast provinces constitute the lowest enrolments for year 1999 graduates as presented in Table 4.5. Distance learning promotes training to students irrespective of the students’ province thus overcoming geographical barriers.
4.2.6 Enrolment by country of origin.

Students' country of origin or host country is not a barrier for enrolling in the college for the distance learning courses. Table 4.6 shows students from other countries other than Kenya.

Table 4.6 Number of students from foreign countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>1999 Graduates</th>
<th>2000 Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>38 (74.52 %)</td>
<td>25 (65.79 %)</td>
</tr>
<tr>
<td>Rwanda</td>
<td>5 (9.80 %)</td>
<td>3 (7.90 %)</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2 (3.92 %)</td>
<td>6 (15.79 %)</td>
</tr>
<tr>
<td>India</td>
<td>4 (7.84 %)</td>
<td>0</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0</td>
<td>1 (2.63 %)</td>
</tr>
<tr>
<td>Botswana</td>
<td>2 (3.92 %)</td>
<td>3 (7.89 %)</td>
</tr>
<tr>
<td>Total</td>
<td>51 (100 %)</td>
<td>38 (100 %)</td>
</tr>
<tr>
<td>Percentage of total Number of Students</td>
<td>7.09 %</td>
<td>6.22 %</td>
</tr>
</tbody>
</table>

Distance learning overcomes national borders in terms of the student's host or native country. Students from foreign countries enroll in the College distance-learning center for training thus overcoming broad geographical barriers in relation to national borders. The highest enrolment was from Uganda comprising of 74.52 percent and 65.79 percent for 1999 foreign graduates and 2000 foreign enrolment respectively out of

52
the total number of foreign students enrolled. The total number of foreign students constitutes 7.09 percent and 6.22 percent out of the total of 1999 graduates and 2000 enrolments respectively. In distance learning students can learn from anywhere regardless of their native countries or host countries. The students access the correspondence material through postal services. The host or the native country of a student is not a barrier to access in distance learning.

### 4.2.7 Students in professions.

Distance-learning centre in the college enrolls students who are on the job (Working individuals). Table 4.7 shows students enrolled in the college and their professional categories.

<table>
<thead>
<tr>
<th>Profession</th>
<th>Total Number of Students</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Professionals</td>
<td>34</td>
<td>12.57</td>
</tr>
<tr>
<td>Other Professionals</td>
<td>61</td>
<td>21.47</td>
</tr>
</tbody>
</table>

*NB: Personal services job category constitutes of the students who are involved in business tasks, e.g. Sales, Marketing, Typing, D roses operators and in an attempt to generate income or compensation basis.

Distance learning promotes access to students who are on the job. Out of the 1999 graduates 26.56 percent were on the 2000 enrolments 29 percent of the college. As presented in Table 4.7 the highest percentage of students on the job were in the personal services job category. 64.39 percent out of the total number of students on the job were in the personal services job category. About eighty percent out of the total number of year 2000 were working students who were on the job were also from personal services job category.
Table 4.7 Number Of students and their professional categories

<table>
<thead>
<tr>
<th>Job Category</th>
<th>1999 graduates</th>
<th>Percentage of total working</th>
<th>2000 enrolment</th>
<th>Percentage of total working</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Management/ Directory</td>
<td>3</td>
<td>1.57</td>
<td>6</td>
<td>2.97</td>
</tr>
<tr>
<td>b) Personal services (e.g. sales, typing e.t.c.)</td>
<td>123</td>
<td>64.39</td>
<td>143</td>
<td>70.79</td>
</tr>
<tr>
<td>c) Teaching professionals</td>
<td>24</td>
<td>12.57</td>
<td>19</td>
<td>9.41</td>
</tr>
<tr>
<td>d) Other professionals</td>
<td>41</td>
<td>21.47</td>
<td>34</td>
<td>16.83</td>
</tr>
<tr>
<td>Total Number of working</td>
<td>191</td>
<td>(26.56 %)</td>
<td>202</td>
<td>(33.06 %)</td>
</tr>
<tr>
<td>Students &amp; (Percentage of the total Number of students)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB: Personal services job category constitutes of the students who are involved private business tasks, e.g. Sales, Marketing, Typing, Bureaus operators e.t.c, in an attempt to generate income or on commission basis.

Distance learning promotes access to students who are on the job. Out of the total 1999 graduates 26.56 percent were on the job. 33.06 percent of the 2000 enrolment were also on the job as presented in Table 4.7. The highest percentage of students who were enrolled in distance learning on the job were from the personal services job category who constituted of 64.39 percent out of the total number of students on the job of the 1999 graduates category. About eighty percent out of the total number of year 2000 enrolment of the total number of students who were on the job were also from personal services job category. The possible
reason for this being that they would want to attain advanced training for better job placement. The courses offered in the college are related to personal services they undertake. Distance learning bolsters training for working individuals who undertake training while still continuing with their day-to-day professions. This shows that distance learning can promote training for students at minimal opportunity costs. Working learning students denotes reduced opportunity costs to their total individual incomes.

4.2.8 Students after graduation

Graduates from the distance learning center in the college, are either placed in a job or promoted in their jobs. Being placed or being promoted in a job is a direct benefit of undertaking training. Table 4.8 illustrates the student’s whereabouts after graduation from courses in the college.

Table 4.8 Students and their professions

<table>
<thead>
<tr>
<th></th>
<th>1999 graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job placement</td>
<td>182 (25.31 %)</td>
</tr>
<tr>
<td>Job promotion / Salary</td>
<td>6 (0.83 %)</td>
</tr>
<tr>
<td>Increment</td>
<td></td>
</tr>
<tr>
<td>Not known where they are (Could not be contacted for this research)</td>
<td>531 (73.85 %)</td>
</tr>
<tr>
<td>Total</td>
<td>719 (100 %)</td>
</tr>
</tbody>
</table>

**Job placement**: This is getting employed of previously unemployed.

**Job promotion**: This is getting a higher position from the previous one for the employed.
Based on information in Table 4.8, it was found that students are usually placed on the job while others are promoted in their relevant work positions. About fifteen percent of the 1999-year graduates were placed on job while 0.83 percent were promoted. However 76.50 percent of the 1999 graduates could not be contacted. Job placement and job promotion indicates earning opportunity and increased earnings respectively, which are direct rates of returns accruing from training. Job placement and promotion is an indicator of one of the direct benefits for undertaking training and advanced training. Other indirect benefits that accrue from training like self-fulfillment were not tested in the study.

4.2.9 Job categories for 1999 graduates

Table 4.9 illustrates job categories of the students when placed in a job after graduating from the college.

<table>
<thead>
<tr>
<th>Job category</th>
<th>Number</th>
<th>Mean salary (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountancy</td>
<td>129</td>
<td>28,000</td>
</tr>
<tr>
<td>Teaching</td>
<td>24</td>
<td>18,000</td>
</tr>
<tr>
<td>Sales</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Secretarial</td>
<td>29</td>
<td>15,000</td>
</tr>
<tr>
<td>Management</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Others (Could not be contacted for this research)</td>
<td>531</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>719</td>
<td></td>
</tr>
</tbody>
</table>

The information in Table 4.9 shows that majority of the students were placed as Accountants, of course the field they had trained in. The reason for lower percentages in the other job categories being that they are placed due the elasticity of substitution in the labour
market (Bowman, 1971). A mean from a survey conducted by the researcher in three types of business institutions in Nairobi that is, insurance companies, banking institutions and merchant middlemen revealed an average starting salary of Ksh 28,000 for fresh Accountants from College. A mean of Ksh 18,000 salary from 10 Colleges that offers Accounting was revealed as the average salary for fresh tutors of Accounting and Ksh 15,000 for secretaries. Otherwise this would vary from one employer to the other. Earning is private return that accrues from training and it is one factor that influences demand for training.

4.2.10 Estimate of the Average family disposable income on monthly basis

Table 4.10 illustrates an estimate of the family disposable income for the students who graduated from the college in the year 1999.

<table>
<thead>
<tr>
<th>Amount in Ksh (Thousands)</th>
<th>0-5</th>
<th>5-10</th>
<th>10-15</th>
<th>15-20</th>
<th>20-25</th>
<th>25-30</th>
<th>30-35</th>
<th>35-40</th>
<th>40-45</th>
<th>45-50</th>
<th>50-55</th>
<th>55-60</th>
<th>60-65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>0</td>
<td>7</td>
<td>13</td>
<td>5</td>
<td>17</td>
<td>43</td>
<td>12</td>
<td>6</td>
<td>11</td>
<td>26</td>
<td>13</td>
<td>2</td>
<td>14</td>
</tr>
</tbody>
</table>

\[
\bar{x} = A + \frac{\sum fx}{N} \times C
\]

\[
=34.66
\]

Mean \( A \) = Assumed mean

\( f \) = frequency
\[ d = \text{deviations from mean} \]
\[ x = \text{mid points of the class intervals} \]
\[ N = \text{number of items} \]
\[ C = \text{class interval} \]

\[
\text{Median} = \text{Med} = L + \frac{\frac{N}{2} - c.f}{f} \times i
\]

\[ = 29.79 \]

Median \( = \text{Med} \)

Where \( L \) = lower limit of the median class
\( c.f \) = cumulative frequency of the class preceding the median class
\( f \) = frequency of the median class
\( i \) = the class interval of the median class

### 4.2.11 Estimate of the Average family disposable income on monthly basis

Table 4.11 illustrates an estimate of the family disposable income for the students who enrolled in the college in the year 2000.

**Table 4.11 Estimate of family disposable income (Year 2000 enrolment in Kshs 000)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td>18</td>
<td>4</td>
<td>22</td>
<td>30</td>
<td>27</td>
<td>7</td>
<td>9</td>
<td>13</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

58
\[ \bar{X} = A + \sum \frac{fx}{N} \times C \]

=35.74

Mean \( \bar{X} \) = Assumed mean

\( f \) = frequency

\( d \) = deviations from mean

\( x \) = mid points of the class intervals

\( N \) = number of items

\( c \) = class interval

\[ \text{Med} = L + \frac{2 \cdot c.f}{f} \times i \]

=32.08

Median \( \text{Med} \) = Med

Where \( L \) = lower limit of the median class

\( c.f \) = cumulative frequency of the class preceding the median class

\( f \) = frequency of the median class

\( i \) = the class interval of the median class
From the information above as given by distance learning students as shown in Table 4.10 and Table 4.11 reveals that the mean income level from 169 students out of the total 1999 graduates was Ksh 34.66 in thousands and from 150 students out of the total year 2000 enrolment the mean income level was Kshs 35.74 in thousands. This family disposable income does not take into account deductions in expenses of the basic needs as may be demanded by any family in relation to any family consumer buyer behaviour which was not accounted for in this study. Payment to training in this case could have been classified, as the good to be purchased; otherwise the study did not establish the discretionary purchasing power of the specific income categories as per the responses of the students (Wagner, 1977).

4.3 Estimates of price and financing of training

4.3.1 Estimate of Personal expenditure on learning materials on quarterly basis.

Table 4.12 illustrates an estimate of personal expenditure on learning materials for distance learning students.

Table 4.12 Estimate of quarterly expenditure on learning materials (Ksh 000)

<table>
<thead>
<tr>
<th>Amount in</th>
<th>0-5</th>
<th>5-10</th>
<th>10-20</th>
<th>20-25</th>
<th>25-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 graduates</td>
<td>42</td>
<td>113</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>67</td>
<td>77</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
\[
\bar{X} = A + \frac{\sum fdx}{N} \times C
\]

1999 graduates = 6.69

2000 enrolment = 5.47

Mean \( A \) = Assumed mean

\( f \) = frequency

\( d \) = deviations from mean

\( x \) = mid points of the class intervals

\( N \) = number of items

\( c \) = class interval

\[
Mo = L + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times I
\]

Mode = Mo

Where \( L \) = lower limit of the modal class

\( f_1 \) = frequency of the modal class

\( f_0 \) = frequency of the class preceding the modal class

\( f_2 \) = frequency of the class succeeding the modal class

1999 graduates = Ksh 5.45 modal personal expenditure on quarterly basis

2000 enrolment = Ksh 5.12 modal personal expenditure on quarterly basis

According to the information got as shown in Table 4.12 the mean estimate of personal expenditure on learning materials are Ksh 6.69 and Ksh 5.47 in thousands and the majority quarterly expenditure is 5.45 and 5.12 in thousands for the 1999 graduates and year 2000.
enrolment respectively. As can be inferred and analyzed pragmatically this cost is lower if it
caters for all the learning materials and costs on postage services per month.

### 4.3.2 Duration for completion of courses

Table 4.13 illustrates duration of completion of courses for 1999 graduates

**Table 4.13 Time of completion of courses for 1999 graduates (months).**

<table>
<thead>
<tr>
<th>Time of completion in months</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Modal Time of completion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPS</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>6 months</td>
</tr>
<tr>
<td>KATC</td>
<td>0</td>
<td>40</td>
<td>81</td>
<td>26</td>
<td>7</td>
<td>9</td>
<td>0</td>
<td>5 months</td>
</tr>
</tbody>
</table>

As presented in Table 4.13 most students complete their courses through distance learning in
the stated time although some taking the K.A.T.C certificate extend with about one month
and a few of them extending with two or three months. The majority of KATC students
complete their course within 5 months. Most CPS students complete their course within 6
months extending beyond the stated duration with one month whereas a few of them extend
beyond the stated duration with two months. The normal time of completion of both courses
is 5 months. It might seem as if distance learning has no efficiency implication in terms of
the duration of the course, nevertheless the advantage falls due the reduction of the
opportunity costs.
Table 4.14 illustrates the time devoted for private study by the student in hours per day.

**Table 4.14 Hours devoted to personal study per day.**

<table>
<thead>
<tr>
<th>1999 graduates</th>
<th>Hours devoted to personal study daily</th>
<th>Number of students</th>
<th>Average hours per student per day 3.84</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

As presented in Table 4.14 the average hours per students per day devoted solely to personal study is 3.84 hours. This reflects low opportunity costs by embarking to train through distance learning in that the students have substantial time for their private jobs or activities.

### 4.3.3 Direct costs of training

Table 4.15 shows the amount of fees payable per course, per semester in the college.

**Table 4.15 Fees payable per course per semester**

<table>
<thead>
<tr>
<th>Fees paid per course per semester</th>
<th>CPA (SECTIONS 1 - 4)</th>
<th>CPS</th>
<th>KATC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance learning</td>
<td>18,600.00</td>
<td>23,400</td>
<td>10,500</td>
</tr>
<tr>
<td>Conventional learning</td>
<td>35,200.00</td>
<td>39,400</td>
<td>26,500</td>
</tr>
</tbody>
</table>

Difference in fees between conventional and distance learning for CPA (1-4) 16,600.00

Ratio of conventional fees to distance learning for CPA (1-4) 2:1
NB: For the courses that are not offered through distance learning the fees payable is estimated using a standard difference of Ksh 16,000 between Conventional learning and Distance learning as estimated by Accountants in the College as the possible difference in fees payable between the two modes of delivery.

The fees payable, which is a direct cost for training through distance learning, is lower as compared to conventional learning. As presented in the Table above the difference in fees payable is an estimate of Ksh 16,000.00 more for conventional learning as compared to distance learning. Since the quality of training in the two modes of delivery are the same sometimes distance learning producing higher quality output than conventional learning in terms of examination performance, individuals would otherwise embark on distance learning due to its lower fees payable (Keegan, 1993). The implication is that distance learning would promote access to training to individuals who are economically poorer and not able to pay for training through conventional training.

4.3.4 Financing of training

Table 4.16 illustrates financiers of the students who enroll in the college for the year 1999 graduates and year 2000 enrollment.
Table 4.16  Number Of students and sources of financing.

<table>
<thead>
<tr>
<th>Source</th>
<th>1999 graduates</th>
<th>2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Parent / Student</td>
<td>679 (94.44 %)</td>
<td>577 (94.43 %)</td>
</tr>
<tr>
<td>The government</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Donor Agencies</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Srathmore</td>
<td>9 (1.25 %)</td>
<td>11 (1.81 %)</td>
</tr>
<tr>
<td>Employers</td>
<td>31 (4.31 %)</td>
<td>23 (3.76 %)</td>
</tr>
<tr>
<td>Total</td>
<td>719 (100 %)</td>
<td>611 (100 %)</td>
</tr>
</tbody>
</table>

From the information in Table 4.16 it was found that financing of training in Strathmore College, Distance learning Center is mainly private financing by the student, the parent, Strathmore College or employers. No public financing of training was identified. The parent / student as private financier for training comprises the highest percentage. The parent / student as a financier constitutes 94.44 percent and 94.43 percent of the total financiers of both 1999 graduates and 2000 enrolment respectively. Strathmore College also contributes in financing of students in form of scholarships to those who are extremely needy and the very outgoing in terms of academic performance. Strathmore College level of financing comprised of 1.25 percent and 1.81 percent out of the total number of students for the 1999 graduates and 2000 enrolment respectively. Other private financiers of training in distance learning center are employers whose level was 4.31 percent and 3.76 percent out of the total number of financiers for the 1999 graduates and year 2000 enrolments respectively. Employers finance training for their employees in case of new technology or if wishing to upgrade and improve the existing skilled manpower. Basically as revealed by the information in the above Table payment of fees in training through distance learning center
in Strathmore College is through private financing. Fees payable is directly related to unit costs of training in any academic institution where the management is not willing to charge above the breakeven point (Hyman, 1991). The family disposable income influences the demand for training in any particular institution. In this case Strathmore College fees charged does not vary much with the unit cost thus attracting enrolments.

4.4 Reasons given by students on why they opted to undertake training through distance learning as the only choice

Table 4.17 illustrates the reasons given by the students on why they opted to undertake training through distance learning.

Table 4.17 Reasons given by students on why they chose to undertake training through distance learning.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>1999 graduates</th>
<th>2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower fees</td>
<td>165 (97.63 %)</td>
<td>141 (94.00 %)</td>
</tr>
<tr>
<td>Less opportunity costs</td>
<td>33 (19.53 %)</td>
<td>67 (44.67 %)</td>
</tr>
<tr>
<td>Formal employment</td>
<td>51 (30.18 %)</td>
<td>42 (28.00 %)</td>
</tr>
<tr>
<td>Fatherhood</td>
<td>46 (27.22 %)</td>
<td>34 (22.67 %)</td>
</tr>
<tr>
<td>Motherhood</td>
<td>58 (34.32 %)</td>
<td>66 (44.00 %)</td>
</tr>
<tr>
<td>Total Number of students investigated</td>
<td>169</td>
<td>150</td>
</tr>
</tbody>
</table>

NB: The percentage is out the sample size
Because of lower fees.

Based on the information Table 4.17, 97.63 percent of the total number of the 1999 graduates investigated and 94 percent of the year 2000 enrolment gave the reason of lower fees as the reason, which made them take the option of enrolling in distance learning.

Unit costs in training through distance learning are lower than in conventional learning thus low payable fees. Some costs that are variable in conventional learning remain fixed in distance learning. Due to the ability of distance learning to train a high number of students simultaneously the variable costs become low since mostly in training institutions variable costs reduce as output increases as a normal behaviour of variable costs. Consequently the unit costs become lower because of the large number of students. For buyers to purchase alternative goods that are directly related in terms of their final utility one factor to consider is the prices of the two goods and that’s why people would undertake training through distance learning (Hyman, 1991).

Less opportunity costs due to personal income generating activities and businesses.

Based on the information in Table 4.17 it was found that 19.53 percent and 44.67 percent of the 1999 graduates and year 2000 enrolment of the students investigated respectively gave the above reason as why they chose to enrol in distance learning. Opportunity costs are the costs forgone for an alternative investment. In the case of training through conventional learning individuals are usually full time students and have no chance of engaging in any earning activity. Conversely through distance learning students have an opportunity to engage themselves in earning activities since learning is usually self controlled and self
managed. The individual students would plan their learning in relation to their personal programs.

Being in formal employment.

30.18 percent and 28 percent of the 1999 graduates and year 2000 enrolment respectively of the students investigated gave the reason of being in formal employment as why they embarked on training through distance learning. The theme of being in formal employment is that the students would still continue earning while still continuing learning thus reducing opportunity costs.

Parenthood

27 percent and 22.67 percent of the 1999 graduates and year 2000 enrolment respectively of the students investigated gave the reason of fatherhood as why they chose distance learning as the mode in which to undertake their training. About 30 percent and 44 percent of the 1999 graduates and year 2000 enrolment respectively gave the reason of being mothers on choosing to undertake training through distance learning. This would be attributed to the domestic responsibilities, which concur with the need and the time of undertaking training.

This mode of learning addresses the unique situation of mothers and thus it is a good strategy to reduce the gender gap than the conventional mode.

4.5 Reasons given by the administrators on why training is undertaken through distance learning leading to the establishment of distance learning centers.

The reasons given by the administrators on why training is undertaken through distance learning justifies the grounds leading to the establishment of distance learning centers. These
reasons justify the establishment of distance learning centers from the supply side (Mace, 1979).

Make training less expensive so as to cater for the economically marginalized groups in the society.

Distance learning fee is usually low as compared to conventional learning especially when the number of students is high. Students who are unable to learn through conventional learning due to its high cost would definitely undertake training through distance learning.

Overcome geographical barriers

Another prevalence of distance learning is its ability to train students from all geographical areas. Students within a specific country and outside the country borders can undertake training through this mode at a distance provided they are accessible to postal services. This is advantageous where some courses are not offered in institutions within a country and thus willing students who may be not be having sufficient funds to train in the respective country where the courses are being offered choose to train through distance learning which is cheap and convenient.

Give an opportunity for working individuals

The goal of this is to reduce the opportunity costs (This has been discussed earlier in this chapter)
Offer training to a greater number of individuals simultaneously due to the limited financial resources.

Distance learning promotes training to a large number of students simultaneously since no additional classrooms are required; no additional tutors are required as enrollment increases apart from in the case of new courses being offered. Once the learning material (modules) has been developed the development staff is only required sporadically for conducting some convenient consultancy services and redesigning the course content if required (Perraton, 1993). In conventional learning the academic staff ought to spend most of their time in lecture halls.

Encourage and motivate individuals on the importance of private study.

Distance learning aims at arousing the individual student’s self-instructive skills since distance-learning students are usually self-motivated. It is the role of the student to select a conducive learning environment and monitor his / her personal learning. Distance learning students usually develop own aptitude to self-instruction. From the comments received from the administrators it was clear that personal motivation depended to a large extent on the freedom individuals were given to determine their own goals and the means of achieving them. It was argued that where individuals have a major say in determining their own directions where they feel much more committed to the task in hand, gaining satisfaction not only from the responsibility given but also from the ultimate achievement of their goals.
Offer training to older individuals who would feel sociologically barred to undertake training through conventional learning.

Sociologically, some adults are barred from training due to the age factor. They feel uncomfortable to undertake training together with the younger students in the same class thus fail to undertake training through conventional learning and opt to train through distance learning.
5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In the preceding chapter an attempt was made to analyze and report the findings of data collected for this study. In this chapter the summary, conclusions and recommendations of the study are given as derived from the analysis of data. The conclusions derived lead to the statement of the recommendations. The analyses was based on the following research questions:

a). What factors influence individual demand to undertake training through distance learning?

b). What students’ characteristics make distance learning the only choice in which to undertake training?

c). What are the direct costs of training through distance learning in relation to the conventional learning?

d). What are the possible factors that lead to the establishment of distance learning centres?
5.2 SUMMARY

5.2.1 Factors influencing individual demand to undertake training through distance learning.

Direct private costs

Direct private costs in distance learning in terms of fees payable and personal expenditure on learning materials has a low magnitude as compared to the direct private costs in conventional learning. Since distance learning generally offers home based learning the students' personal expenses such as housing are much less than if the student enrolled in conventional learning and pay for those facilities.

Opportunity costs

Foregone earnings are minimal because distance learning caters largely for working class people who may be in full time or part time formal jobs or personal businesses. The students usually plan their learning programmes so as not to interrupt their working hours.

5.2.2 Characteristics of distance learning students

Disposable income levels

Distance learning provides training opportunities for groups which have been marginalized in terms of income. As concluded in chapter four that the unit cost is low in distance learning thus low fees, and then the opportunity for access to training for low income earning population is created.
Age

Distance learning promotes training for students under a higher range of ages, majority being mature age students thus overcoming the sociological barriers of learning. Some students, who for some reasons failed to access any training earlier on, especially women who were barred to training due some cultural prejudices or may be due to financial instability and who may be constrained at present due individual commitments, would embark on training through distance learning (Bolton, 1986).

Geographical distribution of students

One major advantage of distance learning is its ability to overcome geographical barriers. Students can be enrolled from any part of the world provided they are accessible to postal services if the mode of learning is Correspondence for instance. In distance learning students usually don’t attend face-to-face instruction. Students are given learning materials and assignments, which they post back to the institution. As shown for the case of Strathmore College students are enrolled from all the provinces in Kenya and there are foreign students who are enrolled from other countries in Africa and India.

Marital status

Students who have personal responsibilities in their families due their marital status (married, have children; mothers or fathers) usually find conventional learning impeding their training in some ways due to their domestic commitments and responsibilities in upbringing of their children. Distance learning becomes an option to undertake their training in order not to forsake their marital and domestic responsibilities.
5.2.3 Possible factors that lead to the demand of distance learning training.
The factors that lead to the establishment of the distance learning centers emanate both from
the demand and the supply sides of training. These factors have been discussed in the
previous chapter. These factors characterize distance learning as a promoter of training to the
marginalized groups in the society. Individuals can be marginalized in terms of:

a) Age
b) Sex
c) Marital status
d) House hold activities
e) Personal activities
f) Geographical location
g) Country of origin
h) On the job
i) Income levels
j) Unit costs of training
k) Fees payable

5.3 CONCLUSIONS.
The conclusive element in the economies of distance learning in relation to the unit cost per
unit output, which is a direct reflection of the fees payable, is that it can serve a large number
of students since there are no limits for the class size. Distance learning can cater for many
students simultaneously who may be undertaking a common course of training making the
costs to break even faster and this is what substantially reduces the unit costs. Whereas the fixed costs are constant the variable unit costs reduce as the level of output increases.

Working individuals enrolling in distance learning largely reduces the opportunity costs of training since they don’t leave their jobs.

As can be compared the difference in fees payable between distance learning and conventional learning is high. Distance learning has low user charges thus groups with a low disposable income would afford to pay for training through that mode.

Distance learning would reduce impediments posed by conventional learning in terms of access to training since differences in the following students characteristics have little impact in access to learning at a distance. These characteristics are, age of the students, sex, marital status, household activities, personal activities, geographical location, country of origin, students on the job, income levels, unit costs of training and fees payable.

5.4 Policy recommendations
Distance learning centers should be expanded and marketed in order

a) To cater for the marginalized groups in the society (Individuals may be marginalized in terms of finances (income), age, geographical location, marital status).
b) Educational planners should develop and establish means of promoting distance learning for training since it is a viable means in promoting training at a lower cost.

c) To overcome the impediments posed by conventional learning.

d) Since higher training is mostly achieved through private financing distance learning would concur with the middle-income earners and also lower income earners in respect to the demand for training.

5.4 Areas of further research

a) Establishing the factors that influence and impede the motivation of distance learning students.

b) Identifying the feasibility of distance learning in the curriculum.

c) Identifying the potential of distance learning in promotion of adult basic education.

d) Absorption cost analysis of distance learning centers.

e) Distance learning and primary education.

f) Distance learning within the pastoral communities.


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  *Methodological Approach*: IREDU: Universite de Bourgogne.


  Washington: World Bank


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A.1 QUESTIONNAIRES’ COVER LETTER

MURAGE MICHAEL NJAGI,
KENYATTA UNIVERSITY,
CURR, ADMN & PLN DEPT,
P.O. BOX 43844,
NAIROBI.

Dear Respondent,

RE: INTRODUCTORY LETTER.

I am a postgraduate student from Kenyatta University. I would like to collaborate with you in identifying how access to training can be promoted through distance learning. I sincerely request for your support through filling the questionnaire provided to you. The information you will give will assist highly in the above goal, which would be very vital in understanding the potential of distance learning in promoting access to professional training. The information provided will be used for no other business apart from the researchers’ interests only.

Your contribution and sincerity will be highly esteemed and recognized.

Yours truly,

Signed---------------- Date----------------

Murage Michael Njagi.
Distance mode of learning is the mode of learning where the teacher and the learner are separated in time and space.

1. What courses do you offer through distance learning?
   a) 
   b) 
   c) 
   d) 
   e) Others

2. How many students have enrolled in distance learning mode in the following years?
   Enter number

3. Table A2.1 Number Of students per course and gender.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COURSE</th>
<th>NUMBER OF STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 graduates</td>
<td>a).</td>
<td>MALE</td>
</tr>
<tr>
<td></td>
<td>b).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d).</td>
<td></td>
</tr>
<tr>
<td>2000 enrolments</td>
<td>a).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d).</td>
<td></td>
</tr>
</tbody>
</table>
4. What are the ages of the students in question 2 above students? Enter number in table below.

Table A2.2 Ages of students in terms of gender.

<table>
<thead>
<tr>
<th>1999 graduates</th>
<th>2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE (YRS)</td>
<td>MALE</td>
</tr>
<tr>
<td>15-24</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td></td>
</tr>
<tr>
<td>54-Above</td>
<td></td>
</tr>
</tbody>
</table>

5. What are the highest educational qualifications of the above students? Enter number in the table below.

Table A2.3 Students' educational qualifications.

<table>
<thead>
<tr>
<th>Educational Qualifications</th>
<th>1999 graduates</th>
<th>2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) K.C.P.E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Ordinary level (K.C.E, K.C.S.E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Advanced level (A' Level)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Diploma level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Degree level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Specify any other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. How much and what sort of training is basic for enrolling in distance learning?

Tick one
a) K.C.P.E
b) Ordinary level (K.C.E, K.C.S.E)
c) Advanced level (A' Level)
d) Any other specify

7. What is the marital status of the students in distance learning? Enter number.

Table A2.4 Distance learning students marital status.

<table>
<thead>
<tr>
<th>Distance learning</th>
<th>1999 GRADUATES</th>
<th>2000 ENROLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARITAL STATUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARRIED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGLE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. What are the provinces within which the above students come from? Enter number.

Table A2.5 Students geographical distribution in terms of provinces.

<table>
<thead>
<tr>
<th>Province</th>
<th>1999 graduates</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Nairobi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Central</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) North Eastern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Nyanza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Western</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Coast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Eastern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) Rift Valley</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Does the distance-learning centre enrol students from other countries?

Yes

No

If yes specify by naming the country and entering the number.

Table A2.6 students' country of origin

<table>
<thead>
<tr>
<th>Country</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>a).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Do you have information on the physical health of distance learning students?

Enter number

1999 graduates  2000 enrolment

Physical disabilities

Specify

a)

b)

c)

d)

11. How many of the above students are working in a formal job?
12. How many of the above students are from the below working groups? Enter Number Of students.

Table A2.7  Students professions.

<table>
<thead>
<tr>
<th></th>
<th>1999 graduates</th>
<th>2000 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Management/ Directory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Personal services (e.g. sales, typing e.t.c.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Teaching professionals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Other professionals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Do you have information on graduates from distance learning when they enter the labour market?

Tick

a) Yes

b) NO

14. If yes above where do graduates go after training through distance learning? Enter number in the table below
Table A2.8  Students’ professions

<table>
<thead>
<tr>
<th></th>
<th>1999 graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Job placement</td>
</tr>
<tr>
<td>b)</td>
<td>Job promotion</td>
</tr>
<tr>
<td>c)</td>
<td>Not working</td>
</tr>
<tr>
<td>d)</td>
<td>Don't know</td>
</tr>
</tbody>
</table>

15. The graduates who are placed in a job or promoted in the question above are in which job category? Enter number in the table below.

Table A2.9  Students’ professional category

<table>
<thead>
<tr>
<th>Job category</th>
<th>1999</th>
<th>Salary (Estimated or actual) Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>a). Accountancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b). Teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c). Sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d). Marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e). Secretarial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f). Specify others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. What is the cost of training per course per month in the two modes? Enter figure

<table>
<thead>
<tr>
<th>Course</th>
<th>Distance learning</th>
<th>Conventional learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. What is the total tuition fee that a student is required to pay per course per term? Enter figure in the table below.

Table A2.10 Fees paid per course per each mode.

<table>
<thead>
<tr>
<th>Course</th>
<th>Distance Mode</th>
<th>Conventional Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. Who pays the above fees? Tick appropriately in the table below.

Table A2.11 Students’ source of finance.

<table>
<thead>
<tr>
<th>Distance learning</th>
<th>a) The student</th>
<th>b) The Parent</th>
<th>c) The government</th>
<th>d) Donor Agencies</th>
<th>e) Any other specify</th>
</tr>
</thead>
</table>
19. How long should a student take to complete a course? Enter duration in the table below.

Table A2.12 Course duration per mode

<table>
<thead>
<tr>
<th>Course</th>
<th>Distance learning</th>
<th>Conventional learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. Do the students complete their courses within the above listed time duration? Yes/No

If No give possible reasons

a). 

b). 

c). 

d). 

e). 

f). 

g). 

h). 

21. Why do you train students through distance mode of learning? Tick appropriately

a) Make training less expensive

b) Overcome geographical barriers

c) Give an opportunity for working individuals

d) Offer training to a greater number of individuals
e) List other reasons

i. 

ii. 

iii. 

iv. 
v. 

vi. 

vii. 

viii. 

ix. 

x. 

xi. 

xii. 

xiii. 

xiv. 

xv. 

xvi. 

xvii. 

xviii. 

xix. 

xx. 

xxi. 

xxii. 

xxiii. 

xxiv. 

xxv. 

xxvi. 

xxvii. 

xxviii. 

xxix. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x

xx. 

xxI. 

xxII. 

xxIII. 

xxIV. 

xxV. 

xxVI. 

xxVII. 

xxVIII. 

xxIX. 

xxx. 

xxxI. 

xxxII. 

xxxIII. 

xxxIV. 

xxxV. 

xxxVI. 

xxxVII. 

xxxVIII. 

xxxIX. 

x
A.3 DISTANCE LEARNING STUDENTS QUESTIONNAIRE

1. Fill the blank spaces as required.
   a) Province 
   b) District 
   c) Place of birth 
   d) Current living place 
   e) Age in years 
   f) Sex 
   g) Marital status (Single or Married) 
   h) Number of sisters Number of brothers 
   i) Formal occupation/Employment 

2. Fathers Information
   a) Age 
   b) Education level 
   c) Formal occupation/Employment 

3. Mothers information
   a) Age 
   b) Education level 
   c) Formal occupation/Employment 
   j) Personal income generating activities
      i.
      ii.
k) Average income on monthly basis in Ksh, Tick appropriately in the table below.

Table A3.1 Average income on monthly basis

<table>
<thead>
<tr>
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</thead>
<tbody>
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<td></td>
</tr>
</tbody>
</table>

Specify any other income category if not in the above table.

l) Do you have any physical disability Yes/No Tick appropriately

m) If yes above, elaborate further on the nature of the disability

________________________________________

________________________________________

d) Father's income generating activities (List)

1.

2.

3.

4.

5.

6.

Specify any other income category if not in the above table.

e) Father's Average income on monthly basis Ksh, Tick appropriately in the table below.
Table A3.2 Average income on monthly basis

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specify any other income category if not in the above table.

d) Mother's income generating activities (List)

i.

ii.

iii.

iv.

v.

e) Mother's Average income on monthly basis Ksh, Tick appropriately in the table below.

Table A3.3 Average income on monthly basis.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specify any other income category if not in the above table.

f) Family average disposable income on monthly basis Ksh, Tick appropriately in the table below.

97
Table A3.4 Family average disposable income on monthly basis.

|---------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

4. Who pays for your education in Strathmore College? Tick

a) Self
b) Father
c) Mother
d) Government
e) Donor Agencies
f) Any other specify

5. Why did you decide to enrol in distance learning centre instead of being a fulltime student?

a) Because of fees
b) Because of household activities
c) Because I am employed
d) Because I am a mother
e) Because I am a father
f) Other reasons
   i.
   ii.
   iii.
6. Estimate the total expenditure you incur on the following items related to your course per month, Enter figure in Ksh in the table below.

Table A3.5  Personal educational expenditure

<table>
<thead>
<tr>
<th>Item</th>
<th>Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Stationery</td>
<td></td>
</tr>
<tr>
<td>b) Postage</td>
<td></td>
</tr>
<tr>
<td>c) Text books</td>
<td></td>
</tr>
<tr>
<td>d) Others</td>
<td></td>
</tr>
</tbody>
</table>

7. How many hours per week do you devote yourself entirely on your courses, reading, revising e.t.c  -------------- Hrs per week.