FACTORS INFLUENCING EDUCATIONAL MANAGERS' SUPPORT FOR DISTANCE EDUCATION MODE OF DELIVERY: THE CASE OF WESTERN REGION, KENYA

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A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF PHILOSOPHY IN DISTANCE EDUCATION OF THE UNIVERSITY OF NAIROBI

2012
DECLARATION

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

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DEDICATION

This dissertation is dedicated to all who supported the researcher including my family, Dorcas Wanja, Maureen Nyokabi and Prudence Wanjiru.
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<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>B.ed</td>
<td>Bachelor of education</td>
</tr>
<tr>
<td>D.E</td>
<td>Distance Education</td>
</tr>
<tr>
<td>D.L</td>
<td>Distance Learning</td>
</tr>
<tr>
<td>D.E.O</td>
<td>District Education officer</td>
</tr>
<tr>
<td>D.D.E.O</td>
<td>Deputy District Education Officer</td>
</tr>
<tr>
<td>D.Q.A.S.O</td>
<td>District Quality Assurance and Standards Office</td>
</tr>
<tr>
<td>D.D.Q.A.S.O</td>
<td>Deputy District Quality Assurance and Standards Officer</td>
</tr>
<tr>
<td>D.P</td>
<td>Deputy Principal</td>
</tr>
<tr>
<td>H.E.L.B</td>
<td>Higher Education Loan Board</td>
</tr>
<tr>
<td>H.O.D</td>
<td>Head of Department</td>
</tr>
<tr>
<td>J.A.B</td>
<td>Joint Admission Board</td>
</tr>
<tr>
<td>M.Ed</td>
<td>Masters of Education</td>
</tr>
<tr>
<td>M.E.O.</td>
<td>Municipal Education Officer</td>
</tr>
<tr>
<td>N.O.U.N</td>
<td>National Open University of Nigeria</td>
</tr>
<tr>
<td>T.S.C</td>
<td>Teachers Service Commission</td>
</tr>
<tr>
<td>U.O.N</td>
<td>University of Nairobi</td>
</tr>
<tr>
<td>MMUST</td>
<td>Masinde Muliro University of Science and Technology</td>
</tr>
<tr>
<td>Z.Q.A.S.O</td>
<td>Zonal Quality Assurance and Standard Officer</td>
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ABSTRACT

In many countries distance learning has been adopted and has had significant success in terms of accommodating large number of students at the same time. Despite Distance Education (DE) mode of learning having been introduced in Kenya in the 1960s at the University of Nairobi only a few students are reported to have completed various courses through the mode. This study seeks to establish the factors that influence support by educational managers for DE mode of learning in Western Region. The study undertook to answer the following four research questions: The first research question was to what extent do the educational managers' level of awareness of DE mode of delivery influence their support for DE mode in Western Region of Kenya? The second question was to what extent do the attitudes of educational managers in Western Region influence their support for DE mode of delivery? The research sought to establish to what extent do personal characteristics—Gender, professional qualifications, work experience and administrative position—hold influence their support for DE learners in Western Region? Finally the study focused on to what extent does the government policy on DE influence educational managers' support for distance learning mode of delivery? In addition to these research questions seven hypotheses were tested at 0.05 level of significance. The data collected was analyzed using both qualitative and qualitative techniques which revealed that the educational managers' support for DE mode of learning was influenced by personal characteristics such as working experience, position held and subject specialization. Further the level of awareness of educational managers about distance learning mode was also found to be having a significant influence on their support for DE mode of learning. The educational Managers' attitudes towards DE mode of learning were also found to have influence on their support for DE mode of learning. The study recommended that teacher training institutions should revise their syllabuses to include DE units in their new syllabuses. This would expose students undergoing educational courses to appreciate DE's strengths, weaknesses and situational application for suitability. Further a major campaign also needs to be organized to sensitize existing educational managers of the effectiveness and efficiency of DE mode of learning. It was evident that attitude of majority of educational managers was not based on facts but on mere beliefs. A reasonable number of those who participated in the study were not fully exposed to distance learning mode despite their background in education and their work experiences. More research needs to be facilitated to establish the situational effectiveness of various modes of learning. This would allow stakeholders to make informed decisions regarding appropriate mode of learning taking cognizance of prevailing circumstances. The government needs to review its policy on education to provide an enabling environment for employees / students undergoing DE programme while working
CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Distance Education is not a new phenomenon in the world, however, it has evolved through several stages to its current state. Distance Education has taken different paths of development, for instance in Russia, institutionalized DE was established as early as 1850 based on correspondence (Gakuu, 2007). Earlier in 1840 an Englishman called Pitman had offered a class in shorthand taught entirely by mail (Williamson, 2009). Later, other providers of post-secondary distance education courses were established in various parts of the world. These include, the Toussaint and Langenscheidt institute in Berlin established in 1856 and the Swedish Libert Hermonds Institute established in 1898 with over 150,000 students each (Sclosser, 2002).

The attempt to enrol students in a university programme offered by distance mode of learning was made by the University of London in 1858. It allowed qualified candidates to join the University for a degree course without following a course of instruction at one of its approved colleges (Gakuu, 2007). The idea of provision of education to external students through correspondence was taken up by Universities in the United State of America such as Illinois State University in 1874; University of Chicago in 1891 and the University of Queensland in 1911. In 1883 an entire correspondent University was established in Ithaca, New York (Williamson, 2009). This was later emulated by other learning institutions such as development of correspondent directorates at Indian
Universities, external studies in Australian and Anglophone African Universities and independent studies at United States Universities.

The 1970s saw an eventful growth of DE. During this period, open learning was introduced by British Open University which at the time was handling more than 200,000 students concurrently. The British Open University system was considered unique because several approaches were applied in the provision of education. These included: Correspondent tuition, face-to-face tutorials, broadcast media and print, within the framework of a publicly funded institution offering its degree.

Today, millions of students acquire certification, personal educational enrichment and advanced degrees through Distance Education (DE) programmes. Advanced technology has set the stage for the use of different methods of delivery ranging from print materials, online chat, advanced email services, to conferencing media (synchronous, and asynchronous). With these combinations mega universities have been established all over the world, serving more than 100,000 students at a given time. These include Open University of United Kingdom, Indhira Gandhi Open University, University of South Africa and The Africa Virtual University (Daniel, 1996).

Education is viewed as the most instrumental factor in determining the character and pace of a country’s economic and social development. It is in this regard that most countries allocate a huge proportion of their budget to education. Studies have revealed that expenditure on education in developing countries, is a profitable investment and that the rate of returns from education is higher than for physical investment (Hossain &
Psacharopoulos, 1994; Psacharopoulos, 1985). Developing countries in particular must try to obtain the maximum return from their investment. The Government of Kenya like others global economies has invested heavily in education, yet access to Education, especially at university level, has been a mirage to a great majority as demand for education has over striped the supply (Mwiria and Nyakundi, 1994).

The government of Kenya through the Ministry of Education spent KShs. 125.28 billion on education in the financial year 2007/2008. This was an increase from ksh. 144.7 million allocated to education in the financial year 1963/64 which translated to 25.7% of the total budget compared to 37.7% of the 1987/88 budget. The increase in allocation was attributed to teachers, civil servants and lecturer's salaries (World Bank, 2003). The budget has gone up to 233.1 billion (16% of the total budget) in the financial year 2012/2013 of which 118.7 billion or (50.9%) was to cater for teachers salaries (Rep, 2012).

Due to high costs involved in provision of education, Saint (2000) argued that Open universities could be used as a way of saving manpower while at the same time increasing students enrolment.

The success of distance education, partly depends on support for the mode of learning since most learning takes place at a distance (Robinson 1995; Sahoo 1993). Daniel (1996) demonstrated how distance education (DE) mode of teaching can be efficient by documenting that in US 3500 colleges and Universities collectively served 14 million students at an average annual cost of $12500 each. In contrast, 11 Mega Universities served 2.8 million distance students at an average annual cost of $350 each. Similarly,
Hawkridge in his 1974 report conceded that open universities were more cost effective compared to conventional universities. Other scholars sharing the same views include: (Casey 1998; Parraton, 2000; Harry and Perraton, 2003). This shows that if DE was to be accepted as an alternative mode of delivery, then the cost of education could be reduced tremendously. From the above observation, capital-intensive technology seems to be an answer to the issue of access to higher education. Therefore, DE mode has been seen by many to be the solution, however, this seems not to have received much support from the stakeholders in many developing countries Kenya included.

The Government of Kenya has increasingly been concerned about the rising cost of education and training, as it has constrained the provision of adequate finance to other sectors of the economy as documented in the Rep of Kenya (1988). The problem of access to education is not unique to Kenya as a country. Tsang (1988) conceded that the rate of growth in education in less developed countries was low, yet the growth in population coupled with fiscal pressures, make it extremely difficult for governments to increase or even to maintain their current level of expenditure on education. Kenya is therefore not exceptional; the Government of Kenya reduced recurrent expenditure on university education from 14.2 billion in 2006/2007 to 11.9 billion in the year 2007/2008. Earlier, there was a decrease in education budget allocation in 1994 where the government reduced her annual recurrent expenditure from 37% to 30% citing inability of the Government to allocate more funds to the sector (Kiamba, 2004). Despite the adjustment in government funds allocation, the ministry of education is still reported to be receiving higher share of Government allocation as compared to other ministries. For
instance, according to 2009/2010 Economic Survey, the Ministry of Education was allocated 73.8% of the total expenditure on social services. It was followed by the Ministry of Health which was allocated only 16%, while other Ministries offering social services shared the remaining balance which amounted to only 10.2% of the total budget. These other Ministries include; Ministry of Labour and Human Resource Development, Ministry of Home Affairs and Ministry of Youth Affairs which are essential for a balanced economic development of any country.

Decreased funding for higher education has been reported as a global phenomenon as higher education fiscal needs, appear invisible in the light of other pressing needs such as health care welfare and primary education (Enrenberg, 2006; Duderstadt, 2000; Hearn, 2006 and Heller, 2001 ). One would think that African countries would have been in the forefront in embracing DE mode of delivery, which is capable of competently handling large numbers of students totalling 100,000 or more at a time as it has happened in other countries. University of Nairobi, which is the oldest university in Kenya, is reported to have trained only about 80,000 people since its inception in 1960s (University of Nairobi, 2005). The number of students trained in the University of Nairobi is equivalent to only one intake of the established mega Universities. For instance, the first Open University in UK opened its doors to students in 1971 and by 1980 its enrolment had risen to 70,000 students. In 1998, this university conferred degrees to 200,000 graduands. The success of the United Kingdom Open University is attributable to support received from the employers as well as innovative teaching methods applied (Thairu 2010). Surprisingly, most African countries have not been very fast in embracing DE as an alternative mode
of education delivery (Daniel, 2001). This is contrary to the belief of the many who had viewed distance learning mode as panacea to access or democratisation of education. As Hall in 1996 puts it:

“distance education showed that it could provide educational opportunities to large numbers of people who had previously been denied such opportunities, and that it could be done in cost-effective manner... The developing countries have found in distance education an answer to the previously almost insurmountable problem of how to take education to large numbers of their population who are isolated geographically” p.77

The history of DE in Kenya can be traced as far back as 1950s yet its impact is not very significant compared to other countries in Africa. Though the idea of DE is older than the oldest University in Kenya that is University of Nairobi, which was established in 1956 as a technical college and later transformed into a university college in 1961. By 2007 the university had only three schools offering four (4) programmes through DE out of 46 academic programmes offered at the university (Gakuu, 2007). The total number of students registered under DE are less than 6000 (admissions) with some programmes failing to attract more than 100 students. Kenyatta University on the other hand, which is the second largest University in Kenya, offers distance programmes in 9 schools out of the existing 16 schools. DE has been viewed by many as being more economical than conventional mode (Wagner, 1972, 1977; Ostman and Rumble, 1989; Knight, 1993; Phelps et.al. 1991; Cushman, 1996; Arvan, 1998; Bates, 2000; Wagner, 1987 and Parraton, 2000). This should however be treated with caution because cost of education has been a debate for quite some time, yet no agreeable conclusion has been reached.
Some distance programmes have been reported to be cheaper than conventional programmes as a result of economies of scale. Tsang, in 1988 acknowledged the difficulties experienced in determining the cost of education, highlighting shortage of competent cost analysts and lack of good data, as some of the barriers in costing education. The problems associated with costing of education, have made it difficult to do cost comparisons between countries or between delivery systems. With development of new technologies such as use of computer mediated communication, studies are showing increase in cost of distance mode of delivery. A study by Arizona Learning Systems (1998) found out that the cost per course enrolment of an average Internet course which amounted to US $571 was higher than that of traditional classroom instruction which costed US $ 474. It was, however, noted that though the cost of DE increased with introduction of computers, the dropout rate for computer mediated mode was 10% which was lower than 60% reported in other DE programmes. The cost structures of distance and traditional education are so different that those setting up distance systems experience difficulties in describing the operation and economics of DE mode of education (Snowden and Daniel, 1980). This made Psacharopoulos and Woodhall in 1985 to conclude that there is no single response to the question, what is the cost of education?

The 1992/93 statistics showed that national recurrent expenditure per student in public universities was 4.46 times higher than that of a primary school pupil, even though actual total recurrent expenditure for primary education was almost three times larger than that
of public universities (Rep of Kenya, 1993). This concurs with Abagi (1997) who gave the ratio of government expenditure on various levels as 1:3:42 that is, expenditure on a primary school child, as compared to a secondary student and to a university student. The data indicates that the cost of education per student is much higher at the university level than at the primary level. Nevertheless, the large number of students at primary level, makes total expenditure at primary level higher than expenditure at university level. It is therefore important for the expenditure at the university level to be checked and at the same time meet the ever increasing demand for education, without necessarily increasing the cost. In an attempt to do so the government planned to reduce its expenditure on education to 30% on recurrent expenditure and to 4% on development expenditure (Rep. of Kenya, 1988). This target will not be achieved without denying some deserving Kenyans access to education and therefore, an alternative mode of learning seems to be the most practical and viable option available.

The demand for education is higher than the supply at different levels in Kenya. According to Opondo and Noormahamed (1989), enrolment ratio at secondary school was 24% of the nation’s young people of secondary school age, while there were only 7.5% of the secondary school leavers absorbed at the universities. This translates to only 2% of university age Kenyans. This indicates that 98% of university age youth, do not access university education (Mwiria & Nyukuri, 1994). Daniel (2001) argued that the problem of access to higher education could improve if distance mode of delivery was adopted as a complementary mode of delivery as opposed to as a substitute of conventional mode of delivery. The number of students joining universities will increase
tremendously owing to the large numbers served by mega open universities (Daniel, 2001).

University admission in Kenya is based on bed capacity. For instance, 82,143 candidates qualified to join public universities in 2006/2007 academic year having attained the minimum grade of C+ and above requirement for university admission. Republic of Kenya (2008) reported that only 16,000 students were to be admitted through JAB into public universities. The other 10,000 students were expected to join private universities while 10,000 more students were expected to join foreign universities. According to statistics given, about 46,134 qualified students were projected to miss vacancies in the universities in 2007/8 intake, not forgetting the working class adults looking forward to join Universities to pursue further Education.

Despite the shortage, only a small percentage of students direct from secondary schools opt to join universities through distance education mode. For instance, in a study by Rambo and Odundo (2010) in their sample of 673 distance education learners registered at the University of Nairobi for B.ed, 84.5% were TSC employees and a further 4.3% were employed by other sectors. It can be deduced that a total of 88.8% of the sampled students were employees, while only 12.2% were either not employed or were direct from secondary schools.

Mboroki (2007) had similar results, majority of DE students sampled in his study were on fulltime employment (95%) compared to only 11% of on campus students sampled who were working. Bowa (2007) in the study of the relationship between learner characteristics and academic performance of distance learners, the case of external degree
programme of the University of Nairobi showed that out of 212 students under the study, 190 (89.6%) were employed and over 80% were 32 years of age or above. This is an indication that DE mode of learning, seems to be catering for the aged and employed and not catering for the youth and unemployed, who also require similar opportunities. The situation is not any better in private universities, Nancy and Kinya, (2010) in their study targeting Private Universities where Catholic University of Eastern Africa, United States International University and Daystar University were included, revealed similar outcome. In their study 72.9% of the respondents were employed ,while only 25.9% were not employed. In the study by Nancy and Kinya however, both distance and evening students were considered, therefore the students registered under continuing education were not purely distance learners.

Mwongera and Faida in (2010) in their study involving 80 first year Master of Business Administration at Tumaini University, in Tanzania also revealed similar results in the study ,80% of the respondents were in formal employment meaning majority of distance learners are aged and Working. Further the study revealed that 40% of the working respondents were not known by their employers that they were pursuing further studies. Only 10% of the employed had full support of their employers indicating that 90% of the employed did not receive support from their employers. The data indicates that distance education mode of learning has not attracted a lot of attention, especially from the school leavers. It therefore appears like DE mode of learning is mainly attractive to working class cadre that cannot fit in the conventional system of education. The situation is not much different in other African countries for instance Nigeria which has a total of 104
universities have not been able to accommodate the number of candidates who meet the minimum qualification to join these Universities. For instance in the 2010/2011 academic session, 839,147 candidates were eligible for admission into conventional higher institutions but only about 500,000 students could be admitted to conventional universities the other 339,147 candidates who were qualified could not be admitted owing to lack of space and other materials. These young people could be admitted on distance learning programmes that are free from limitations of both human and material resources (Ofoha and Awe, 2011).

The government of Kenya support to institutions offering education through DE mode of training seems to be shaky. This is illustrated by the state of the facilities used in offering distance education programmes at the University of Nairobi and others institutions of higher learning. Republic of Kenya, (1988) described the facility at the University of Nairobi to be comprising of a printing press, a small recording studio, a typing pool, records office and stores section which were said to be too old and too small to cater for expanding programmes. It is important to note that efforts are being made to support open and distance programmes through budget allocation. Between 2005 – 2010, the government of Kenya allocated ksh1.3 billion to be used to finance DE related activities (Republic of Kenya, 2005). The situation however seems not to have changed much to date. Recently, Bowa (2008) established that 90% of distance education students under the study were, dissatisfied with the provision of study materials. Bowa also revealed that on average each student was issued with 3.2 study materials instead of the stipulated 8. Earlier, Mboroki (2007) had also indicated that 94% of the DE learners
considered in the study had not received adequate self-instructional distance study materials this was due high demand that exceeded supply or due to fees payment requirement. The centres for open and distance learning have since been established at the University of Nairobi and Kenyatta University but not much achievement has been noted as far as students' registration is concerned. For instance, according to UoN, (2009), students continuing with studies were mainly on face to face programme despite existence of distance programme option. Surprisingly, available studies on effectiveness of DE modes of studies indicate no significant difference in students' achievement, regardDEess of the mode of study, that is whether face to face or distance mode (Capper and Fletcher, 1996; Moore and Thompson, 1997; Schutte, 1997; Morrissey, 1998; Bradford, 1999; Paskey, 2001; Parker and Gemino, 2001)) while others such as (Daugherty and Funke, 1998; Hiltz, 1994; Harting and Erthal, 2005 and Janassen et.al., 1999) found learners from DE mode of delivery to be better than learners from conventional mode in examinations performance, especially in solving complicated problems.

It is important for the government of Kenya to expand access to university education for its people. One possible way of doing this is looking for alternative methods that could be more economical and equally effective. This goes in line with recommendations of Tsang (1988) who suggested the following as strategies for reducing cost associated with linear expansion of traditional education: The strategy of making maximum utilisation of resources, reallocating resources in education and involving alternative technologies in education such as use of DE methods. Though DE has been suggested as a viable option,
educational managers and other stakeholders seem to be reluctant to recommend it as a suitable complimentary teaching method, especially at tertiary level of education (Wagner, 1977 and Parraton, 2001).

The Government of Kenya has been elevating existing midDEe level colleges to full university status, a move that has not solved the problem of access to university education. The educational managers and education stakeholders in Kenya, have been reluctant to provide support to DE mode of delivery. According to the Ministry of Education (2005), one of the strategies to increase access to education is to promote and popularise ODE programmes. This can be successfully achieved through first popularising it amongst the opinion leaders as far as educational issues are concerned. These opinion leaders include regional educational managers. This, however, seems not to have succeeded amongst the youth who have not responded positively, given the composition of students reported in various studies focusing on characteristics of distance learners. The paper however never suggested appropriate strategies of achieving this. There seems to be insufficient budgets from the government allocated to support DE mode of delivery. It is also noted that this seems to be the trend even in other countries. In India a student going through DE mode of learning, pay more than four times, compared to a student going through conventional method. This is as a result of heavy subsidies towards conventional mode of education by the government and none towards distance education mode (Manjulika and Reddy, 1996).
There have been non-supportive attitudes among the public decision makers as well as professionals, towards distance education (Mathews, 1999). This may influence their support for the adoption of DE as an alternative method to conventional method of teaching (Mathews, 1999 and also Miller and Pilcher, 1999).

In Kenya, resources allocated by the government to finance university education seem to be dwindling, yet demand for the same level of education has been increasing. According to Republic of Kenya, (2008), students' enrolment in public universities rose by 6.3% from 91,337 in academic year 2006/07 to 97,107 in academic year 2007/08. During the same period, recurrent expenditure to the universities decreased by 16.2%. The increment in enrolment was as a result of upgrading of technical colleges and teachers' colleges into University colleges. Some of the new campuses that have been acquired by Public Universities include Kenya Polytechnic and Kenya Science teachers' College which were recently elevated to be University of Nairobi constituent Colleges, Pwani college was taken over by Kenyatta University, Kisii and Chuka Colleges became constituent colleges of Egerton University while Mombasa Polytechnic and Kimathi institute were made constituents of Jomo Kenyatta University of Science and technology. Bondo Teachers Training College was later elevated to a constituent college of Maseno University. Considering history of various Public Universities in Kenya, it can correctly be concluded that all the existing Universities were elevated from college status to University status apart from Moi University which was established as a full university in 1984. The conversion of colleges to University status has since been suspended owing to the important role that they play in the economy (Express communication, 2009).
From the statistics the Government of Kenya seem to be reducing her budget towards university education. Tsang (1988) and Thairu, (2010) observed that it is important for countries to explore other alternative delivery methods to complement the existing conventional method which appears to be comparatively expensive owing to its labour intensive nature. DE mode seems to be providing solution to the fore mentioned problem, since it has been noted to be having potential of increasing the output at reduced cost while maintaining quality (Daniel, 2003). It is on the basis of the foregoing that the researcher wanted to establish the factors influencing educational managers' support for DE mode of learning. Though attempts have been made to adopt DE mode of learning, the rate and the target group seem not to be satisfactory. The educational managers in Kenya seem to be skeptical on distance education mode of delivery, yet other countries such as China, Turkey, France, South Africa and United Kingdom, have embraced DE mode of delivery, achieving remarkable success in increasing students enrolments drastically, while at the same time, lowering educational costs (Daniel, 1996) and also (Tsang, 1988). Some countries have reported an annual growth rate of distance education of 40% (Gallagher, 2003).

1.2 Statement of the Problem
The educational managers influence decisions made by the parents and students with regard to the career choice, the university choice, the programme they enrolled in and the mode of study. It has been noted during University of Nairobi meetings in Western Region that DE learners do not get the expected support from their seniors in terms of
motivation, release time to study, to attend teaching practice exercise, to attend meetings organized by Universities during self study periods, to attend residential sessions and posting on completion of their courses. Earlier study by Bowa (2008) indicated that 74% of the students under study through DE at the University of Nairobi, attended regional meetings only three times or below out of the four meetings required by the University. Further Bowa's study showed poor centre visitation by students with an average of 3.5 visits instead of the stipulated six visits. According to analysis of problems reported to University of Nairobi Western Region office by ongoing B.ed students those students from Mumias and Busia districts, who are registered under the distance programmes are required to secure study leaves even when their learning does not interfere with their performance of duties. (See appendix v). The study by Bowa (2010) revealed that learners' support services contributed immensely to the academic performance of DE learners. The study also revealed that poor academic performance was partly due to inadequate provision of learners support from the university to the external degree learners. Perhaps, lack of support by the superiors could also be one of the contributing factors to poor performance of DE learners since most learning through DE mode take place off campus (Bowa, 2008). However, there is no empirical evidence to support the argument that educational managers are non-supportive of distance education mode of learning. The researcher therefore, is justified to investigate the factors influencing educational managers' support for DE mode of delivery in Western Region of Kenya. In addition there is virtually no study focusing on ministry of education managers' support for DE mode of delivery that has been undertaken in Kenya thus the current study is justifiable.
1.3 Purpose of the Study
The purpose of the study was to investigate factors influencing educational managers' support for Distance Education mode of learning in Western Region of Kenya.

1.4 Objectives of the Study
The study was guided by the following objectives.

1. To establish the extent to which selected personal characteristics of educational managers' influence their support for Distance Learning mode of delivery.
2. To assess the extent to which level of awareness of educational managers about DE mode of delivery influences their support for Distance Learning mode delivery in Western Region.
3. To establish the extent to which attitudes of educational managers towards Distance Education Mode of learning influences their support for Distance Learning mode of delivery in Western Region of Kenya.
4. To explore the extent to which education policy on Distance Learning mode of delivery, influences educational managers' support for Distance Learning mode of delivery.

1.5 Research Questions
The study sought to answer the following, the research questions:

1. To what extent do personal characteristics of the educational managers influence their support for Distance Learning mode of delivery?
2. How do educational managers' state of awareness of Distance Learning influence their support for Distance Learning mode of delivery in western region of Kenya?

3. To what extent do the educational managers' attitude towards Distance Learning influence their support for Distance Learning mode of delivery in western region of Kenya?

4. Which way does the education policy on Distance Learning mode of delivery affect educational managers' support for Distance Learning mode of delivery in western region of Kenya?

1.6 Research Hypothesis

The study tested the following hypothesis:

1. There is no difference in support of distance learning mode of delivery between male and female educational managers in western region of Kenya.

2. The support accorded to distance learning mode of delivery by education managers in western region of Kenya does not vary with their work experience.

3. There is no significant relationship between the Professional qualifications of the educational managers and the support they provide to distance learning mode of delivery.

4. There is no significant association between subject specialization of Educational managers' and support they provide to distance learning mode of delivery.

5. There is no association between the administrative position held by the respondents and the support they provided to Distance Learning mode of delivery.
6. There is no relationship between awareness of educational managers about DE and their support for DE mode of delivery.

7. There is no relationship between attitudes of educational managers towards DE and their support for DE mode of delivery.

1.7 Significance of the Study

Based on research findings of this study it is hoped that the Government will sensitize educational managers as well as the general public, on DE mode of delivery and its applicability. This may encourage the use of both capital intensive method of training as well as labour intensive method of training; thus translating to more learning opportunities.

The revealed state of awareness among educational managers on DE mode can be improved; by the government through carrying out major campaigns to sensitise and popularise the programmes. It is hoped that the universities will use the research findings to justify curriculum review to accommodate distance education units in educational programmes. The envisaged improvement of state of awareness among educational managers would positively influence the support for DE mode of delivery. Further, this would lead to an increase in demand for DE programmes, thus reducing competition for face to face mode of education currently being experienced in the country.

According to the theory of demand and supply, the demand for products or services that are substitutes, is inversely related at micro level. At individual level when one opt for
DE mode automatically his demand for conventional mode will be nil. At macro, level DE mode of learning would complement conventional mode of learning thus reducing the problem of deficiency in supply of education. This implies that the country will be able to provide both modes of education to its population where one will be at liberty to choose the option best suitable for him or her free. The government is likely to spend more on education initially, through set up costs, but provide a long lasting solution to the problem of access to university education.

Distance learning has been seen as a method of reducing absolute expenditure or producing more education for the same overall budget. Eventually, the current expenditure in education is likely to be reduced drastically; the economies of scale of distance learning are likely to translate to increased usage that would bring about even lower cost per student. DE reduces the need for classroom space, and accommodation space as well as high budgets on teachers’ salary. Further, it is hoped that the new technology and innovations being applied in distance education can also be applied in conventional mode of learning, thus covering certain aspects hitherto neglected. In many situations students already enrolled for face to face learning, find modules and other materials prepared for DE learners, very useful. The study findings is also hoped to contribute to the pool of knowledge in DE discipline which is said to be scarce especially in Kenya (Mboroki, 2007) and also elsewhere (Robinson, 1995; Merisotis and Phipps; Batte, Forster, and Larson; Navarro; Navarro and shoemaker 1999).
1.8 Delimitations of the Study

The study restricted itself to the investigation of factors influencing educational managers’ support for DE learners in Western Region of Kenya. The educational managers play a vital role in the provision and management of education in Kenya. One of the factors investigated was attitude. Attitude has been defined to be learned predispositions to behave consistently favourably or unfavourably towards an object. Attitudes are formed as a result of direct experience with the product or service, information acquired from others, or exposure to the mass media.

The DEOs, DDEOs, DQAOs, Secondary Schools Principal’s, Secondary Schools Deputy Principals, and Secondary Schools heads of departments influence the society’s attitudes towards an education system since they are considered to be opinion leaders in the field of education. Some studies have showed low completion rate and poor performance of DE learners possibly that can be attributed to lack or lukewarm support from educational managers. Therefore educational managers are strategically positioned to provide information required for the study. It was on this basis that they were used as a source of information in this study. Other factors investigated include personal characteristics of the educational managers in Western Region, level of awareness of educational managers and Government policy.

Due to time limitation and resources constraints available, only one out of the eight regions of Kenya was targeted as a sample frame. However, the use of scientific method of sampling ensured that sampling error was minimal. This study did not cover the
efficiency and effectiveness of DE mode of delivery; these were considered to be beyond the scope of the study.

The study also only covered educational managers working within Western Region at the time of the study, it took a cross sectional approach. Educational managers in tertiary level of education were not included in the sample frame, this was justifiable because some of these managers do not have educational background and therefore may not be sharing the same characteristics with the targeted respondents in the study. The researcher made use of both self developed questionnaire and an interview guide, the triangulation was done to ensure that weaknesses associated with self reporting tests were minimised.

1.9 Limitations of the Study

The following were the limitations of the study:

The study was confined to educational managers working in Western Region of Kenya at the time of the study and results can only be generalised to cover other areas. The study was self sponsored, thus resources available was a limiting factor in terms of the geographical area covered. However, scientific sampling methods were applied to ensure sample taken was as representative of the target population as possible time was also a major limiting factor given that the work was to be completed within three (3) years. The researcher however made use of three thoroughly trained research assistants in data collection to ensure that data was collected as fast as possible without compromising the quality of the study. Two of the research assistants were Master degree holders while the
third one was undertaking a masters degree course at the University of Nairobi at the time of data collection. Though the situation could be the same throughout the country, the researcher narrowed down the research region to one out of the existing eight regions in Kenya.

1.10 Basic Assumptions of the Study

The study assumes the following:

The instruments for data collections measured the desired constructs. The study was also based on the assumption that D E mode of delivery is an effective method of delivery. It is also assumed that the educational managers gave true and honest opinion about D E and any other aspect of education sought through the research instruments. The study also assumed that professional qualification was a prerequisite to becoming an officer of the level of DEO, DDEO, DQASO and DQASO in the Ministry of Education. The study also assumed that there was only one principal and one deputy principal in every school considered in the study.
1.11 Definition of Significant Terms Used in the Study

Attitudes of educational managers refer to the extent the educational managers have either favourable or unfavourable feelings towards DE mode of learning in terms of costs, quality of graduates, students' achievement and convenience.

Educational managers refer to Ministry of Education officials that manage education programmes in the regions away from national headquarters these included, DEOs, DDEO, DQASOs, Secondary schools principals, Secondary School Deputy Principals and Heads of Departments in secondary schools.

Common Departments refer to Department of sciences, humanities guidance and counselling

Conventional Education refer to face- to- face learning or formal classroom based instruction, which takes place in schools, colleges, or universities where both learners and teachers are physically present at the same place and time. Traditional mode of education and conventional education in this study were taken to mean the same (synonymous).

Distance Education refer to instructions through whatever media to persons engaged in planned learning where learning takes place at different place or and time from that of an instructor(s). It includes both synchronous and a synchronous.

District Education Officers refer to educational officers at the district level thus entailed district education officers, deputy district education officer, and district quality assurance and standard officers.

Distance Education learners refer to learners enrolled for DE programmes at tertiary level institutions.
**Distance Learning Mode** refer to learning that take place through use of DE system where the learner and the teacher are separated but linked through a signal career.

**Level of awareness** refer to interaction of educational managers with DE graduates, participation in DE programmes either as students or facilitators or both or having studied through an institution training through dual mode.

**Open University** refers to flexible institutions of higher learning in terms of: time of study, age of student, and place of study. Most of these institutions utilise DE mode of delivery to train.

**Opinion Leaders** refers to District Education Officials and secondary schools principals, deputy principals and secondary schools heads of departments who are viewed as source of credible information concerning educational matters at district and school levels.

**Personal characteristics of educational managers** refer to the respondents profile such as, gender, educational background, working experience in years and professional qualifications.

**Self Sponsored Students**- refers to students not admitted through joint admission board therefore expected to finance their studies either through their parents, their salaries or any other source.

**Support for DE** refer to the provision of information to prospective learners, allowing students carry out training related activities in the institution that are under one's jurisdiction, time off to registered students who are at the same time working, advice, encouragement, counselling, recommendation for promotion on completion of a DE programme and resources to learners undergoing DE programmes.

**Readiness** refer to the state of preparedness.
1.12 Organization of the Study

This study is comprised of five chapters:

Chapter One covers the introduction of the study under the following sub topics: background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitations of the study, limitations of the study, assumptions of the study, definitions of significant terms used in the study and finally, organisation of the study.

Chapter Two covers literature review under the following sub topics: introduction, theories of distance education, factors influencing support for DE mode of delivery, theoretical framework, conceptual framework and finally a summary of the literature review.

Chapter Three covers research methodology, under the following themes: research design, target population, sample and sampling procedures, research instruments, pilot testing of the instruments, validity and reliability of the instruments, data collection procedures, and data analysis procedures.

Chapter Four on the other hand covers data presentation, data analysis, discussions and data interpretation. Finally, chapter five entails summary of the research findings, conclusions and recommendations of the study.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter covers literature review under the following sub-headings: The concept of Distance Education, Theories of DE, Factors influencing support for DE mode of learning, theoretical framework, conceptual framework and finally, a brief summary of literature review. The first part, covers the concept of distance education. The next part covers theories of DE that are relevant to this study, these includes: theory of independency and autonomy, theory of industrialization of teaching, theory of interactivity and communication, and finally the equivalency theory. This section is followed by another section covering review of factors influencing major stakeholders' support for DE mode of learning based on the following themes, attitudes towards DE in regards to: achievement, job performance, student satisfaction and policy on DE as well as support for DE programmes. This review is followed by a theoretical framework, conceptual framework and finally a summary of literature review and gaps in knowledge.

2.2 The Concept of Distance Education
The term Distance Education covers the various forms of study at all levels which are not under the continuous supervision of tutors present with their students in the lecture rooms or on the same premises, but which benefit from the planning, guidance and tuition of an organisation through the use of various types of technology. The existing literature on DE reveals lack of unanimity on the terminology used in the field of Distance Education. Some of the terminology used referring to DE includes: Correspondence study, home
study, independent study, external studies, distance teaching and distance education (Sewart, Keegen and Holmberg, 1984). In the definitions of distance education available the separation of teacher from the learner is highlighted as fundamental to all forms of distance education whether they be print based, audio/radio-based, video/television-based computer based, satellite based or any other technology. The next distinguishing feature identified in the existing definitions is the link between the materials and the learner by the organisations involved in the planning, structuring and development of the learning material used in Distance Education. This, according to Holmberg (1977) differentiates the distance education from private study or independent learning and or self study. Other features that have been used in the definition of distance education are possibility of occasional seminars equivalent to residential sessions in Kenya system, use of technical media and possibility of two-way communication (Moore, 1978). Peters (1973) presented a philosophical analysis of distance education as

"an industrialised form of teaching and learning" p.206.

According to, definition, distance education is a method of imparting knowledge, skills and attitudes to learners through the application of division of labour and organisational principles as well as by the extensive use of technical media.

According to this definition, several people are involved each participating in a certain area that is best suited for him or her. Some deal with production of materials such as print electronic or any other, others deal with learner support services, planning or general administrative tasks and many others tasks. In the provision of education through distance mode there are people involved in different activities it is on the basis of this
definition that DE is linked to the theory of economies of scale which states that unit cost reduces as the number of units produced increases until it reaches ascertain level where the firm start experiencing diseconomies of scale resulting from large scale production. This result to higher unit costs though measures can be taken to manage diseconomies of scale.

2.3 Theories of Distance Education

There are various theories of distance education. The following were found to be relevant to this study: theory of Autonomy and Independence whose major supporters were Delling (1968), Wedemeyer (1973) and Moore (1994), theory of Industrialization propagated by Otto (1973), theory of interaction and communication Holmberg (1977), and theory of equivalency supported by Shale (1988) and Keegan, (1995). The study was based on these theories since they all contribute to the discipline of distance education, which is said to be a fast growing discipline with old theories becoming redundant very fast as a results of technological innovations upon which DE is based.

2.3.1 Theory of Independence and Autonomy

The theory of autonomy and independence is based on the learner’s independence and autonomous in the process of learning. The theory views distance learners as independent and autonomous in terms of determining when to start and when to terminate the course, to choose where and when to learn and at the same time to select goals and activities to be undertaken during learning process as well as evaluation processes. The theory also views the learners as the determinant of pace of learning depending on the prevailing circumstances and therefore not bound by any mechanism of an institution.
According to Delling (1968), D.E is an artificial dialogic learning opportunity in which the physical distance between the learner and the helping organization is bridged by an artificial signal carrier. The role of the teacher and that of the organization is reduced to minimal. Moore (1973) on the other hand believed that autonomy of the learner is equally important in DE. Moore (1973) believed that for a programme to be successful there should be a match between the programme and the learner for the latter to exercise maximum autonomy and experience growth. Titmus (1989) also viewed adult learners as independent, autonomous and self directed.

The theory of independence and autonomy however failed to recognise the role played by the environment under which distance learners operate. Researchers and practitioners have long suggested that successful students learning in distance education can only be achieved through provision of appropriate support service (Feasley 1983; Gunawarden, 1988; Sahoo, 1993; Watkins & Wright, 1991; Gell-Danley and Fetzner, 1997). The distance learners therefore, require support from the providing institution as well as from others who form the environment under which they study (Lando, 2010). Student support may include, but not limited to the provision of libraries, material delivery, counselling, and relevant teaching and learning approaches as well as financial support from the government or from any other source. Lack of support by employers were identified by Knapper (1988) as one of the major contributing factor to high dropout rates amongst DE learners. This study by Knapper confirmed the earlier work of Knowles (1980). Kenyan scholars such as Lando (2010) and Thairu (2010) also identified employers’ lack of support to students undergoing DE programmes as one of the major challenge facing DE
learners. This also concurred with Rambo and Odundo (2008), this study focused on financial support disregarding other forms of support that managers may offer such as reduced workload, time off to study, encouragement and recognition of additional qualifications obtained through DE programmes. The current study sought to establish the influence of other factors on educational managers' support for DE since DE learners are expected to work independently they need support for their success given that most learning takes place off campus and mainly at work place (Knapper, 1988; Knowles, 1980; and Bowa, 2008). Educational managers' support for DE programmes is very crucial, since most of the learning takes place either at home or at work place. Therefore, time becomes an important predictor of retention in a DE programme (Sung, 1986).

2.3.2 Theory of Industrialization of Teaching

The main contributor to this theory was Peters (1967). According to Peters, teaching at a distance was so different from conventional teaching that there was need for researchers in distance teaching to develop a more relevant model. Peters conceded that analysis of distance education in terms of conventional instruction theory, was a failure and unproductive therefore, there was need for a different approach.

Peters developed a model equating teaching at a distance to an industrial production process. Research by Peters led to the conclusion that DE was an industrialized form of education and industrialization was the best explanation of it. According to the theory of industrialization, distance teaching could not have existed before the industrial era. The following similarities between industrial production of goods and distance teaching were
identified: rationalization, division of work, mechanization, mass production, planning and preparation, standardization and monopolization of operation.

For the theory of Industrialisation to be practical and viable the number of students involved has to be high for the theory of economies of scale to work. Economies of scale indicate that a firm benefit in several ways owing to large scale production. These include technical economies of scale, financial economies of scale, marketing economies of scale and managerial economies of scale. There is therefore need to encourage as many students as possible to participate in DE mode of delivery. Though the idea of increasing access of education through DE mode of delivery is good there is need for educational professionals to be fully involved so that as the principles of industrialisation are applied in the education sector, the quality of education is not compromised through mushrooming of ill prepared Universities or institutions of higher learning aimed at making profit from innocent students (Lukoye, 2008).

The theory can only be practical with large number of students being registered for the same courses. This has not been achieved especially in Kenya. For instance, University of Nairobi has been forced to postpone Bachelor of Commerce intake through DE mode scheduled to begin in July, 2011 to an indefinite time owing to lack of quorum, yet a similar programme offered through face to face mode in the same University registers high applicants in all the three intakes in every year (Bachelor of commerce distance programme University of Nairobi coordinator personal communication). This seems to suggest that DE has not been fully accepted by students and other stakeholders either
because of negative attitude, lack of awareness or other factors that the researcher sought to investigate.

2.3.3 Theory of Interaction and Communication

The major contributors of this theory were Baath (1980), Daniel Marquis (1979), Stewart (1980) and Smith (1984). Holmberg (1977) described distance education as guided didactic conversation. DE was viewed as a study in a distance different from self study or private reading since the student was guided and supported by an organization in terms of materials and constant interaction with tutors. According to the theory, conversation can either be real or simulated like through distance materials or internalized conversation through the texts.

Baath, contributing to the theory, conducted several studies on possible forms of communication in distance education. The studies showed that communication could be achieved at a distance through exercises, questions or self check tests, communication by the tutor through mail, computer, telephone or face to face. Stewart (1980) on the other hand identified absence of swift feedback and of the peer group as the major difference between DE mode and conventional mode. Stewart (1980) believed that teachers cannot be replaced by a package of materials and if it happened, it was to be extremely expensive. The theory also supports the need for communication and interaction between the distance education learners and the offering institution. The theory therefore support that is needed from the offering institution these include provision of information,
materials and constant communication. The current study, considered the support that could emanate from supervisors working with the students at their work environment.

**2.3.4 Equivalency Theory**

The theory states that DE is equivalent to conventional education. The major proponents of this theory were Shale (1988) and Keegen (1995) who argued that all what constitutes the process of education when teacher and student are able to meet face to face also constitutes the process of education when teacher and student are physically separated. According to this theory, D.E should not be viewed as different from conventional mode of training. The researcher in the study, viewed this theory to be relevant in the sense that the end results from both modes of learning is the same and the only difference is the mode of delivery and possibly the characteristics of students.

From the studies carried out there is no significant difference noted between the two modes of learning and even their outcomes. McIsaac and Gunawarderna, (1996) and Barker, (2000) also acknowledged the difficult experienced in distinguishing between traditional mode of learning and distance mode of learning. According to these scholars, technology such as computer are useful both to students under conventional mode as well as under DE mode. If the attitudes of educational managers were favourable towards DE mode of learning or if they treated the two as modes equal, then the competition for face to face programmes would be reduced and more learning opportunities would be created through application of theory of industrialisation of education. This would enhance access to education at the same time reducing the cost due to the inherent
characteristics of economies of scale discussed under the theory of industrialization of education.

2.4 Factors Influencing Support for DE Mode of Learning

Stakeholders in education tend generally to be non-supportive to DE mode of education, reasons for these, have not been agreed on. Kurt, et al (1991) argued that it is natural for human beings to prefer face to face mode of learning as opposed to other modes of learning. Available data on attitudes towards DE in regards to students' achievement, job performance by graduates of DE programmes, students' satisfaction shows varying outcomes. Attitude was considered as an important factor that influences behaviour which in the case of this study is support for DE mode of learning (Action). In the early days of attitudes research, most investigators accepted the fact that human behaviour is guided by social attitudes. This made the field of social psychology to be defined as the scientific study of attitudes (Thomas and Znaniecki, 1918; Watson, 1925) because it was assumed that attitude was the key to understanding human behaviour.

Later this was challenged by some scholars who demonstrated that some people say one thing and do the opposite (Lapiere, 1934). This was later supported by Corey (1937) who proved in a study that there was no correlation between the students attitudes and their behaviour that was cheating in examinations. Due to the inconsistency of the outcomes of attitudes behaviour prediction attitudes studies became more frequent. By the late 1960s, at least 45 separate studies had been reported in which investigators assessed verbal attitudes and observed behaviour. Many of these studies attempted to predict job
performance, absenteeism and turnover from job satisfaction (Bernberg 1952, Vroom 1964). Others scholars such as Himelstein and Moore (1963), attempted to predict judgements made by African- Americans and attitudes towards African- Americans. From these studies, attitude was found to be a poor predictor of actual behaviour. This lead to the conclusion by Wicker in 1969 that

"taken as a whole, these studies suggest that it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviours than that attitudes will be closely related to actions. Product moment correlation coefficient relating the two kinds of responses, are rarely above 0.3 and often zero".p65

The major weakness being tendency to give socially desirable responses (Bernreuter 1933; Lenski and Leggett 1960; Vernon 1934). The instruments for measuring attitudes were improved but this did not solve the inconsistency. Individual differences variables were later included as moderators (Ganngstad and Snyder, 1985). Several studies examined the hypothesis that attitudes are better predictors of behaviour for people low as opposed to people high in the tendency to monitor their behaviour (Kline, 1987; Snyder and Kendzierski, 1982; Zanna, Olson and Fazio 1980). The study will apply both qualitative and quantitative approaches to solicit information that the managers' will not provide without a bit of probing. The interview guide proved to be a very useful tool in obtaining required information.

2.4.1 Attitudes toward DE in Regards to Students' Achievements and Support for DE Mode of Learning

The attitude towards DE in regards to students' performance is mainly based on studies taken to compare students achievements from both DE and conventional education.
Studies have revealed that, with a few exceptions, education through distance education mode exhibited similar learning outcomes with students in traditional classroom settings (Harden, Barnard & Donnan, 1994; Besser & Bonn, 1996; Jung, 2001; Muirhead, 2001; Mboroki, 2007; Elaine & Larry 1993 and Russell, 1991). In all these studies, there were no significant differences in students' performance regardless of the mode of training. The attitudes about students achievements are based on available researches. Some studies have showed that students who went through distance mode of learning performed better than those who went through conventional mode (William 1993; Tulmer et al. 1992; Bartlett, 1997; Bothum, 1998; Hernes & Hulse, 1996; Koch, 1998; RIDEey & Sammons, 1996; McCollum 1997; Thirunara Yanan & Perez – Prado, 2002 and Shutte 1998).

Russell (1999) analyzed 355 studies on legitimacy of distance learning and concluded that students participating in distance learning, are capable of achieving positive outcomes comparable to students enrolled in traditional institutions.

On the other hand, other studies have showed contradictory results revealing that students under conventional mode of learning performed better than those on DE mode. This was explained by Fozdar and Kumar (2007) as due to factors such as age, social class and isolation. Bernard et al. (2004) and WooDEey, (2004) added boredom with the courses, financial difficulties, lack of feedback and lack of encouragement, insufficient motivation, and dissatisfaction with the requirement of the course to the factors contributing to the poor performance and high drop out rates of students enrolled in the
DE programmes. On his part Knox (1977) identified family issues, work and community roles as well as physical condition, personality and earning interests as major factors affecting adult ability and willingness to participate in adult education which is mainly offered through distance mode. Bernard et. al. (2004) conducted an extensive meta-analysis of 232 studies and concluded that some applications of DE are far much better than classroom instruction and some are far worse. Bernard et. al. (2004) after a Meta-analysis study, concluded that thorough comparison between DE mode and conventional mode is needed for any meaningful conclusion to be made in terms of superiority of either mode of delivery. This was after realising that in some instances DE group outperformed the traditional group by up to 50%, whereas in some other instances the opposite occurred. Similarly Eicher et. al. (1982) concluded that motivated students can learn from any medium provided it is competently adapted to their needs, Wells had indicated the same in 1976. This implies that DE can produce successful results when well implemented and can be unsuccessful when not well implemented just like any other mode.

From the foregoing debate it appears that the DE mode of learning is an effective mode as well as traditional mode though debates about which mode is superior to the other has not been concluded yet. Some (Shale 1988) have argued that comparison between the two modes of education was not necessary since the input, that is, the learners joining the two modes of training were different. Meyer (2004) argued that the results from comparison of DE mode of learning to conventional mode of learning is unreliable due to the fact that students involved in the two modes are totally different. The theory of equivalency argue
that though the two modes could be different but equivalent situation could be created thus producing the same end results. Other scholars like Howell, Law and Lindsay, (2004) on their part viewed comparison of the two modes as comparing two different things such as comparing “apples and oranges” according to them the result from such comparison would not be valuable. The subjects under study were different in terms of their characteristics and also the learning environment was also different, yet they were not controlled thus making the results of the comparison studies, questionable. From the above review it can be concluded that though people could be having either favourable or unfavourable attitudes to DE in regards to students’ achievements, available data shows no superior modes amongst the two mode of learning owing to conflicting outcomes. McIsaac and Gunawardena, (1996) and Barker,(2000) acknowledged the difficulties facing scholars in distinguishing between traditional and distance education settings.

2.4.2. Attitudes towards DE Graduates in Regards to Job Performance and Its Influence on Support for DE Mode of Learning

Employers also tend generally to be non supportive to DE mode of education. Empirical data on attitudes towards DE graduates shows mixed results. Some of the researches that showed preference for graduates from conventional system as opposed to graduates from distance mode include Adams and Defluer (2005) where 98% of the 109 employers surveyed preferred to hire candidates with traditional degrees. Adams and Defluer in 2006 undertook a national polling of hiring executives. (n = 269) and found out that 75% preferred applicants with a traditional degree. According to Vagt (2001), a survey conducted by New York City based employment research web site, showed that
most employers (54%) favoured job applicants with traditional degree over those with DE acquired degrees; however, 45% indicated that they would give job candidates with both types of degree equal consideration. Results of the study by Flower and Baltzer (2006) largely confirmed the earlier hypothesis that most employers preferred hiring graduates from conventional system of education as opposed to graduates from DE mode of learning. A later study by Defleur and Heald (2007) considering acceptability of degree acquired through distance mode in health sector, 95% of the employers considered preferred applicant with a traditional degree as opposed to applicants with a degree acquired through distance mode. The study further revealed that 29% would select a candidate with a hybrid degree where half of the courses were taken through distance and the other half through traditional system. Seybold’s study (2007) applying qualitative approach and considering employers from five different industries, confirmed that traditional degrees are viewed to be more superior than degrees acquired at a distance. According to the study, hybrid mode of study was slowly gaining acceptability. This is in line with the theory of diffusion of innovations (Rodgers, 2003).

The theory of diffusion of innovations argue that any population can be broken into five different segments, based on their propensity to adopt a specific innovation. These segments include innovators, which represents a small number of people who are visionary, imaginative innovators. Those who belong to this segment lavish great time, energy and creativity on developing new ideas and gadgets. The next segment is referred to as early adopters who adopt new innovations immediately benefits of the innovations become apparent. The third segment identified is early majority the characteristic of early adopters is that they are pragmatists, moderate, cost sensitive, risk
averse and followers. The fourth segment according to Rodgers theory (2003) was late majority. These are conservative pragmatists who hate risk and uncomfortable with new ideas. The last segment is Laggards which constituted by people who hold to the bitter end. The providers of education through DE mode should take initiative to understand the their prospective clients, so that appropriate approaches can be used to attract them to their offers.

A study by Huss (2007) carried out on 326 Principals to investigate their attitude towards DE showed that they were overwhelmingly negative. In the study Huss (2007) revealed that 95% of the Principals felt that DE does not carry as much credibility as a teaching degree as compared to a traditional acquired degree. In the study by Huss (2007), 99% preferred candidates who attended traditional class settings for employment. The study however did not provide reasons for preferring graduates from conventional mode as opposed to distance education mode. The study contradicts studies on students' performance by William (1993) and later confirmed by Mboroki (2007) who proved through their studies that students under both mode of studies showed comparable performance and even where there was a difference DE indicated superior performance to traditional learning Mboroki, (2007). The study by Mboroki (2007) however focussed on students on teaching practice and not on regular teachers. More studies need to be carried out on employers who have worked with the graduates of the two modes of learning instead of targeting ongoing students who are likely to behave differently with the knowledge that they are under observation. This is the more reasons that researcher in the current study target the educational managers who work with teachers from the two
modes of learning and also participates in policy decisions as far as education matters are concerned.

From the foregoing discussion, there are two schools of thought concerning DE. One is opposed to DE mode of training while, the second school, is supportive of the mode. It is surprising that even without empirical evidence of the superiority of conventional mode of education to DE mode, professional association, administrative and accrediting agencies have adopted rules that in many instances prohibit credit or any other recognition for courses taken through DE mode of learning (Wedemeyer, 1988). In Kenya, there are some situations where diploma holders are preferred as teachers for secondary schools as opposed to Bed holders obtained through distance mode. This is evident by the move by the TSC to recall diploma humanities teachers who had previously been redeployed in primary schools back to secondary schools see appendix (iv). This is ironical given the high numbers of Bed holders still teaching at secondary level and some with higher qualifications.

2.4.3. Attitudes towards D.E Graduates in Regards to Quality and Its Influence on Support for DE Mode of Learning

Quality is the level of value in a product/service or a level of achievement, a standard against which to judge others (Uvah, 2005). In education quality can be assessed through standards, perfection, consistency, fitness for purpose, value for money and transformation (Ofoha and Awe 2011). One way of judging the quality of DE mode of learning is through survey of students satisfaction on the programmes.
Studies on students' satisfaction with DE mode of learning have showed mixed results. Gallagher and Poroy, (2005) conducted a national survey of prospective post secondary education students and analyzed responses from 541 participants. The study showed 39% of the respondents were unsure about the quality of online education compared to campus based learning, 29% believed DE was inferior to campus based learning; 30% felt online learning is comparable. Some institutions which pioneered and sustained non-traditional learning, have been unable to properly accredit learners who have, by standard academic assessment, achieved a quality of learning comparable to that of traditional learners. The studies reported attempted to compare two different modes of learning but the researchers seem to have overlooked prevailing situations at the time the researches were conducted. The entry criterion for the two modes of learning is different and therefore comparing the learning outcomes may not be very valid. The characteristics of students in the two modes are different and therefore the outcomes of two modes will be different.

On student's satisfaction, the views ought to have been collected from students who have been exposed to the two modes of learning rather than from prospective students. Prospective students may not have accurate information concerning distance mode of learning since they have not been exposed to the mode. Elsewhere Ofoha and Awe (2011) reported a rather interesting results though 70% of the 106 academics considered in the study held positive attitude towards distance programmes offered by National Open University of Nigeria. Only 42.5% of the respondents indicated willingness to recommend and encourage their relatives to study through distance mode offered by the
same university. This is a clear indication of the skepticism that prevail about distance mode of learning amongst academics that are involved in the provision of education through distance mode.

2.5 Awareness about DE Mode and Its Influence on DE Mode of Learning

Distance Education is understood differently by different people or same people at different times. Some view distance education as correspondence education or correspondence study, that is, education conducted by postal services without face to face contact between the teacher and the learner. This term does not consider the didactic potential of DE, thus, the use of new technologies such as video and ICT need to be reflected in the definition used.

Some view DE as home study, this originated from United States of America where they use the term to refer to further education (technical and vocationally oriented institutions). One problem related with this term is that DE may take place at home and or elsewhere (Keegen, 1986).

DE has also been viewed as independent study referring to distance education programmes at higher education level (Markowitz, 1983). The weakness of this definition is that it assumes that learning takes place independent of the offering institution which is not always the case. Offering institutions are actively involved in the planning of the programmes as well as in the provision of learners support through out the learning period.
The other definition which is in wide use is External Studies. The term originated from Australia, referring to education offered to two set of students, that is, on campus group (internal) and off campus students (external) by the same staff (Keegan 1986). This type of offering is currently being referred to as dual mode system.

Further, others define DE as distance teaching or distance learning. Though these terms have been in use, they are viewed to be inadequate because distance learning is considered to be too student based while distance teaching is viewed to be too teacher oriented and over emphasising the role of the offering institution. To eliminate the weakness of distance learning and distance teaching, distance education was suggested, this encompasses both teaching as well as learning. Rawson (1974 p.61) summed the pros and cons of DE as follows

“I do not like the term distance education. It seems to put a lot of an undue emphasis on the distance between the teacher and the learner. But I cannot think of a better name for a multimedia educational process in which the teacher and the students may never meet in face to face situation... in the absence of a better name for the process I shall use it when appropriate”

Distance education is defined as the quasi-permanent separation of teacher and learner throughout the length of the learning process. There is the influence of offering institution in the planning and preparing of the learning materials where multimedia technology is used to convey the content and there is provision of two-way communication. It is worth noting that there are terms that relate to DE though they have different meaning, these include Open Education and e-Learning. Open Education refers to flexibility of a system in terms of admission criterion as well as time which can apply both to traditional mode
as well as DE mode, e-learning learning on the other hand refers to computer mediated learning which can also apply to both traditional mode as well as DE mode.

Existing studies indicates that those that are familiar with an object are likely to be more supportive than those who are ignorant about the object. Gakuu in (2007) revealed that lecturers’ readiness to adapt ICT in training was influenced by their exposure to the technology. Keiyoro (2010) concurred with Gakuu revelation that awareness influenced support for a new idea though Keiyoro focused on use of ICT in teaching and learning science curriculum in secondary schools in Kenya, the results were similar. Keiyoro (2010), attributed limited use of ICT in teaching science subjects in secondary schools partly to lack of support from both the school administration and project managers.

Other studies that support this phenomenon that experience or awareness influence behaviour include (Dillon, 1989; Parer, 1988; Johnson and Silvernail, 1990; Mani, 1988; and Taylor and While 1991). According to these studies, teachers who had taught at a distance were more positive towards DE teaching than those that had no experience with DE programme. Further studies have showed that people who have direct experience with the object are likely to be more predictive than those with second-hand information (Fazio and Zanna, 1981). A study by Regan and Fazio (1977) based on hypothesis that awareness influenced behaviour highly when based on direct experience yielded a correlation coefficient of between 0.51 and 0.54, whereas correlation based on indirect experience condition raged between 0.2 to 0.22 only. This shows that if more and more people are sensitised about DE mode of learning, they would be more supportive hence influencing the behaviour of both the learners that they help to mould or their juniors who
could be interested in professional development programmes as recommended by Nyonje and Kyalo (2011).

2.6 Policy on Distance Education

Distance education is viewed as a new phenomenon in many Countries. It is as result of these that many countries have not developed policy guidelines on the implementation of this relatively new mode of training. Braimoh and Lekoko (2005) commenting on the issue, are of the opinion that a policy frame work should be provided to ensure quality education is provided for learners of diverse cultures including economic background and geographic regions. In South Africa, the implementation of DE at regional level and international level was viewed as uncoordinated because of lack of policy on open and distance learning (Braimoh and Lekoko 2005). This is a surprise because south Arica has been noted to be among the successful countries in implementation of DE programmes.

In Kenya, the scenario is not any different the government seem to be supporting the DE programmes as a matter of last resort. As far as financing DE programmes is concerned, very little funds are allocated to DE programmes. However Ksh. 1.3 billion was allocated to finance open and distance learning activities (Republic of Kenya 2005). Earlier financial support, included the establishment of correspondence Course units (CCU) in 1967 and financial assistance received from USAID through the Ministry of Education. Though the DE learners are free to apply for a loan from HELB majority of the learners are not aware of the provision. Further, according to UoN (2005) there is no official finance scheme that benefits DE learners as their regular counterparts.
Rambo and Odundo (2010) revealed that 79% of the students sampled and at the same time, were employees of the TSC, indicated that the employer had not developed policies to permit financial support for staff development among its employees. In the Study by Rambo and Odundo, (2010) out of 673 active and non-active learners involved, 84.5% were employees of the (GOK) through teachers service Commission (TSC). None of these had benefited from HELB. This led the Study to recommend for support of DE learners by the employers in terms of finance. On the contrary, over 80% of students in regular programmes are financially supported by the government of Kenya (UoN, 2005). On the other hand the government of Kenya has no policy specifically concerning students undergoing their studies through DE programmes and at the same time no policy on promotion of graduates who have gone through DE programmes. This however, seems to support the equivalence theory earlier discussed which suggest that the two modes of training is the same and therefore no need for different treatment by the government. Perhaps this also explains why University of Nairobi does not have different policy on promotion of lecturers who participated in DE activities (Gakuu 2007).

A study by Hawkridge et.al (1982) on cost effectiveness analysis of the teacher training in Kenya, found that the DE mode of delivery was effective in terms of planned objectives but was viewed as very costly. The study however, did not compare the cost effectiveness of this method with other teacher training methods. Moreover, the number involved in the programme could have been fewer than the number recommended for DE programmes for economies of scale to be achieved.
In other Countries, situation is not very different Cornel(2004) describing the scenario in the United States, indicated that a postgraduate school was not eligible to participate in the Federal students aid programmes if the school offered more than half of its courses through correspondence courses, or half or more of its students enrolled in correspondence courses. These restrictions had been enacted to protect the federal student aid programmes from widespread fraud and abuse which had been noted in some correspondence schools a decade earlier. Elsewhere in Africa, Nigeria and South Africa lack of substantial financial support by the Governments had been reported by Yusuf (2006) and Braimoh and Lekoko (2005) respectively. Gakuu (2006) on the other hand argued that though distance education has a long history that goes back to the eighteenth century, it has taken more than a hundred years for it to develop into an academic discipline, partly because of general negative attitude towards DE since its inception.

2.7 Support for Distance Mode of Learning

Research has showed that there is a higher dropout rate amongst DE learners (Odundo and Rambo 2010). Students Support services has been identified as one of the strategies that can be used to increase retention rate and improve performance of students undergoing their studies through DE mode. The Support Services researched, on are institutionalised support services such as: administrative support services which includes: pre admission counselling, admission and registration information, learning materials and books distribution.
Library and technical services: this includes provision of library services closer to the students as well as provision of computer services and technical services to the DE students.

Academic services which include tutoring and counselling services. These academic services are offered to students undergoing DE programmes to achieve the following among others: to help students realise the institutional objectives of the course by minimising the negative effects of isolation and lack of regular personal contact, to minimise the dropout rate, to improve the students learning experience, to cater for weaker students and to provide counselling services to those with personal difficulties.

Majority of the studies done in the area of students support services focus mainly on the institutional services yet there are other players who also need to support students and DE programme as a whole. Ostman and Wagner, (1987) found out in their study that lack of time was the major factor influencing dropout amongst DE learners. The impact of lack of time on DE programmes may be minimised through support of the employers and legitimisation of DE programmes.

A study by Carr and Ledwith (1980) revealed that housewives tended to drop out at a lower rate than the distance learner population. This could be associated with the availability of time to concentrate with their academics. This seems to support results from a study by Bowa (2008) which indicated that students who participated in other income generating businesses to supplement income from their primary occupations, performed poorly in examinations owing to inadequate time to concentrate on their
studies. Time has been identified as an important variable influencing students’ performance. It is therefore paramount that employers support their employees through allowing them some time off to carry out their studies. In addition to these, the employer may offer other forms of support such as financial support, motivation through encouragement and recognition of the students’ success through promotion. All these may go along way to enhance the success of distance mode of learning which seems to be panacea to access of education, yet not so popular.

Technical support as earlier mentioned plays an important role in the success of any DE programme but as Oaks (1996) correctly puts it, success of any DE programme hinge more on students support service than on any technology. Further, he noted that though technology costs and consideration can be a source of budgeting problems, students support for distance learners should take precedence. Scholars have showed the importance of support service in success of any DE programme; among these scholars include (Feasley, 1983; Gunawarden, 1988; Sahoo, 1993; Watkins & Wright, 1991; and Gellman-Danley & Fetzner, 1997). All these scholars as mentioned earlier focussed on support offered by the offering institution apart from Gellman-danley and Fetzner( 1997) who pointed out on need for financial support as well as time consideration.

This study focuses on support by the educational managers who are partly consumers of the DE output and also opinion leaders in educational matters. The employers need to support the DE students through recognition of the certificate obtained through DE mode. In Kenya for instance it is ironical that TSC, which is a single highest employer of teachers, in the country preferred recalling diploma holders from primary schools to teach in secondary schools than redeploying DE graduates who are currently teaching at
primary schools level to secondary schools. Lack of support for distance learners is also evident in the study leave policy issued by the TSC. According to the policy, learners pursuing full time studies were entitled study leaves of up to 4 years with full salary, while those pursuing their studies through distance mode are required to request for unpaid study leaves with no further consideration (Odundo and Rambo, 2010).

As far as financial support is concerned HELB, which is mandated to finance higher education in Kenya, finance over 80% of the learners in regular academic programmes. The funding from the HELB covers up to 70% of the cost while the other 15% comes from the university and the other 15% comes from the learner (UoN, 2005). On the other hand, very few learners from DE mode have benefited from the HELB. To demonstrate this in a study by Odundo and Rambo (2010) out of a total of 673 distance learners sampled, none had benefited from financial support from HELB. The funding scenario for distance learners is totally different. For instance in the same study by Odundo and Rambo (2010), only 32% of active learners (446) and 14% of the inactive learners (227) had benefited from the funding from commercial banks, SACCO societies and CDF programmes. It is worth noting that while the interest for commercial banks and SACCO societies are market rates of 12% respectively the interest rate funds from HELB is between 4% to 6% depending on the level (Odundo and Rambo, 2010). The low number of DE learners benefiting from HELB loan could be associated to lack of information on the part of the learners as well as the educational managers.
2.8 Theoretical Framework

The current study was anchored on the theory of reasoned action whose proponents were Ajzen and Fishbein (1980). According to this theory behaviour is said to be strongly influenced by personal experience and personality, family influence, opinion leaders (admired individuals), direct marketing as well as mass media influence. Therefore, a decision by prospective students to join a DE programmes is likely to be influenced by the attitudes towards DE programmes as well as other subjective factors. According to Ajzen and Fishbein (1980), behaviour is influenced by two variables as shown in figure 1. These are: Attitudes towards the behaviour and Subjective norm.

It has also been established (Zajonc 1980) that it is possible for people to form attitudes towards an object or a person even before they have had opportunity to process any information about the attitude object or person. This suggests that educational managers could have formed an attitude towards DE even when they do not possess information concerning this mode of learning. Educationists and educational stakeholders seem to be having different definitions of DE with some viewing any programme offered out of the main university as distance, though it should be classified as face to face so long as there is no distance between the teacher and the students. Attitudes have been said to influence action or behaviour, therefore it is important to study attitudes to understand and or predict human behaviour.

Subjective norm refers to the influence of relevant others and willingness to comply with the specific referents. These relevant others are people that one would want to be
associated with and play an important role in certain area of specialization. In the current study educational managers were viewed to be playing an important role in learners' decisions making process. According to Loudon and Bitta (1993) opinion leaders influence consumers in decision making a great deal. In academic arena, Mboroki's study (2007) confirmed this observation, in the study out of 59 DE students 76% were influenced by others to join the course through a word of mouth. These results showed how powerful personal selling is as regards to influence in purchase decision positively. On the same argument this implies that any negative influence is likely to have similar negative impact. Earlier Bayus (1985) had concluded that word of mouth was the most important marketing element that existed. Myers (2002) and Baron and Byrne (2002) on their part argued that personal influence from compliance, peer and other opinion leaders improves the attitude-behaviour linkage. Attitude towards the behaviour is influenced by the belief that the behaviour leads to certain outcomes and evaluation of the outcomes. The researcher in the study felt that it is important to establish how attitudes among other factors influence educational managers' support to DE mode of learning.

Review of literature indicates a slow rate of embracing the idea of DE mode of training. Though Robertson (1971) suggested an adoption process through which one goes through before accepting and continuous use of a product or a service. However it appears like educators and other stakeholders are taking so much time at the initial stages of the process. According to Robertson (1971) the first stage was Awareness stage. At this stage, the potential consumer finds out about the existence of the service or the product, but only obtains little information and therefore no attitude is formed at this level. The
second stage identified was Comprehension stage. At this stage the consumer obtains knowledge about the product and seeks understanding of the product or the service. The third stage as identified by Robertson (1971) was Attitude formation stage. At this stage, the consumer develops favourable or unfavourable predispositions towards a product or a service. The fourth stage identified was Legitimisation. At this stage the consumers become convinced that the service or the product should be adopted. The consumers depend on attitudes formed and information gathered before making decision. The consumer may also gather new information about the product or service. The next stage was Trial stage. This stage is optional since it involves testing of a product or trial of a service for its utility. Since education is a long term investment, the role of opinion leaders in decision making becomes evident, since one cannot go for education on trial basis. The public therefore rely on educational managers on advice concerning career development and available courses in various institutions within the country and at international levels. It is as a result of this that the study investigated the factors influencing educational managers support for DE mode of learning. The final stage is Adoption; at this stage the consumer determines whether or not to use the product. Ajzen and Fishbein (1980) model shown in Figure1 revealed that attitudes and subjective norms influence ones decision to purchase or not to purchase a product or a service. It is on the basis of this that the researcher endeavours to establish the influence educational managers' attitudes towards DE on their support for DE mode of learning the case of Western Region.

The educational managers play an important role in parent and learners decision making. Scholar such as Schiffman and Kanuk(1997) suggest that opinion leaders offer advice or
information about specific product or service. In this case, they provide information concerning education such as, career development options, modes of study available in various colleges, the cost and suitability of graduates from such programmes in the labour market. It is the educational managers that would be more trusted by the parents as well as prospective students because their information is more authentic and credible and they are able to reach prospective students more easily. Information from this cadre of personnel is considered more credible and authentic due to the fact that the people involved have no direct benefit from the purchase decision (Kotler, 2003). This suggest that information from educational managers is likely to be considered more authentic than information presented by University official since university officials are direct beneficially of the fees received from students.
Figure 1: Reasoned Action Model

Reasoned Action Model

Beliefs that the behaviour leads to certain outcomes

Evaluation of outcomes

Beliefs that specific referents think one should or should not perform the behaviour

Motivation to comply

Attitude towards the behaviour

Subjective norm

Intention to behave

Behaviour

2.9 Conceptual Framework

This study was guided by the following conceptual framework. The study was based on a number of interrelated concepts that form conceptual framework. It has been noted that DE is a mode of study where students are separated from the teachers or offering institutions in terms of time or location or both. The learners study either at work place, at home or any other place determined by the students at their own time. The environment is therefore crucial for the success of the learners. This environment is constituted by employers’ social set up, as well as government policy.

For the purposes of this study, attitude of educational managers in Western Region was considered as one of the independent variables and was measured in terms of the following indicators: Quality of DE programs, job performance as well as cost or worthiness of DE as shown in Figure two (2). The next independent variable in the study was the level of awareness, which was indicated by college attended, participation in DE activities, and interaction with DE graduates. The last independent variable was personal situation which was measured in terms of age, gender, level of education and work experience. Support for DE mode was considered as dependent variable measured in terms of: provision of information to prospective students, support of learners while undergoing TP; support in terms of posting and recruitment for promotion; release time to attend tuition sessions and to attend meetings and work allocation while under going the studies as well as financial support. Government policy on DE was treated as moderating variable.
Figure 2 shows Conceptual framework of factors perceived to be influencing support for DE mode of learning in terms of: provision of information, finance, time, encouragement, and recommendation for promotion or for placement or employment.

Distance education mode of learning is slowly gaining popularity in Kenya. The rate of adoption is likely to be influenced by three major (factors) independent variables. These includes: attitudes towards distance education mode of learning, personal characteristics...
such as age, gender, level of education, and experience and level of awareness of educational managers about DE mode of study.

Attitude towards DE is likely to influence one’s support for D.E. programmes. In this study, attitude was treated as independent variable, while support to DE learners was treated as dependent variable. The attitude was signified by the way managers view D.E in terms of its worthiness, quality in terms of effectiveness, student’s entry criteria and their academic achievement, work performance as well as examination system applied.

For one to make a decision to enrol in a program or not, environmental factors such as government policies in regards to finance, employment and promotion play a vital role. Though the government has not formulated specific policies discriminating against DE students, distance learners rarely benefit from the existing policies possibly due to lack of awareness. For instance, though HELB is meant to benefit all students taking their degrees in the country, Rambo and Odundo (2010) reported that none of their respondents had benefited from HELB loan.

The researcher is of the opinion that the attitude towards an object can be negative or positive but behaviour towards the object may be inconsistent owing to other moderating factors. To avoid the influence of receipting socially acceptable answers from the respondents the researcher made use of two instruments to cross check the responses obtained from the respondents. The two instruments used were self administered questionnaire and an interview guide for each respondent. According to Snyder (1979)
the inconsistence between the attitude and behaviour is attributable to personality. Two types of personality was identified, these are, low self monitors and high self monitors. The behaviour of high self monitors is mainly determined by the demands of the social situation, thus are consistent with social environment and situation. The behaviour of low self monitors is consistent with their attitude since behaving according to ones belief and attitude is the prime consideration for this type of personality. One may consume a certain type of food even though the attitude towards it is negative, if that type of food is the only type available. Consumption could be as a result of expectations or some other forces influence ones' behaviour if one belongs to a high self monitor as opposed to those who fit under low self monitors who act as per their own belief and attitudes, ignoring the prevailing circumstances.

Support for DE mode was the dependent variable as depicted in figure 2 and eventually influence the actions to be taken either enrol or not to enrol or even to drop out of distance education programme. The support to DE learners was measured in terms of; provision of information to prospective students, support during teaching practice period, release time to attend residential sessions as required by training institutions, promotions on completion of the course and reduced work load, while pursuing the course.

2.10 Summary of literature review and knowledge gaps
Literature reviewed has shown that DE is viewed differently by different scholars. However most definitions have highlighted characteristics of DE to include: separation of teacher from the learner, influence of an educational organisation in the planning and
preparation of learning materials, use of technical media provision of two-way communication possibility of occasional seminars and participation in the most industrialised form of education. Decision to opt to take education through distance mode or otherwise is based on attitudes towards taking the course through DE mode and as well as other subjective norms. These include influence of opinion leaders as well as willingness to comply to the belief of relevant others. In the current study relevant others have been considered to be the educational managers who are viewed to be opinion leaders as far as educational matters are concerned. Through career guidance sessions they influence their students in terms of course preferred, institution selected and the mode of learning. Many studies have been done focusing on attitudes of students pursuing programmes through DE, their satisfaction with the mode, on attitudes of lecturers and administrators but nothing has been done on the attitudes of educational managers who deal with students who finally then become prospective students at the tertiary level. This was therefore established as a knowledge gap worth venturing in.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers research methodology, first section covers the research design of the study, followed by target population, sample and sampling procedures, description of the research instrument, validity of the instrument, reliability of the instrument, finally the chapter presents data collection procedures and data analysis procedures.

3.2 Research Design of the Study

The study took a mixed approach. It qualified as a descriptive survey research taking both qualitative and quantitative approaches. A survey research is a study that is set to determine and describe the way things are (Gay Mills & Airasian, 2006). The study also qualifies as an ex-post-facto research. Kerlinger (1967, P.360) aptly defined ex-post facto as:

"That research in which the independent variable or variables have already occurred and which the researcher starts with the observation of dependent variable or variables. He then studies the independent variables in retrospect for their possible relations to and effects on the dependent variables or variables."

Ex-post-facto design was found to be appropriate owing to the subjects under study, that is, human beings. It is difficult to control some independent variables under study because their manifestations had already occurred. Examples of such variables in the current study includes: attitudes towards DE, personal characteristics of the educational managers such as age, gender, academic qualifications attained, mode of training (conventional or distance) and university attended as well as awareness of DE mode of
education of the educational managers in Western Region of Kenya. These variables are not manipulatable. Experimental designs are not appropriate in investigating educational problems. Kerlinger,(1967) recommended ex-post facto design as compared to other designs. It is important to note that different researchers suggest different system of research classification, according to Mugenda, (2008) research classifications are not mutually exclusive and therefore a research may fall under more than one category, this view supports Best (1977) argument that there is no generally accepted scheme of classifying researches. Cooper (2008) also supports the argument when he concluded that though there are a number of different design dimensions in existence, and therefore there is no simple classification system that defines all the variations that must be considered. Therefore the current study is said to have taken a mixed approach design.

3.3 Target Population
The study targeted Ministry of Education managers who interact closely with teachers as well as students. They are viewed as opinion leaders on issues pertaining to education. These included; Secondary school Principals and their deputies, Secondary school Heads of Departments, District Education Officers and their deputies, District Quality Assurance Officers, and deputy quality assurance officers. In total, 2282 educational managers in western region were targeted. This was comprised of 445 secondary schools principals, 445 secondary schools deputy principals,1335 heads of departments in secondary schools and 19 District Education Officers,19 Deputy District Education Officers and 19 District Quality Assurance and Standards Officers in Western Region of
Kenya now comprised of four counties that is Kakamega county, Vihiga county, Busia and Bungoma counties.

3.4 Sample Size and Sampling Procedure

In the study, probability techniques were utilised to identify the respondents. Probability techniques that were applied were both simple random as well stratified random sampling. The educational managers in Western Region, were identified on the basis of the fact that they are looked upon by students and parents for advice pertaining to educational issues. Thus they are considered as opinion leaders on issues pertaining to education. They were thought to be strategically placed by the virtue of their positions and therefore to possess the information required. As Cooper (2008) suggests elite or experts are used as a source of information for informed managerial decisions. The DEOs, DDEOs and DQASOs in the region province were considered in the study. Therefore, 17 DEOs, DDEOs and DQAOs were used in the study, although there were 19 districts in Western Region (Republic of Kenya, 2008). Two districts were left out since they had been used during pilot testing. To determine the number of principals and heads of departments to be included in the study, the following formula recommended by Yamane (1967) was applied

\[ n = \frac{N\varphi}{1 + N(e^2)} \]

Where \( e \) is the level of precision or margin of error

\( N \) is the sampling frame.

\( n \) is the ultimate sample size
The Principals, Deputy Principals and Heads of Departments were selected using random sampling but schools were used as the unit of sampling, that is all principals, deputy principals, and at least three heads of common departments of the schools selected participated in the study. The first 102 schools selected to participate in the study also produced the heads of departments to participate in the study that is 306. The common departments considered were, sciences, humanities and guidance and counselling departments. In some schools however career master were used in place of guidance and counselling. This was necessitated by the fact that the list of heads of departments could not be obtained from the Provincial Director of Education office because some are locally appointed by the principals of the schools where they are teaching and therefore on temporary terms.

Table 3.1 Target Population and Sample per Category

<table>
<thead>
<tr>
<th>s/no</th>
<th>Category</th>
<th>Population(N)</th>
<th>Sample(n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Secondary schools principals</td>
<td>445</td>
<td>210</td>
</tr>
<tr>
<td>2</td>
<td>Secondary schools deputy principals</td>
<td>445</td>
<td>210</td>
</tr>
<tr>
<td>3</td>
<td>Secondary schools heads of departments*</td>
<td>1335</td>
<td>307</td>
</tr>
<tr>
<td>4</td>
<td>DEOs</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>DDEOs</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>6</td>
<td>DQASOs</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>2,282</strong></td>
<td><strong>778</strong></td>
</tr>
</tbody>
</table>
The data in table 3.1 is compiled from Kenya Education Directory (2009) and directorate of Quality assurance (2004).

3.5 Data Collection procedures

On completion and approval of the research proposal by the University of Nairobi the researcher applied for research permit from the National Council of Science and Technology. On obtaining the permit, the researcher went to the Western Region and visited the headquarters of the sampled districts. The researcher appointed 3 research assistants who were thoroughly trained on data collection techniques. To ensure they would produce consistent data all the three research assistants accompanied the researcher during pilot study.

The researcher used self administered questionnaire, and semi structured interview guide. The researcher visited the districts sampled, reported to the district education officer and requested to be allowed to conduct the study in the district. Once the permission was obtained from the DEO, the researcher or the research assistant visited the officers in their offices for administration of the interviews as well as the questionnaires. The respondents were requested to fill in the questionnaires, on completion of the questionnaires the researcher or the assistant joined the respondent for an interview or booked an appointment depending on the availability of time and prevailing circumstances. All the educational officers in the districts sampled participated in the study. The selected schools were also visited and got permission from the principal to meet the DP as well as heads of departments. The Principals were also requested to
complete a questionnaire. The researcher or research assistant waited for the respondents to complete the questionnaires and on completion, they were collected. Some were left behind depending on circumstances but a convenient day was agreed on for collection. The researcher made a telephone call to remind the respondents about the intended visit before making the trip to collect or give an interview. The whole exercise took one month to distribute and collect all the questionnaires.

3.6 Research Instruments

This section gives a brief description of research instruments used in the study, pilot testing process, validity of the instruments and reliability of the instruments.

3.6.1 Introduction

The instrument used in data collection was a questionnaire as well as an interview guide. The triangulation was applied to eliminate response bias associated with measurement of opinions, attitudes and satisfaction. Caslyn and Winter (1999) and (Grandy, 1998; Krosnick, 1999) identified response bias such as respondent giving socially desirable answers, repeated endorsing items regarding of the content (acquiescence) and avoiding exaggerated or extreme responses. All these were minimised through the use of in-depth interview conducted with all the respondents. The questionnaire contained three sections, section A which contained 10 semi structured items to collect demographic information of the respondents as well the level of awareness of Educational managers on DE. Section B contained five point Likert scale to measure educational managers attitudes towards DE. The Likert scale contained 27 cross-ended
items to measure educational managers’ attitude towards DE. The attitudinal dimensions covered included: Cost of DE in terms of finance and time, Quality of DE in terms of students achievement, Performance of graduates after training and students satisfaction with the training, Examination process in terms of cheating and impersonation and lastly students entry criteria. A multidimensional scale was preferred since they are said to describe the object better than uni-dimensional scale (Cooper and Schindeler 2008) especially where measurement of attitudes is involved. In the current study, attitude measurement constituted part of the study.

Section C on the other hand, contained 8, 5 point Likert scale items to solicit information on managers’ support to DE mode of learning. Support focused included financial support, motivation, time to study, recommendation for promotion, and information concerning DE programmes. Further Interview guide was used to solicit information related to educational managers’ to support DE mode of learning. The interview guide had both semi structured and unstructured items. A total of six items were included in the guide. The triangulation was done to ensure accuracy in the opinions of the educational managers and to reduce weaknesses associated with attitude measurements such as giving socially acceptable responses.

3.6.2 Pilot Study

To improve the quality of the instruments, the researcher conducted a pretest. In addition to general improvement of the quality of the instruments the results of the study are also improved. Cooper and Schindeler (2008) identified other benefits of pre-testing which
include among others increase of respondents participation in the research and to identify questions with content, wording and sequence problems, with a view of improvement.

The two instruments were piloted in two of the districts of Western Region these were Busia and Lugari districts which were randomly selected from the list of 19 districts. In the two districts five schools were randomly selected and had the following officers: two districts education officers, two deputy district education officers, two district quality assurance and standard officers and their deputies, five secondary schools principals five deputy principals and fifteen heads of departments. In total, 33 respondents were used for pilot purposes. The results from the pilot study were used to eliminate ambiguous items and to modify vague items.

3.6.3 Validity of Research Instruments

The validity of a test or any measuring instrument depends upon the fidelity with which it measures what it purports to measure. Validity is a relative term, a test that is valid for a particular purpose or a particular situation, is not generally valid (Garret 2004). This shows that an instrument is valid depending on the environment that it is being used. To ensure the instruments were valid the researcher opted to develop tailor made instruments, but borrowed heavily from existing Likert scale of five points. Likert scales are preferred because they are considered to be the most reliable and able to provide a greater volume of data compared to other scale. Further the scale produces interval data (Cooper and SchinDEer). Triangulation was applied where both a questionnaire and an
in depth interview were used to increase the validity of the findings (Nachmias and Nachmias, 1996).

The choice of items to be included depends on the judgement of competent persons as to its suitability for the purposes of test. To ensure the instruments used in the current study were valid, various experts who included four university distance educators scrutinized the questionnaire as well as the interview guide. The experts have participated in development of similar instruments before. The instruments were further pilot tested in two districts that never participated in the final study. These were Lugari and Busia which were identified through simple random sampling method. After piloting corrections, additions and modifications suggested were made to ensure a fair amount of validity

3.6.4 Reliability of the Instruments

An instrument is said to be reliable when it can measure accurately and consistently and still obtain the same results under the same conditions over a period of time. A test score is said to be reliable when it is believed to be stable and trustworthy(Garrett2004). The researcher conducted a pilot study to measure reliability of the instruments for use as already stated two districts were used for pilot study and were not considered in the final study and these were Lugari and Busia Districts. Spearman brown prophecy formula recommended by Garrett (2004) was used to determine reliability coefficient of the instrument. Using this method, the test was first divided into two equivalent halves. The first set of scores was odd numbered items while the second set of items was performance
on the even numbered items. The sum of the odd scores for each respondent was correlated with the sum of the even items using product moment correlation formula. The correlation for half split was 0.75. The self correlation of the whole test was estimated as follows:

\[ R_{ii} = \frac{2r_{hh}}{1+r_{hh}} \]

Where \( R_{ii} \) = reliability coefficient of the whole test.

\( r_{hh} \) = reliability coefficient of the half test found experimentally.

\( r_{hh} \) is calculated using Pearson correlation coefficient method given below;

\[ r_{hh} = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \cdot \sqrt{n\sum y^2 - (\sum y)^2}} \]

Where:

\( \sum x \) = the sum of scores in x distribution

\( \sum y \) = the sum of scores in y distribution

\( \sum xy \) = the sum of the products of paired X and Y scores.

\( \sum x^2 \) = the sum of squared scores in X distribution

\( \sum y^2 \) = the sum of squared scores in Y distribution.

\( N \) = the numbers of paired X and Y score.

The reliability coefficient arrived at was 0.85 thus the instrument was considered to be highly reliable (Garrett, 2004)

The split half method is employed in situation where it is not feasible to use other methods for testing reliability of a test such as constructing a parallel test or repeating the test itself. Split half method is suitable in tests designed to measure performance,
personality, attitudes and interests. Garrett (2004) regarded the method as the best of all the methods for measuring test reliability.

3.7 Data Analysis Procedure

The study used descriptive statistics given the nature of data collected. A computer was used to determine whether different groups studied would be different statistically; Chi-square was computed using Statistical Package for Social Science (SPSS) programme. The analysis established whether the variance is attributable to the different conditions, or the variance among the groups aroused from individual differences within the groups (Garrett, 2004). The analysis technique used was dictated by the nature of data collected that was categorical and ordinal. Qualitative data was sorted out into categories. The information was first coded then the coded information was classified into themes. Interconnections between questionnaire information and interview information were looked at. The data collected was presented in tabular format, as appropriate. Table 3.2 shows a summary of research questions and how the data collected was analysed to answer each research question and research hypothesis as appropriate.
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Variable</th>
<th>Measurement scale</th>
<th>Statistical Test</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship between personal characteristics of Educational managers and their support for DE mode of learning</td>
<td>Independent variable Personal Characteristics</td>
<td>Nominal</td>
<td>Chi-square</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>• Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Educational Background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Profession and qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Working experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dependent variable Support</td>
<td>Ordinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Time off</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Encouragement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employment preference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Recognition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship between Educational level of managers</td>
<td>Independent variable Awareness</td>
<td>Nominal scale</td>
<td>Chi-square</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not aware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>awareness about DE and their support for DE</td>
<td>Dependent variables</td>
<td>Ordinal scale</td>
<td>Interval scale</td>
<td>Supportive</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------</td>
<td>---------------</td>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Relationship between attitudes of educational managers and support for DE</td>
<td>Independent Variable Attitudes</td>
<td>Ordinal scale</td>
<td>Interval scale</td>
<td>Supportive</td>
</tr>
<tr>
<td>• Positive</td>
<td>• Neutral</td>
<td>• Negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Ordinal scale</td>
<td>Interval scale</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>• Support</td>
<td>• Positive</td>
<td>• Neutral</td>
<td>• Negative</td>
<td></td>
</tr>
<tr>
<td>Relationship between Educational policy on DE and the support for DE</td>
<td>Independent variable Policy</td>
<td>Nominal scale</td>
<td>chi-square</td>
<td>Available</td>
</tr>
<tr>
<td>• Available</td>
<td>• Not available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent variable Support</td>
<td>Ordinal scale</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Supportive</td>
<td>• Neutral</td>
<td>• Non supportive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter covers data analysis, data presentation, interpretation and discussions. These will be covered under various thematic areas as per research objectives; however, response rate will be presented first. The first theme to be presented will be personal characteristics of the respondents and their influence on support for distance learning mode of delivery. This was followed by the level of awareness of educational managers about distance mode of delivery and the influence on their support for distance mode of delivery, attitudes of Educational managers and its influence on support for distance education mode of learning and finally the government policy and its influence on the distance learning mode of delivery.

The data collected from the field was scored and results were entered into a computer. Since the analysis involved sub-group comparisons, score for the sub-group were entered separately. After the data was entered into a computer, descriptive analysis was done through application of (SPSS) Statistical Package for Social Sciences. This analysis generated descriptive statistics concerning the respondents. Further Chi-square correlation analysis, and finally multi regression analysis was conducted to determine the influence of each variable on support for DE mode of delivery as appropriate. The information generated was relevant as it formed part of the investigation in answering the research questions and in hypothesis testing as appropriate. The personal characteristics obtained included, gender, working experience, training institution, professional
qualifications and subjects' specialization. The other factors tested included the level of awareness about DE mode of delivery, the attitude of the educational managers on DE mode of delivery where multi-dimensional approach was adapted covering, quality, achievement, students' satisfaction and performance of graduates after training and finally the influence of Government policies on DE mode of delivery was explored.

4.2 Response Rate

There were various categories of respondents sampled in the study. Table 4.1 shows the number of respondents targeted in each category and the response rate for each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Target</th>
<th>Response Rate</th>
<th>Rate of Response in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEO / DDE / DQASOs</td>
<td>51</td>
<td>32</td>
<td>63</td>
</tr>
<tr>
<td>D.P</td>
<td>210</td>
<td>168</td>
<td>80</td>
</tr>
<tr>
<td>Sec. School Principals</td>
<td>210</td>
<td>158</td>
<td>75</td>
</tr>
<tr>
<td>HOD</td>
<td>307</td>
<td>252</td>
<td>82</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>778</td>
<td>610</td>
<td>78</td>
</tr>
</tbody>
</table>

The response rate was 610 (78%) as indicated in Table 4.1 which was considered adequate for social science research, according to Dillman (2000) a response rate of 60% for social science research is considered adequate. Considering various categories, the response rate for DEOs, DDEOs and DQASOs all considered as District Education management was the lowest at 32 (63%), followed by secondary school principals at 158
(75%). Heads of departments recorded the highest response rate at 252 (82%) followed by secondary school deputy principals at 168 (80%). This trend follows the administrative structure of the Ministry of Education.

At the district level, the ministry of education is represented by a district education officer who works closely with the District quality assurance officers and district education staffing officer, though they all report to the district education officer deputized by deputy district education officer. The district management officers performs the managerial functions in the district which include among others, the day to day supervision of management of schools in the district as well as being secretary to the District Education board (Olembo and Karagu, 1992). Their duties, therefore involves among others, attending schools management meetings in various schools and the Ministry of Education meetings at the headquarters in Nairobi hence some were out of their working stations at the time of data collection. Principals of secondary schools also perform administrative roles and represent the schools in various forums, such as principals’ meetings, district education board meetings and other relevant meetings, so some were out of their stations at the time of data collection thus the comparative low return rate. Deputy Principals and heads of departments rarely represent their schools out of school unless on delegated assignment. This again explains the higher return rate of these two categories of managers given that the majority of them were available during school visitation for data collection. The return rate for deputy principals and heads of departments was 80% and 82% respectively as reported in Table 4.1
4.3 Factors Influencing Support for Distance Learning Mode of Delivery

This section covers the factors that were believed could be influencing educational managers support for DE mode of delivery in Western Region of Kenya. These were personal characteristics of the respondents, the level of awareness about DE mode of delivery, the attitudes of educational managers towards DE mode of delivery and finally, the government policies on DE mode of delivery and their influence on DE mode of delivery.

4.3.1 Personal Characteristics and their Influence on Educational managers’ Support for Distance Learning Mode of Delivery

In this section, descriptive statistics was used first to describe the respondents under study and later, Chi-square was used as one of the statistical tests for the analysis. Chi-square was opted for by the researcher on the basis of the fact that variables at this level could only be measured through categorical and ordinal scales. Further assumptions necessary for use of chi-square were satisfactorily met among the assumptions. These include the following: first, the samples were independent from one another, second, the subjects within each group were randomly and independently sampled; third, each observation was exhaustive and mutually exclusive and finally, the sample size was relatively large, more than 5 for each cell (McCall 1970). The ones that were not large enough to meet this condition were merged to meet the criteria therefore all the districts officers were clustered as one category during the analysis. To meet the requirement DEO,DDEO, DQASOs were clustered together to total to 32 respondents to meet the requirement stated.
Chi-square symbolized as $\chi^2$ is a non-parametric test of significance. A chi-square test compares the proportions actually observed in a study to the expected proportions to determine whether they are significantly different statistically. Expected proportions are usually the frequencies that would be expected if the groups were equal (Mason, Lind and Marchal, 1999). The chi-square ($\chi^2$) value increases as the difference between observed and expected frequencies increases. The difference is declared when the chi-square ($\chi^2$) value calculated is greater than the critical value obtained from a standard chi-square table appendix vii. Further, the P-value was also considered in determining the strength of the decision. This involved the comparison of the probability called P-value with the significant level. In situations where the P-value was smaller than the significance level $H_0$ was rejected. On the other hand, if P-value is larger than the significance level, then the $H_0$ was not rejected. A very small P-value indicates that there is little likelihood that $H_0$ is true, whereas a large P-value indicates that there is little likelihood that $H_0$ is not true. It is therefore according to these guidelines that the decision to reject or not to reject a hypothesis was made (Mason Lind and Marchal, 1999). Further, Pearson product moment correlation and multi regression analysis were conducted to test the null hypotheses stated.

4.3.1.1 Gender of the respondents and its influence on support for DEmode of Delivery
The respondents were asked to indicate their gender. From the questionnaire the
distribution of the respondents by gender was as indicated in Table 4.2

**Table 4.2 Distribution of Respondents by Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>347</td>
<td>56.9</td>
</tr>
<tr>
<td>Female</td>
<td>263</td>
<td>43.1</td>
</tr>
<tr>
<td>Total</td>
<td>610</td>
<td>100</td>
</tr>
</tbody>
</table>

As shown in Table 4.2, male respondents were 347 (56.9%) whereas female respondents
were 263 (43.1%). This distribution reflects the general teacher distribution in Western
Region of Kenya by gender. In 1997 Abagi reported a ratio of 1:1.9 of female to male
teachers in Western Region, though the study incorporated educational managers not
currently in the teaching force. It is assumed that they were once teachers prior to their
promotion to their current status of DEOs, DDEOs, DQASOs, DDQASOs, secondary
school principals or deputy principals.

The researcher was interested in establishing whether gender of the respondents
influenced the educational managers’ support for DE mode of learning. To determine
this, the following null hypothesis was tested.
There is no difference in support of distance learning mode of delivery between male and female educational managers in the western region of Kenya.

Table 4.3 Cross-tabulation in (percentages) of gender of the respondent and the support they accorded distance learning mode of delivery

<table>
<thead>
<tr>
<th>Support</th>
<th>Non-supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>Frequencies</td>
<td>Frequencies</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>158</td>
<td>119</td>
<td>277</td>
</tr>
<tr>
<td></td>
<td>189</td>
<td>144</td>
<td>333</td>
</tr>
</tbody>
</table>

When $\chi^2$ chi-square test was carried out to test whether there was any significant difference between the two groups male and female, $\chi^2$ value of 0.009 was obtained, while the critical value considering one df at 0.05 level of significance was 3.84. $\chi^2$ calculated was less than critical value. The p-value was 0.94 while the level of significance was 0.05 therefore the $H_0$ was therefore not rejected. Therefore statistically, this suggests that the difference was as a result of chance and could not be attributed to the difference in gender. From the available data, one can conclude that there is no difference between male and female in support they accord to the distance education mode of learning. This means there is no association between gender and support that educational managers accorded to distance education mode of learning. This shows that the gender of the educational manager has no influence on the support they accorded to distance education mode of learning. Though gender of the administrator has no
influence on support they accord to distance learning mode, elsewhere, data indicates that completion rate of distance education learner could be dependent on gender. During the 2011 graduation at the University of Nairobi, only 65 (19.06%) out of 341 graduands were female from distance education (Arts) mode of learning, compared to 276 (80.9%) who were male. This however could be attributed to other factors such as fees issues, family responsibilities and other issues not necessarily associated to gender. Elsewhere, the number of students registered for DE programmes are higher for female than men.

According to Sheets (1992) a survey of tele-course in the United States of America, established that about two thirds of the participants were women. In the study by Nyonje and Kyalo (2011) on access to professional development of secondary schools managers in Kenya, 47.4% of those included in the study had not accessed professional development programme and further established that of those who had accessed such programmes, only 18.4% were female, while 34.2% were male. It is worth noting that the programmes focused by Nyonje and Kyalo(2011) were not offered through distance learning mode of delivery and therefore, other factors could have influenced registration for the course and not necessarily the mode of learning available. Earlier studies on relationship between gender and support for DE modes (Shashaani,1994; Durndell, at.al, 1995; Su et.al, and Durndell &Thomson1997) suggested that women were likely to be less ready to have access to computers than their male counterparts. Though Carr and Ledwith (1980) found out that housewives tended to drop out at a lower rate than other distance education students this could be linked to availability of time for study and not necessarily due to gender variation. Studies have also shown that there are no innate and
universal qualities which are automatically applicable to men and women (Martin, 2006). Some studies have indicated that there are more male registered for DE programmes than female (Bowa, 2008 and Odundo and Rambo, 2011), due to the mixed outcomes of the available studies the difference noted could only be attributed to other factors such as the role they play in the society, the culture, nature of work and work environment (Odundo and Rambo, 2011).

4.3.1.2 Influence of Working Experience of the Respondents on their Support for DE

The researcher was interested in establishing the working experience of the respondents since from literature reviewed: working experience was proved to be influencing behaviour towards DE mode of delivery. The working experience of the respondents was as shown in Table 4.4

<table>
<thead>
<tr>
<th>Working experience in years</th>
<th>Frequency (No)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 and below</td>
<td>54</td>
<td>8.9</td>
</tr>
<tr>
<td>5 – 10</td>
<td>51</td>
<td>8.4</td>
</tr>
<tr>
<td>10 – 15</td>
<td>121</td>
<td>19.8</td>
</tr>
<tr>
<td>Above 15 years</td>
<td>384</td>
<td>62.9</td>
</tr>
<tr>
<td>Total</td>
<td>610</td>
<td>100</td>
</tr>
</tbody>
</table>
As shown in Table 4.4 the majority of the respondents 384 (63%) had a working experience of above 15 years. This was expected because promotion to higher level in most cases is pegged on seniority and experience in addition to merit. Majority of respondents were in senior positions with the lowest at head of department level. Those who had 10 – 15 years working experience were 121 (19.8%), while those with 5 to 10 years work experience were 51 (8.4%) and those with 5 years work experience and below were 54 (8.9%).

Working experience of the respondents was proved to be influencing some DE variables such as attitude and readiness (Gakuu, 2007) therefore the researcher sought to establish whether working experience of the educational managers influences their support for DE mode of delivery. To achieve this, the following hypothesis was formulated and tested.

The alternative hypothesis was favoured if the null hypothesis was rejected

2. H. The support accorded to distance learning mode of delivery by education managers in Western Region of Kenya, does not vary with their working experience.
Table 4.5 shows cross tabulation between working experience of the respondents and support they accorded to DE mode of delivery.

Table 4.5 Cross Tabulation Showing Work Experience of the Respondents and Support accorded to DE Mode of Delivery

<table>
<thead>
<tr>
<th>Support status</th>
<th>Non supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years and below</td>
<td>23</td>
<td>31</td>
<td>54</td>
</tr>
<tr>
<td>5-10 years</td>
<td>14</td>
<td>36</td>
<td>50</td>
</tr>
<tr>
<td>10-15 years</td>
<td>71</td>
<td>50</td>
<td>121</td>
</tr>
<tr>
<td>Above 15 years</td>
<td>169</td>
<td>215</td>
<td>384</td>
</tr>
<tr>
<td>Total</td>
<td>277</td>
<td>333</td>
<td>610</td>
</tr>
</tbody>
</table>

According to the results obtained, there is no clear pattern concerning the working experience and the support accorded to DE mode of delivery by the education managers in Western Region of Kenya. One interesting outcome noted was that those that had worked for 10 to 15 years were not very supportive, only 50 (41.4%) of the respondents in this category were supportive. Self sponsored students were first admitted in 1998 when the University of Nairobi admitted the first group of students on what is commonly known as module (ii) or parallel programmes. Since the introduction of the self sponsored programmes at the University of Nairobi, 13 years have elapsed, therefore those students who were at the University then fall under 10 to 15 years of work experience, hence this could be used to explain their non supportive of DE mode of learning. The introduction of parallel programmes or admission of self sponsored students was met with a lot of resistance from the students then on government
sponsorship. Those with work experience of 5-10 years were highly supportive possibly because they are now settled and planning to further their education. They could be contemplating using distance education mode given that at this time most of them could be married and not ready to separate from their spouses.

χ² test was conducted and there was enough evidence that work experience influenced support that educational managers accorded to distance learning mode of delivery. The chi-square calculated at 3df was 15.177 while P-value was 0.0016 which was less than 0.05 which was enough ground to reject the research hypothesis and retain the alternative hypothesis that there was a relationship between work experience and support that educational managers accorded to DE mode of delivery. Lack of clear pattern could have been as a result of different circumstances under which the managers were trained and worked.

Though distance education programme to train teachers in Kenya was started in 1986, at the University of Nairobi, it is highly associated with self sponsored programmes in Kenya. The students who were at the university during introduction of these self sponsored programmes were resistant to its introduction. These students have been out for 10 – 15 years and possibly that is why only 50 (41.4%) of those educational managers with working experience of between 10-15 years were supportive of DE programmes. From Table 4.7 only slightly more than half 333 (54.6%) of the managers were supportive of DE mode of delivery, this shows that the other 276 (45.4%) almost half were not supportive. This could be as a result of lack of full information concerning DE
mode of learning. According to Gakuu (2007), lack of adequate information could make one hold a neutral position on an object or phenomenon. It has also been argued that direct experience with an object enables one behave consistently and in a more predictable manner than behavior based on second hand information. The other contributing factor could have been due to other commitment of their families at this level most of the respondents could be concentrating more on education of their children more than their own

4.3.1.3 Influence of Professional Qualifications on Support accorded to DE Mode of Delivery

The respondents were asked to indicate their highest professional qualifications. The aim of collecting this data was to test whether the professional qualifications of the respondents influenced their support for DE mode of delivery. The results are as shown in Table 4.6.

Table 4.6 Respondents Distribution by Professional Qualification

<table>
<thead>
<tr>
<th>Professional Qualifications</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma in Education</td>
<td>53</td>
<td>8.7</td>
</tr>
<tr>
<td>Approved graduate teacher</td>
<td>48</td>
<td>7.9</td>
</tr>
<tr>
<td>B.Ed</td>
<td>366</td>
<td>60</td>
</tr>
<tr>
<td>Master</td>
<td>116</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>610</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Majority of the respondents 366 (60%) were Bachelor of Education holders. 116 (19%) had obtained a masters degree, whereas 53 (8.7%) were diploma holders. Only 48 (7.9%) indicated that they were approved graduate teachers. The results were as expected since bachelor of education teachers dominate teaching at secondary school level in Kenya (Republic of Kenya, 1998). The diploma holders that were teaching in secondary school level, were mainly science oriented teachers since art based teachers had been redeployed to primary school level. It is, however, surprising that the TSC is again redeploying the same cadre of teachers back to secondary school levels despite the high number of PI teachers graduating with B.ed degree and some with masters degrees teaching at primary level. With liberalization of education and with introduction of self sponsored programmes in public universities more and more teachers are going in for further studies. It has been observed that B.ed holders pursue masters programmes while diploma holders go in for B.ed degrees courses mainly through distance and school based programmes. This is preferred by majority because it is viewed by many to be cost effective and as an opportunity for individuals already in service to access university education, acquire advanced skills and to develop careers without interfering with their current employment.

The researcher further wanted to establish whether professional qualifications of the respondents influenced their support for DE mode of delivery. To achieve this, the following hypothesis was formulated and tested.
3. H. Professional qualifications of the educational managers have no significant association with the support they accorded distance learning mode of delivery.

Table 4.7 shows the number of educational managers under different professional categories and their support for DE mode of delivery.

Table 4.7 Professional Qualification of the Educational Managers and the Support they Accorded DE Mode

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>Non – supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>10</td>
<td>23</td>
<td>53</td>
</tr>
<tr>
<td>Approved</td>
<td>29</td>
<td>18</td>
<td>48</td>
</tr>
<tr>
<td>Graduate</td>
<td>161</td>
<td>205</td>
<td>366</td>
</tr>
<tr>
<td>B.Ed</td>
<td>67</td>
<td>49</td>
<td>116</td>
</tr>
<tr>
<td>Master of Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>295</td>
<td>583</td>
</tr>
</tbody>
</table>

The educational backgrounds that emerged from the respondents included diploma holders, approved graduates, B.ed graduates and masters of education degree holders. According to the data, different categories of educational managers offered support differently.
According to the data in Table 4.7, the percentage of diploma graduates supporting distance education program was the highest, with 23 (81.1%) of the respondents being supportive. This could be associated with the fact that diploma holders are prospective distance education learners and therefore may support the mode for their personal reasons. Approved graduate teachers are those who have been promoted on merit to the status of a graduate. They earn a salary equivalent to that of a graduate teacher: therefore, there is no motivational pressure to enroll for a bachelor of education degree. It is also clear that they do not qualify for any Masters programme, since the minimum requirement for one to join a masters programme is a first degree from a recognized university (UoN, 2005) therefore the 18 (38.6%) of this category who were reported to be supportive is justified, compared to 29 (61.4%) that were not supportive.

B.ed graduates who support DE delivery mode 205 (56%) could be attributed to the fact that some of them are beneficiaries of distance education programmes and others could be aiming at joining masters programmes offered through distance mode. As far as masters degree graduates are concerned, 49 (42.2%) were non supportive, whereas 67(57.8) were supportive. This scenario could be linked to the fact that most of them consider to have completed formal learning and therefore are not likely to benefit from distance learning mode of delivery. However, those who supported distance education mode were 54.2% against 45.8%.

When $\chi^2$ test was carried out, $\chi^2$ calculated was 26.9 while $\chi^2$ critical at 3df and at level of significance of 0.05 was 7.81. It means that therefore, the null hypothesis was
rejected and the alternate hypothesis retained. That is, there is significant relationship between educational background of the educational managers and their support for distance education mode of learning.

4.3.1.4 Influence of area of specialization of the managers on support they accorded to DE mode of delivery

Table 4.8 shows distribution of educational managers in Western Region of Kenya in regards to their area of specialization. Those who specialized in sciences were 361 (59.3%), whereas those who specialized in humanities were 172 (28.2%), while 76 (12.5%) specialized in languages and other subjects. The distribution could be explained to be as a result of the fact that there is a shortage of teachers in humanities, which could be translating to few being promoted to higher level. Further, there is an attitude that science subjects are more superior to humanities and languages, and hence, there could be a possibility of biasness in the promotion of teachers to managerial level.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Areas of specialization</th>
<th>Frequencies (No.)</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sciences</td>
<td>361</td>
<td>59.3</td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td>172</td>
<td>28.2</td>
</tr>
<tr>
<td></td>
<td>Languages &amp; others</td>
<td>76</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>609</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.8 Distribution of Respondents by their Areas of Specialization
Literature reviewed on subject specialization and behavior towards DE mode of delivery, suggested that subject taught influenced behaviour of the education managers towards DE mode of delivery. The researcher wanted to establish whether the subject specialization of the educational managers influenced their support for DE mode of delivery. To determine this, the fourth null hypothesis was tested.

4 H. There is no significant association between subject specialization of Educational managers' and support they accorded to distance learning mode of delivery.

Table 4.9 Cross Tabulation of Educational Managers by Subject Specialization against the Support they Accorded to Distance Education

<table>
<thead>
<tr>
<th>Subjects taken</th>
<th>Non-supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciences</td>
<td>148</td>
<td>213</td>
<td>361</td>
</tr>
<tr>
<td>Humanities</td>
<td>91</td>
<td>80</td>
<td>171</td>
</tr>
<tr>
<td>Others</td>
<td>37</td>
<td>39</td>
<td>76</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>276</strong></td>
<td><strong>332</strong></td>
<td><strong>608</strong></td>
</tr>
</tbody>
</table>

Table 4.9 shows a cross tabulation between areas of specialization of educational managers and their support status. The study indicated an overall 333 (54.5%) support, against 277 (45.5%) non-supportive, considering the subject specialization.

The results surprisingly showed that those who took sciences as their major subjects were more supportive with 213 (59%) as compared to those who took humanities 80 (46.8%) and those classified as others who supported distance education mode were 39 (51.3%).

This seems to be in line with content theories of motivation by Maslow and Herzeberg.
which states that satisfied need is no longer motivating and that another level of need is activated to motivate an individual once the lower level need is satisfied. According to Maslow behavior of human beings are dominated by unsatisfied needs and once these needs are satisfied, other needs are activated. Distance education programmes currently focus mainly on arts subjects and humanities, and possibly this can be used to explain why support is higher from science oriented managers, who may want to benefit from such programmes more than humanities that have already benefited from DE mode of delivery. A study by Chaney, (2002) who researched on eight Midwest Pharmaceutical companies and focused on attitudes of employers on those being hired in various positions that mostly required scientific backgrounds, revealed that the respondents made no distinction between a degree acquired through distance mode and that acquired through traditional mode. This is an indication that degrees acquired through distance are recognized by scientists as well.

When $\chi^2$ test was taken the value of $\chi^2$ calculated was 7.3 and the value of $\chi^2$ critical at(n-1)*(n-1) 2 df and at 0.05 percent, the value obtained was 5.99. Since the Chi-square calculated is greater than Chi-square, critical then the null hypothesis was rejected and the alternative is retained. Consequently, there is significant influence of subjects taken by educational officers on their support for education programmes. This could be associated with the fact that many administrators have not benefited from distance learning mode, either as students, or through recruitment such teachers from such programmes to teach in their areas of jurisdiction. This could therefore act as a motivating factor especially with the shortage of teachers in schools.
DE mode of delivery could have been seen as the only available avenue of receiving additional teachers after upgrading from P1 level since employment of direct teachers from universities and colleges have not been forthcoming. Studies (Harden, et al., 1994) have also showed that only a few academics believed that distance education programmes were not suitable for science (5%) and laboratory (17%) courses. This seems to be supporting the current study where science oriented managers are more supportive of distance education than those in humanities. A different study considering 67 science subjects conducted at California State University over six years period, showed conclusively that there was no difference between distance and internal students in proportions of students in each grade category (Harden, et al., 1994). The result of the study therefore contradict the study by Gakuu (2006) where, lecturers of the University of Nairobi indicated that distance education was not suitable for all programmes, and physical sciences were singled out as one of the areas where distance education was not appropriate. This was however, attributed to lack of exposure, to DE mode of delivery as opposed to the area of specialization. However, the current study dealt with educational managers, managing secondary schools as the respondents as opposed to the managers of tertiary level of education, the teaching staff and administrators at tertiary level as was the case in Gakuu’s study (2006).

4.4 The administrative position held and support accorded to DE mode of delivery

The study categorized the respondents in terms of positions held such as district managerial level, secondary school principal; secondary school deputy principal and head of department in secondary schools. Table 4.10 shows the distribution of respondents by their administrative positions.
Hypothesis 5 was formulated to establish whether administrative position held by educational managers, influenced their support for DE mode of delivery.

5. **H. There is no association between administrative position held by the respondents and the support they accorded to Distance Learning mode.**

Table 4.11 shows the relationship between the administrative position held by the educational managers and their support for DE mode of delivery.

**Table 4.11 Relationship between Administrative Positions Held and Support Status**

<table>
<thead>
<tr>
<th>Administrative position</th>
<th>Non-Support</th>
<th>Support</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top district educational management</td>
<td>14</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>Principals</td>
<td>90</td>
<td>68</td>
<td>158</td>
</tr>
<tr>
<td>Deputy</td>
<td>80</td>
<td>87</td>
<td>168</td>
</tr>
<tr>
<td>HOD</td>
<td>92</td>
<td>160</td>
<td>252</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>276</strong></td>
<td><strong>333</strong></td>
<td><strong>610</strong></td>
</tr>
</tbody>
</table>
NB All senior administrators at the district headquarters are clustered under top educational managers to facilitate Chi-square tabulation.

As observed in Table 4.11, all levels of educational managers were in support of distance education, apart from principals' level where only 68 (43.0%) were supportive, while 90 (57%) were non-supportive. District top educational managers were supportive with 18 (54.8%) of respondents indicating support and 14 (42.5%) indicating non-support. This cadre of people are in management and are not likely to have administrative issues with distance education graduates who work closely with the school principals as compared to them. Majority of principals (57%) were not supportive of distance learning mode possibly because some believe combining teaching and learning could affect the performance of teachers. This is also supported by Ramal and Kamal (2000), who argued that learning while working affected work negatively. Lando, 2010 also expressed concern that employees may resort to utilizing office time and resources to do their academic work. Use of organization's secretaries to type academic work, use of office stationery, use of office time to do assignments and projects as well as use of office machinery in data collection, were identified as among possible ways of misappropriation of the Ministry of Education resources for academic gain by learners who combine working and studying. Some DEOs have resorted to writing memos to all teachers under taking any form of studies warning them of dire consequences if they did this without consent from the employers. This was as a result of frequent complaints from head teachers and principals that students/employees were misusing resources including man hours at the expense of their students.
The heads of departments had the highest number of 160 (63.5%) who indicated support for distance learning mode as opposed to 92 (36.5%) who indicated non-supportive. These heads of department are direct supervisors of teachers and as noted earlier in a study by Mboroki, (2007), there is parity in performance of teachers both from face to face programmes and from distance mode programmes. This supports the outcome of the study results since HODs are mainly concerned with the teachers' performance in class. Studies in other industries revealed contradicting outcomes. Adams and DeFleur (2006) revealed that when companies attempted to fill management or entry-level positions in accounting, business, engineering and information technology, 96% indicated that they would prefer a candidate with a traditional degree. Earlier in a study by Adams and DeFleur (2005), regarding doctorates, indicated that given the choice of selecting candidates who possessed distance mode doctorate or traditional doctorate degree credentials, 98% of the 109 employers surveyed, preferred to hire the candidates with the traditional degree. Further study by Flower and Baltzer (2006) which looked at academia hiring process, confirmed that degree acquired through traditional mode were preferred compared to those acquired through distance mode. A similar study by Seibold, (2007) on officers from five different industries also concurred with the study by Adams and DeFleur (2006). The industries included in the study were telecommunications, data systems, insurance, finance and rental businesses, the conclusion was that even with the increase in the use of distance mode of learning, perceptions still existed that traditional degrees were more superior to degrees acquired through distance mode of learning.
When chi-square test was conducted, the $\chi^2$ calculated value was 17.011 while the $\chi^2$ critical value at 3 df considering 0.05 level of significance was 7.81. The null hypothesis was therefore rejected and the alternative hypothesis that there is a significant difference between the support offered by educational manager at different levels of management, was retained.

Table 4.12 shows a summary of the personal characteristics of educational managers and $\chi^2$ value calculated degree of freedom and the level of probability of making an error

**Table 4.12 Demographic Factors, $\chi^2$ value and P-Value**

<table>
<thead>
<tr>
<th>Factor</th>
<th>$\chi^2$ value</th>
<th>Df</th>
<th>P – value</th>
<th>Level of Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.009</td>
<td>1</td>
<td>0.925</td>
<td>0.05</td>
</tr>
<tr>
<td>Position</td>
<td>17.011</td>
<td>3</td>
<td>0.001</td>
<td>0.05</td>
</tr>
<tr>
<td>Work experience</td>
<td>14.743</td>
<td>3</td>
<td>0.002</td>
<td>0.05</td>
</tr>
<tr>
<td>Educational background</td>
<td>26.94</td>
<td>3</td>
<td>&lt;0.0001</td>
<td>0.05</td>
</tr>
<tr>
<td>Subject specialization</td>
<td>7.300</td>
<td>2</td>
<td>0.026</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Table 4.12 shows that it is only gender that has no influence on the support offered by educational managers to distance education programmes. The result in Table 4.12 confirmed the result reported from the traditional method where chi-square calculated was compared to standard value. Gender was noted to have no significant influence on support accorded to DE mode of learning by the educational managers. Working experience, administrative positions held and subjects specialization of the educational
managers all were proved to be having a significant influence on their support for DE mode of delivery.

4.4.1 Influence of Level of Awareness on Support for DE Mode of Delivery

The researcher was interested in finding out the training institutions that the respondents went through and their familiarity with DE mode of delivery. This information was to be used to test whether the level of awareness of the respondents influenced their support for DE mode of delivery. Some institutions train students through face to face method, whereas others use dual mode where both face to face and distance modes are applied. On the other extreme, some offer all their programmes through pure distance learning mode of delivery. This was of interest to the researcher to establish whether those who went through institutions offering programmes through dual mode were more supportive to DE mode of training than those who went through institutions offering through single mode. The information collected concerning training institutions is shown in Table 4.13
As shown in Table 4.13, 210 (34.4%) of the respondents were Kenyatta University graduates; 89 (14.6%) were University of Nairobi graduates, 85 (13.9%) were Egerton University graduates, 62 (10.2%) were Moi University graduates, 8 (1.3%) were Masinde Muliro University of science and technology graduates and 17 (2.8%) were Maseno University graduates. 134 (21.9%) were graduates from other institutions including diploma teachers colleges and private universities as well as those trained in foreign universities. The distributions, reflects the history of secondary school teacher training in Kenya with Kenyatta University being the oldest university training teachers first as a constituent college of the University of Nairobi from 1970 to 1985 when it was elevated into a fully fledged university. University of Nairobi resumed training of teachers in 1986 after Kenyatta University became autonomous when the first B.ed.
students through distance mode were admitted and later joined by face to face group in 1988.

Egerton University was initially a constituent college of the University of Nairobi up to 1987 when it was elevated to full university status. Although Moi University was established in 1984 as the second university in Kenya, the few respondents 62 (10.2%) could be attributed to two factors. First the University was started as a fully fledged university and not as a constituent college like all the other universities in Kenya, and therefore it had not graduated any student prior to 1984. Secondly, at the time of its inception it was mainly an institution to offer science and technology courses with a relatively small number of arts courses. Education courses were not among these courses. The school of education at Moi University was started in 1987 with a single undergraduate degree programme that is Bachelor of Education (Arts). This therefore provides an explanation as to why Moi University graduates were not as many as one would have thought. Further, the respondents were asked to indicate their exposure or familiarity with the distance learning mode of delivery.

4.4.2 Level of awareness and support accorded to DE mode of delivery

The data collected indicated that 310 (51%) of those included in the study were familiar with DE mode of training compared with 299 (49%) who admitted not being aware or familiar with DE mode of training refer to Table 4.14. This was surprising because those under study were educationists and therefore were expected to be fairly familiar with various modes of delivery available in the country. This was considered a surprise given
that DE mode of delivery is an old phenomenon having been started around 17th century in other countries and in 1980s in Kenya. Nevertheless, lack of awareness could be as result of confusion that exists concerning terminology used for DE such as school based, continuing education, adult education home study and evening classes. All of which are treated as one and the same thing. Some universities offer school based programmes which have nothing to do with distance learning yet they make their clients belief that they are offering a distance education programme. Adult education programmes and any continuing education programme is considered as DE programme yet some have nothing to do with distance education since they are offered in the evening and again there is no separation between the teacher and the learner in terms of time and space. To establish the extent to which level of awareness of educational managers about DE mode of delivery mode influences their support for DE mode of delivery in Western region, the following null hypothesis was tested.

6. H. There is no association between levels of awareness of educational managers about DE mode of delivery and support they accorded to DE mode of delivery.

Table 4.14 shows a close-tabulation of the educational managers’ awareness about DE mode delivery and support they accord to distance learning mode of delivery.
Table 4.14 Cross Tabulation of Awareness Status and Support Accorded to Distance Education Mode of Learning

<table>
<thead>
<tr>
<th>Support status</th>
<th>Non-supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware</td>
<td>127</td>
<td>183</td>
<td>310</td>
</tr>
<tr>
<td>Not aware</td>
<td>166</td>
<td>133</td>
<td>299</td>
</tr>
<tr>
<td>Total</td>
<td>293</td>
<td>316</td>
<td>609</td>
</tr>
</tbody>
</table>

Chi-square obtained from the data in Table 4.14 was 10.862 while the critical \( \chi^2 \) at \((n-1)*(n-1)\) 1 degree of freedom with .5% level of significance was 3.4. Since the \( \chi^2 \) calculated is greater than the critical value of \( \chi^2 \) then the null hypothesis was rejected. Therefore, the null hypothesis that there is no association between awareness about DE mode of learning and the support that educational managers accorded to DE mode of learning is rejected and the alternative hypothesis was retained.

The alternative hypothesis was that "There was a relationship between awareness and the support that educational managers' in Western Region accorded to DE mode of delivery". These results concur with the result of Gakuu (2007) study, which concluded that campaign to sensitize university lecturers about DE had yielded some positive results as far as their readiness to adopt DE mode of delivery was concerned. Those that were more aware about DE mode were more ready to adopt the mode of training than those who were not aware. Dillon and Walsh, (1992) also established that faculty teaching at a
distance are positive towards such teaching and their attitudes tend to improve with experience. Clark (1993) concurred with other scholars when he established that familiarity and previous experience were moderately predictive of respondents’ receptivity to distance learning mode of delivery. This is further supported by the argument by Zajonc (1968), that the more contact people have with something or somebody, the more they like them or the more they are positive towards them or to the object this was referred to as mere exposure effect (Zajonc, 1968). This therefore supports the idea that those who had some experience with DE mode of training, were more receptive than those who had no experience at all.

According to Gakuu (2007) and NEA (2000) attitude towards DE was more favorable among those who had taught in DE programmes. In the study by NEA in (2000) 72% of the instructors who were familiar with DE mode of training, were positive about DE compared to those who were not familiar 51% and who were negative. Another study supporting the idea that awareness influences support, was taken by Inman and Kerwin (1999) which revealed that those who had experience of teaching DE programmes were more willing to participate in distance education programme courses in future. However when they were asked about the quality of DE, about 50% of the instructors thought that the quality of the distance education course when compared with a traditional course was lower. Seibold (2007) later conceded that personal experience with online education influenced employers in their decisions to hire or not to hire a DE graduate as compared to a graduate from a traditional system. A study by Guendoo (2007, 2008) also yielded similar results that exposure influenced support for distance instructional mode. In the
study that involved 52 administrators of the largest 145 community colleges in the United State of America concluded that the gap between those with positive attitudes and those with negative attitudes would close over time due to exposure. Negative attitude was associated with lack of exposure. It has been argued that attitudes influence behavior though not always (Schiftman and Kanuk 2004).

In the study, awareness about DE mode of delivery which included participation in DE programme had a significant relationship with support for DE mode of delivery. This implies that awareness which has been proved to influence attitude also influences action or behaviour, Kotler (2003). A study by Clark in 1993 amongst university lecturers, also supports the current study results which revealed that lecturers who were knowledgeable about DE programme embraced the programme more, compared to those who were not knowledgeable about it. Other studies that concurred with Clark include Black 1992, Heath 1996 and Betts in 1998, who revealed that there was a relationship between the levels of lecturers' knowledge in DE with their readiness to adopt D.E programme. O. Malley (1999) also concluded that prior knowledge or the level of familiarity lecturers have in distance education enhanced their adoption of DE mode of teaching and learning. These results seem to be suggesting that there is a relationship between level of awareness about DE and support that one is likely to offer to DE mode of learning.

Black in 1992 also supported other researchers in their assertion that knowledge about an object or an individual, influences behavior. On his part, he concluded that understanding of DE by lecturers contributed to their readiness to implement DE programme, Clark (1993) also shared the same opinion. The current study focused on Educational managers
who are indirectly involved in implementation of DE programme through their influence to prospective learners. These educational managers are viewed as opinion leaders due to their expertise in educational matters.

4.5 Attitudes of Educational Managers and Its Influence on their Support From DE Mode of Learning

To investigate the extent to which attitudes of educational managers influenced their support for DE mode of learning in Western Province, data was collected through 5 point Likert scale.

There were 27 items used to obtain information on attitudes of educational managers on Distance education mode. The attitudinal dimensions considered were:

(a) Cost
(b) Quality
(c) Examination process
(d) Entry criteria
(e) Convenience

Support for DE mode of training was measured through 8 items of five point Likert scale supplemented by an interview schedule.

The items that focused on attitudes of educational managers in regards to cost of DE in the questionnaire were items numbers qb9, qb18 and qb27.
Quality was focused by items numbers qb14, qb23, qb22, and qb25. Items that focused on examination processes were items number qb4, qb5, qb13 and qb17. Items number qb1, qb10 and qb19 focused on entry criteria used while items number qb8, qb11, qb12 and qb26 focused on convenience of the mode of training. The following five (5) H. hypotheses were tested.

4.5.1 Influence of Educational Managers Attitudes towards DE Mode of Delivery in Regards to Cost on their Support For DE Mode of Delivery

7. H. There is no relationship between attitudes of educational managers in regards to cost of DE and support they accord to DE mode of delivery.

Table 4.15 shows cross tabulation of the attitudes of educational manager towards DE mode of delivery in regards to cost and support accorded.

Table 4.15 Attitudes towards D.E in Regard to Cost and Support Status

<table>
<thead>
<tr>
<th>Support status</th>
<th>Non-supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheap</td>
<td>84</td>
<td>121</td>
<td>205</td>
</tr>
<tr>
<td>Neutral</td>
<td>93</td>
<td>112</td>
<td>205</td>
</tr>
<tr>
<td>Expensive</td>
<td>117</td>
<td>83</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>294</td>
<td>316</td>
<td>610</td>
</tr>
</tbody>
</table>
When $\chi^2$ was calculated the value obtained was 13.443 while the chi-square critical at df.2 with 0.05 level of significance was 5.99, P-value was 0.0012

The null hypothesis was therefore rejected and the alternative hypothesis was retained, that is, there is a relationship between attitudes towards DE in regards to cost and the support accorded to DE mode of learning. Some studies on distance education have conceded that distance education is cheap compared to conventional mode. Such studies include Daniel (2003), Hawkridge (1994), Casey (1998) and Parraton (2000). On the other hand, other studies such as Teterra and Altibach (2003) showed that DE programmes were equally expensive. Keiyoro (2010) researching on factors influencing the effective use of ICT in teaching and learning science curriculum in Kenyan secondary schools, indicated that development of course materials, implementation of training programmes, access to ICT for teachers and students, monitoring of the quality and consistency of ICT integration in schools, was limited to insufficient funds. Further, the researcher carried out correlation and regression analysis to determine the influence of various attitudinal dimensions on the support accorded to DE mode of learning. The results of the two tests are as showed in Table 4.16
Table 4.16 Regression and Correlation Results Between Cost and Support

<table>
<thead>
<tr>
<th>Regression coefficient, B</th>
<th>Correlation coefficient, r</th>
<th>sig. at 2-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>p = 0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of training under DE is expensive</td>
<td>B = -0.266</td>
<td>r = -0.204* (0.000)</td>
</tr>
<tr>
<td>DE mode of education is cost effective</td>
<td>0.030</td>
<td>0.057 (0.170)</td>
</tr>
<tr>
<td>DE mode of learning is economical</td>
<td>0.287</td>
<td>0.213* (0.000)</td>
</tr>
</tbody>
</table>

N = 582

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

The regression and correlation results showed that the respondents who thought that the cost of training under DE was cheap, more supportive compared to those who felt it was expensive (B = -0.266, p = 0.05; r = -0.204*, p < 0.05 at 2-tailed). Those who felt it was expensive support the conventional mode of delivery. This explains why majority of students registered under DE mode do not benefit from bursary funds (Odundo and Rambo 2010) as well as Constituency Development Fund (CDF) which are highly influenced by educational managers’ approval. Other than the approval required from the educational managers the prospective beneficiaries suffer from lack of information which is expected to have been disseminated by the same managers. Earlier in the study only 51% of those who participated in the study were considered to be familiar with DE of delivery. This therefore indicate lack of awareness influence DE learners’ participation in acquisition of funds from CDF as well as from HELB. Those who believed that DE mode was cheap could have argued that there was no need of financial
support since it was affordable. Other reasons could be economic reasons that suggest since the two modes of delivery produce the same results according to equivalence theory then people should go for the cheaper option. Those who viewed DE mode as cheap mode yet were not supportive could have argued that the price of a commodity determines the value or the quality, therefore, sharing this belief with Parraton (2000) who argued that DE mode of training is a second rate system used to offer a shadow of education, while withholding its substance. Other opponents of DE mode of delivery like Klees (1995) argued that distance education systems offer a second-class inferior education to the most disadvantaged. However, the educational managers who believed that DE mode of education was cost effective were supportive of the mode, hence positive correlation and regression (B = 0.030, p = 0.05; r = 0.213*, p < 0.05 at 2-tailed). Consequently, respondents who held opinion that DE mode of learning was economical were also supportive of the mode. It is worth noting that though educational managers could have indicated varying attitudes towards distance learning programmes, accurate comparison has proved to be difficult due to lack of data as well as different resource requirements for each mode of training (Parraton, 2000).

4.5.2 Quality and support accorded to DE mode of delivery
To test association of attitudes in regard to quality and support accorded, the following null hypothesis was used. There is no relationship between attitudes towards DE in regards to quality of DE and support accorded. The chi-square calculated was 19.18 while chi-square critical at df, 2 and at 0.05 level of significance was 5.99 and p-value was 0.0001 Therefore, the null hypothesis was rejected and the alternative hypothesis,
was retained. The alternative hypothesis retained stated: There is a relationship between educational managers’ attitudes towards DE in regards to quality and their support for DE mode of learning.

Table 4.17 shows the attitudes of educational managers towards DE in regards to quality against their support for DE.

Table 4.17 Cross Tabulation of Attitudes of Education Managers towards DE in Regard to Quality and their Support for DE

<table>
<thead>
<tr>
<th>Support Status</th>
<th>Supportive</th>
<th>Non</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High quality</td>
<td>123</td>
<td>74</td>
<td>197</td>
</tr>
<tr>
<td>Neutral</td>
<td>79</td>
<td>119</td>
<td>198</td>
</tr>
<tr>
<td>Low quality</td>
<td>102</td>
<td>98</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>304</td>
<td>291</td>
<td>595</td>
</tr>
</tbody>
</table>

Studies that exist concerning quality of distance education are not conclusive; some indicate parity of the outcomes of the two programmes, while others show one mode being superior to the other.

Quality of the mode is mainly determined by the outcomes of the students in terms of amount of learning, academic performance, examinations, students’ satisfaction, comfort
convenience and perceptions of effectiveness. The current study captured the performance of selected DE graduates at their work place according to their supervisors. Other studies such as Harden and Donnan (1994) and Mboroki (2008) revealed that performance of students from the two modes of learning was the same. Verduin and Clark (1991) in their studies also revealed that there is no significant difference between learning outcomes that can be attained at traditional institutions verses distance learning. These concurred with Gagne and Shepherd (2001). Phipps and Merisotis (1999) also arrived at similar findings in their review that applied meta-analysis approach. From their analysis Phipps and Merisotis (1999) concluded that

With few exceptions, the bulk of these writings suggest that the learning outcomes of students using technology at a distance are similar to the learning outcomes of students who participate in conventional classroom instruction. The attitudes and satisfaction of students using distance education are also characterized as generally positive. Most of these studies concluded that regarding the technology used, distance education courses compare favourably with classroom based instructions and enjoyed high students satisfaction.

Russell (2002) also examined numerous studies focusing on students' performance and similarly reported further support of no significant difference phenomenon. Additionally, Harper believed in the quality of DE available: Describing the quality he started

"The students who has prepared a certain number of lessons in the correspondence school knows more of the subject treatment in those lessons, and knows it better, than the student who has covered the same ground in the classroom" (Harting and Erthal 2005).
Duffy et al (2002) in their studies comparing performance of two groups of students who underwent two forms of course delivery, revealed that all the two modes were successful in meeting the demands of the assessments. The students who studied through distance mode scored higher than those who went through conventional mode.

Some studies on the other hand, considering employers preference revealed contradicting results. Adams and DeFleur (2005) considering employability of doctorates 98% of 109 employers’ surveyed preferred candidates with traditional degree. Similar studies by Flowers and Baltzer (2006) and later by DeFleur and Herald (2007) supported the study by Adams and DeFleur. Some scholars have directly questioned the quality of learning through distance mode, these include Dede 1996 and Harrison 2001 as cited in Peat and Helland (2002). Though the potential of DE mode of education has not been fully exploited it is important that (Noble,1999) providers of D.E are controlled to eliminate possibility of exploitation from ungenerous providers whose interest is to benefit from economies of diploma mills and drop out money, thus producing low Quality graduates. Conventional mode of training on the other hand has also been criticized that their graduates may not be perfect due to overcrowding in the lectures and lack of opportunities of these students to know and discuss their ideas with either their teachers or even their peers (Harris,1987 and Ritzer,1998).

When the researcher carried out a correlation and regression tests to measure the association of the attitudes and support accorded by educational managers to DE mode of learning, the results were as shown in Table 4.18.
Table 4.18 Multiple regression and Correlation Between Quality and Support

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Regression coefficient, $B$</th>
<th>Correlation coefficient, $r$ sig. at 2-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates of DE programmes are equally qualified, $N = 585$</td>
<td>$B = 0.078$</td>
<td>$r = 0.191^* (0.000)$</td>
</tr>
<tr>
<td>Evaluation methods used under DE programmes are appropriate, $N = 585$</td>
<td>$B = 0.255$</td>
<td>$r = 0.279^* (0.000)$</td>
</tr>
<tr>
<td>It is possible for a student who has not satisfied the examiners to graduate under DE programme, $N = 585$</td>
<td>$B = -0.116$</td>
<td>$r = -0.232^* (0.000)$</td>
</tr>
<tr>
<td>No much time is wasted in the course of the study, $N = 570$</td>
<td>$B = 0.104$</td>
<td>$r = 0.043 (0.300)$</td>
</tr>
</tbody>
</table>

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

These results were obtained when each of the item: graduates of DE programmes are equally qualified, Evaluation methods used under DE programmes are appropriate, it is possible for a student who has not satisfied the examiners to graduate under DE programme and no much time is wasted in the course of the study were subjected to a regression analysis and correlated against support. The results showed that educational managers who felt graduates of DE programmes were equally qualified and that evaluation methods used under DE programmes were appropriate supported the mode.
highly compared to those who defaulted the mode, hence positive regression and
correlation coefficient values and (B = 0.078, p< 0.05;  r = 0.191*, p< 0.05 and B =
0.255, p< 0.05;  r = 0.279*, p < 0.01 respectively). Negative regression and correlation
coefficient values were obtained with the attitude that it is possible for students who have
not satisfied the examiners to graduate under DE programme and no time was wasted in
the course of the study against support (B = -0.116, p< 0.05;  r = -0.232*, p< 0.05 and B
= -0.104, p< 0.05;  r = 0.043, p < 0.05 respectively). Those who agreed that time was
wasted were less supportive. This was an indication that education managers who
believed that one could graduate without having satisfied the examiners under DE
programme, did not offer support to DE mode of learning. Consequently, it was revealed
that the education managers who believed much time was wasted in the course of the
study under DE mode were also not supportive of DE.

4.5.3 Attitudes towards DE in Regard to Convenience and Support Accorded
The association between the attitudes towards DE in regard to convenience and support
accorded to DE was tested through a test of a null hypothesis that;
8. H. There is no relationship between the attitudes towards DE in regard to
convenience and the support that Educational Managers offered to DE Table
number 4.18 shows the relationship between attitudes towards DE in regards to
convenience and support accorded to DE
### Table 4.19 Cross-Tabulation between Attitudes towards DE in Regard to Convenience and Support accorded to DE

<table>
<thead>
<tr>
<th>Support Status</th>
<th>Non - supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude to DE (convenience)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>84</td>
<td>68</td>
<td>152</td>
</tr>
<tr>
<td>Neutral</td>
<td>82</td>
<td>72</td>
<td>154</td>
</tr>
<tr>
<td>Positive</td>
<td>121</td>
<td>183</td>
<td>304</td>
</tr>
</tbody>
</table>

Chi-square critical at df = 2 and with 0.05 level of significance which was 5.99. It can therefore be concluded that there is a relationship between attitudes towards DE as far as convenience was concerned and the support accorded to DE.

Table 4.20 shows results of the correlation and regression tests to establish the relationship between attitudes of educational managers towards DE in regards to convenience and support they accorded to DE programmes.
Table 4.20 Multiple Regression and Correlation between Convenience and Support

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Regression coefficient, ( B )</th>
<th>Correlation coefficient, ( r )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( p = 0.05 )</td>
<td>( \text{sig. at 2-tailed} )</td>
</tr>
<tr>
<td>DE mode of learning is</td>
<td>( B = -0.080 )</td>
<td>( r = -0.155* (0.000) )</td>
</tr>
<tr>
<td>only appropriate for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>working class people,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( N = 592 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candidates/ students</td>
<td>( B = -0.162 )</td>
<td>( r = -0.240* (0.000) )</td>
</tr>
<tr>
<td>enroll in DE programmes as the last resort, ( N = 609 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE is only useful to</td>
<td>( B = -0.027 )</td>
<td>( r = -0.147* (0.000) )</td>
</tr>
<tr>
<td>mature learners who cannot fit in other programme, ( N = 609 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students pursuing DE programmes access their progress records any time, ( N = 605 )</td>
<td>( B = 0.112 )</td>
<td>( r = 0.110* (0.007) )</td>
</tr>
</tbody>
</table>

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

The study results pointed out majority of the educational managers believed that DE mode of learning was not only appropriate for working class people but also to other
class of people and this had negative regression and correlation influence on support ($B = -0.080, p< 0.05; r = -0.155^*, p = 0.01$). This meant that those managers who believed that DE mode of learning under DE was applicable to working class people, were not supportive of the mode compared to those who felt that DE was appropriate to all both working and non working class. Those who agreed with the statement were negative and therefore, were expected to yield lower support, thus the negative correlation. The results further revealed that managers who felt that students enrolled in DE programmes as the last resort were less supportive to DE than those who believed that they did not join DE programme as the last resort. Those who perceived the programmes as to be appropriate for working group only are likely not to be supportive especially for students direct from secondary level. This was shown by the negative regression and correlation indicated by the tests ($B = -0.162, p< 0.05; r = -0.240^*, p < 0.05$). This pointed out that the respondents who believed that students enrolled in DE programme as the last resort were not supportive. Moreover, the results indicated that educational managers who believed that DE was only useful to mature learners who could not fit in other programmes were not supportive and this explains why this item impacted negatively on their support ($B = -0.027, p< 0.05; r = -0.147^*, p < 0.05$). According to the results, educational managers held the attitude that students pursuing DE programmes did not access their progress records any time and this had negative effect on their support ($B = -0.112, p< 0.05; r = 0.110^* p < 0.005$).
4.5.4 Attitudes and Examination Process

The relationship between attitudes of Educational Managers towards DE in regards to examination process and support status accorded was tested through testing of a null hypothesis.

9. H. There is no relationship between attitudes towards DE in regards to examination process and support accorded to DE

Table 4.21 shows cross tabulation between attitudes in regards to examination process and support status.

Table 4.21 Cross Tabulation between Attitudes in Regards to Examination Process and Support Status of Educational Managers

<table>
<thead>
<tr>
<th>Examination Process</th>
<th>Support Status</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-supportive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>75</td>
<td>127</td>
<td></td>
<td>202</td>
</tr>
<tr>
<td>Neutral</td>
<td>97</td>
<td>117</td>
<td></td>
<td>214</td>
</tr>
<tr>
<td>Negative</td>
<td>120</td>
<td>72</td>
<td></td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>292</td>
<td>316</td>
<td></td>
<td>608</td>
</tr>
</tbody>
</table>

From the data in table 4.20 the ($\chi^2$) chi-square calculated was 26.349 on the other hand at 0.05 level of significance and df = 2 the chi-square $\chi^2$ critical was 5.99 therefore the null hypothesis is rejected and the alternative hypothesis is retained, that is, there is a relationship between the attitudes of educational managers towards DE in regards to examination process and the support they accorded DE.
From the results in Table 4.21, 68.6% of the educational managers who indicated negative attitudes towards DE in regard to examinations process were still supportive of DE this could be a cursor indicating that other available modes could also be suffering from same shortcomings or that other attitudinal elements override this element. Further correlation and regression tests carried out revealed association between attitudes in regard to examination processes and support as showed in table 4.22.

**Table 4.22 Multiple Regression and Correlation between Examination Process and Support**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Regression coefficient, B</th>
<th>Correlation coefficient, r sig. at 2-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheating is common under DE mode of learning, N = 601</td>
<td>$B = -0.345$</td>
<td>$r = -0.569^* (0.000)$</td>
</tr>
<tr>
<td>Impersonation is likely to take place in DE mode of learning, N = 609</td>
<td>$B = -0.056$</td>
<td>$r = -0.081^* (0.046)$</td>
</tr>
<tr>
<td>There are no adequate control measures to prevent cheating in examination in DE programmes, N = 609</td>
<td>$B = -0.061$</td>
<td>$r = -0.038 (0.353)$</td>
</tr>
<tr>
<td>Progress records can be maintained under DE programmes without interference, N = 605</td>
<td>$B = 0.088$</td>
<td>$r = 0.149^* (0.000)$</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed)
The results in Table 4.22 show that there was negative correlation and regression effect between cheating being a common phenomenon under DE mode of learning and support (B = -0.345, p < 0.05; r = -0.569, p < 0.05). This meant that the respondents who believed that cheating was common in DE mode of learning, were not supportive. This was an indication that the education managers did not tolerate cheating under any mode of learning. Impersonation under DE had a negative relationship with support (B = -0.056, p < 0.05; r = -0.081*, p < 0.05) while the study results further indicated that the respondents who held opinion that there were no adequate control measures to prevent cheating in DE programmes, did not support this mode, and thus, this negatively influenced their support (B = -0.061, p < 0.05; r = -0.038, p > 0.05). This pointed out that there were some weaknesses concerning examination process under DE mode of learning. Moreover, the progressive records can be maintained under DE programmes without interference and therefore, the respondents with such attitude supported DE mode as evidenced by positive regression and correlation values (B = 0.088, p < 0.05; r = 0.149*, p < 0.05).

4.5.5 Attitudes in Regards to Entry Criteria and Support for DE

The relationship between attitudes towards DE in regards to entry criteria and support accorded to DE mode was tested through testing of a null hypothesis.
10. H. That is, there is no relationship between attitudes of educational managers towards D.E in regards to entry criteria and the support they accord to DE mode.

Table 4.23 Attitudes of Educational Managers in Regards to Entry Criteria and the Support they accorded to DE

<table>
<thead>
<tr>
<th>Support Status</th>
<th>Non-supportive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry Criteria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>73</td>
<td>86</td>
<td>159</td>
</tr>
<tr>
<td>Neutral</td>
<td>104</td>
<td>170</td>
<td>274</td>
</tr>
<tr>
<td>Negative</td>
<td>100</td>
<td>76</td>
<td>176</td>
</tr>
<tr>
<td>Total</td>
<td>277</td>
<td>332</td>
<td>609</td>
</tr>
</tbody>
</table>

The null hypothesis was tested at 0.05 level of significance at df = 2. The calculated chi-square ($\chi^2$) was 15.384 while the critical value of chi-square($\chi^2$) was 5.99 therefore the alternative hypothesis was retained. The alternative hypothesis was that there was a relationship between the educational managers’ attitudes towards DE in regards to entry criteria and their support for DE mode of training. Those who were positive believed that DE considered only qualified candidates for admission, while those who were negative believed that unqualified candidates are also considered for admission. Correlation and regression analysis between attitudes in regards to entry criteria and support accorded to DE mode of learning by educational managers produced results showed in table 4.24.
Table 4.24 Multiple Regression and Correlation between Entry Criteria and Support

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Regression coefficient, B</th>
<th>Correlation coefficient, r</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p = 0.05</td>
<td>sig. at 2-tailed</td>
</tr>
<tr>
<td>Only qualified candidates</td>
<td>B = 0.076</td>
<td>r = 0.135* (0.001)</td>
</tr>
<tr>
<td>are considered for admission in DE programmes, N = 609</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unqualified candidates</td>
<td>B = -0.016</td>
<td>r = -0.112* (0.006)</td>
</tr>
<tr>
<td>end up being admitted under DE mode of learning, N = 559</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission to DE is open</td>
<td>B = 0.143</td>
<td>r = 0.130* (0.001)</td>
</tr>
<tr>
<td>to majority of qualified candidates, N = 605</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

With reference to the results in Table 4.24, independent variables were subjected to correlation and regression analysis against educational managers' support to DE learning mode. The results showed that the educational managers who believed that DE mode of learning attracted only qualified candidates were supportive (B = 0.076, p< 0.05; r = 0.135, p< 0.05). Similarly, the respondents whose opinion was that unqualified candidates end up joining DE mode of learning were not supportive of the mode (B = -
0.016, p< 0.05; r = 0.112*, p< 0.05). The results further pointed out that those respondents who believed that admission to DE was open to majority of qualified candidates were supportive and therefore, this had positive regression and correlation values (B = 0.143, p< 0.05; r = 0.130*, p< 0.05). Table 4.25 shows a summary of association between selected attitudinal elements of DE and support accorded to DE by educational managers in Western Region. All selected elements were statistically proved to have some association with support for DE These attitudinal attributes included costs, quality, examination process, and convenience and entry criteria.

Table 4.25 shows a summary of association between selected attitudinal elements of DE and support accorded to DE by educational managers in Western Region using alternative decision criterion. All selected elements were statistically proved to have some association with support for DE since the value obtained in each case was less than 0.05 which was the basis for decision making.

These attitudinal attributes included costs, quality, examination process, convenience and entry criteria.
Table 4.25 Summary of Relationship Between Attitudes and Support

<table>
<thead>
<tr>
<th>Attitudinal attribute</th>
<th>( \chi^2 ) (Calculated)</th>
<th>Df</th>
<th>P - Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>13.443</td>
<td>2</td>
<td>0.001</td>
</tr>
<tr>
<td>Quality</td>
<td>20.07</td>
<td>2</td>
<td>0.001</td>
</tr>
<tr>
<td>Examination Process</td>
<td>32.16</td>
<td>2</td>
<td>0.0001</td>
</tr>
<tr>
<td>Convenience</td>
<td>12.89</td>
<td>2</td>
<td>0.0001</td>
</tr>
<tr>
<td>Entry Criteria</td>
<td>15.384</td>
<td>2</td>
<td>0.0004</td>
</tr>
</tbody>
</table>

Elsewhere, studies on relationship between attitudes and behavior have showed mixed results with some indicating no or little relationship between attitudes and behavior consequences, whereas others pointed out that attitudes are decisive for behavior (Kim and Hunter, 1993; Kraus 1995; Wicker 1969; Wilkie & Pessemier, 1973). The difference between the behavior and attitudes could be associated with several factors some of which are situations while some subjective norms. These subjective norms may include attitudes of others that one wants to comply with. The more the intensity of the other person's negative attitude towards the consumers preferred alternative and the motivation to comply with the other persons wishes the more the consumer will adjust to purchase decision. Prospective DE students are likely to be influenced by the attitudes of the educational managers since they are perceived to be influencing decision pertaining to education in their regions. The fact that the attitudes of educational managers are mixed could explain the low enrolments in DE programmes, whereas demand for other modes
of learning was escalating in Kenya. Some students prefer foreign universities when they fail to secure opportunities in conventional programmes at local Universities leading to loss of foreign exchange as opposed to joining local institutions offering distance programmes that are evident to be less competitive.

The researcher further carried out multi regression analysis to test the strength of the influence of various attitudinal dimensions. The results of the multi regression analysis is presented in Table 4.26.

**Table 4.26 Influence of Attitudinal Factors on Support**

*Multiple Regression and Pearson Correlation Coefficient*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regression coefficient, B, p&lt;0.05</th>
<th>Pearson coefficient, r</th>
<th>P – Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination Process</td>
<td>1.313</td>
<td>0.875</td>
<td>0.004</td>
</tr>
<tr>
<td>Convenience</td>
<td>0.94</td>
<td>0.844</td>
<td>0.02</td>
</tr>
<tr>
<td>Quality</td>
<td>0.757</td>
<td>0.499</td>
<td>0.002</td>
</tr>
<tr>
<td>Cost</td>
<td>0.281</td>
<td>0.172</td>
<td>0.000</td>
</tr>
<tr>
<td>Entry Criteria</td>
<td>0.055</td>
<td>0.084</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

The Table 4.26 presents results when the means of variables cost, quality, entry criteria, convenience and examination process were regressed and correlated with the mean of support. The variables were arranged in the order of their strength of influence on support for DE mode of learning. The tests were carried out to investigate the attitudinal variable...
that influenced the support for DE mode of learning the most. The results showed that examination process had the highest influence on support, an indication that those respondents who felt that examination processes in DE were effective supported the mode highly compared to those that indicated that examination processes in DE mode of learning were defective. \( B = 1.313, P<0.05; r = 0.875, p < 0.05 \). Similarly, the respondents who held opinion that DE programmes were convenient, cost effective and of quality were in support of the DE programmes, although the degree of their support was lower compared to that of examination process. Consequently, entry criteria did not have profound effect on support since its regression and correlation coefficients were almost insignificant \( B = 0.055, p<0.05; r = 0.084, p< 0.05 \).This could be attributed to the fact that entry criteria to both the conventional mode and DE mode is assumed to be the same, however, a few respondents pointed out that some Universities were violating their own rules admitting students that some respondents considered as failures. One of the principal indicated that some graduates from DE programme can only fit comfortably in primary schools since they were not expected to produce any better grade than what they scored. In this case, referring to either a D or a D+ that are minimum entry criteria in some programmes.

4.6 Government Policy and Support for D.E.

In the current study, government policy was investigated as one of the intervening variable that could be explaining the difference between the support that educational managers offer to DE and behavior which can be translated in terms of number of the students enrolling for DE. From the interview guide, the respondents, 400 (66%) indicated
the government does not offer support that is expected to students pursuing their high
education through distance mode. According to Maritim (2009), students who were
pursuing Distance Education programmes and were teachers at the same time did not
qualify for study leaves. It was also noted that the institutions currently offering both face
to face and distance programmes do not receive grants for distance learners, therefore all
the costs are passed on to the learners. Further, Maritim points out that a fee charged to
distance learners is about US$ 2000 to US$ 6000 per year which was said to be three to
seven times higher than other African single mode institutions. It is perhaps as a result of
this that universities offering DE programmes are unable to provide incentives to the
participating lecturers due to low returns from DE programmes (Gakuu, 2006). This could
be attributed to the fact that no subsidies is received from Government and further the
Universities use part of income generated from DE and other self sponsored programmes
to finance other programmes.

The government also needs to support the existing institutions or establish new ones such
that all courses are offered by distance as well as through face to face as suggested by
Gakuu (2006). This will allow the students to make a choice of the mode of learning that
best suit them. The current study also indicated need for a policy on ODE to regulate the
institutions offering programmes through distance. The government may support the idea
of DE programmes by developing materials that could be used by all students taking
similar programmes to benefit from economies of scale which is in support of the theory
of industrialization proposed by Peters(1967). The government of Kenya is working
towards this as plans are in place to establish a single mode distance teaching university
(Open University) with a capacity of 100,000 students by 2015. This is a positive step towards the right direction, however, the stakeholders need to be prepared psychologically since as shown in this study 80% of the respondents believed that DE is only appropriate for mature learners who are autonomous and self disciplined and not meant for young adults direct from school, who many believe, need to work closely with their teachers.

Some of the respondents who were opposive to DE mode of training for young adult direct from secondary schools expressed their fear of too much freedom to immature students. They further argued that they spend a reasonable percentage of school time in guiding and counselling students, which they thought was an important component of education. This concurs with Schmidt and Faulkner, (1989) who questioned the effectiveness of distance education for learners who are considered less independent and may require direct interaction throughout the instruction process. This also concurs with Department of Instructional Technology (2006) that revealed that DE learners, require qualities such as self-motivation, Patience, self-discipline, easiness in using software, good technical skills, abilities regarding time management, communication and organization. The majority of the young adults direct from secondary schools lack these qualities. This perhaps explains why majority of DE learners are mature, adults responsible and who easily work independently. Bower (2001) also questioned the quality of DE citing an article by Mc Kinnon (1998) which stated that most faculty members at Florida Gulf State University, expressed serious concerns about the quality and effectiveness of DE in meeting educational needs. This goes without saying that if
the service providers are doubtful about quality and effectiveness of what they participate in offering, then the users will definitely doubt and be more skeptical than the providers.

Litto (2002) cited the widespread lack of credibility of distance education approaches both inside and outside academic communities as another factor impending the deployment and use of Distance Education throughout Brazil. From 1998 – 2001 Diplomas from foreign universities earned at a distance were not officially recognized in Brazil.
CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to investigate factors influencing educational managers' support for DE mode of delivery in Western region of Kenya. Distance education mode of delivery has not attracted many students in spite of its existence in the country for a long and stiff competition for opportunities for face to face programmes especially at the university level. Some of the students who miss opportunities in conventional mode of delivery end up in foreign countries in search of education rather than opting for Distance education mode. This translates to loss of foreign exchange and brain drain which developing countries seriously require. This chapter presents a summary of the research findings based on research objectives, discussions, conclusions and recommendations of the study.

5.2 Summary of Findings

The study aimed at establishing factors influencing educational managers' support for DE mode of delivery in Western Region of Kenya. From literature review some factors were identified as most probable factors and were used to formulate four research questions and seven research hypotheses. First research sought to establish to what extent do personal Characteristics of the educational managers influence their support for DE mode of delivery? Further the study established to what extent does educational
managers' state of awareness of DE influence their support for DE mode of delivery in Western Region of Kenya? The study also investigated to what extent does the educational managers' attitude towards DE influence their support for DE mode of delivery in Western Region? Finally the study explored the how the education policy on DE mode of delivery affect educational managers' support for DE mode of delivery in Western Region of Kenya?

5.3 Research Hypothesis

The study tested the following hypothesis:

1. There is no difference in support of distance learning mode of delivery between male and female educational managers in Western Region of Kenya.

2. The support accorded to distance learning mode of delivery by education managers in Western Region of Kenya does not vary with their working experience

3. Professional qualifications of the educational managers have no significant association with the support they accorded distance learning mode of delivery.

4. There is no significant association between subject specialization of Educational managers' and support they accorded to distance learning mode of delivery.

5. There is no association between the administrative position held by the respondents and the support they accorded to Distance Learning mode of delivery.

6. There is no relationship between awareness of educational managers about DE and their support for DE mode of delivery.

(7). There is a relationship between attitudes of educational managers towards DE and their support for DE mode of delivery.
The hypotheses started were tested at 0.05 level of significance, as recommended by social scientists.

From the data collected the following emerged. Personal characteristics of the educational managers, influenced their support for DE mode of learning. These characteristics included: - position held, working experience, professional qualifications and subject specialization. Gender of the respondents was proved to have no significant influence on the support they accorded to DE mode of delivery in Western region. The alternative hypothesis was retained which stated that there is no significant relationship between gender of the educational managers in Western region of Kenya and their support for DE mode of delivery. The null hypothesis was tested at 0.05 level of significance.

A total of 54.6% of the sampled population were supportive of distance education mode of delivery as compared to 45.4% who were non-supportive of DE mode of learning (Table 4.11). It is only principals, majority of whom were not supportive of DE mode of learning, only 43% of the principals were supportive whereas 57% were non-supportive of DE mode of learning. Working experience was proved to have some influence on support accorded to DE mode of learning. Majority of the officers (58.6%) with working experience of 10-15 years, were non-supportive, while only 41.4% were supportive.

Two categories of professional qualifications were supportive of DE mode of learning, whereas two other categories were non-supportive. Categories where majority were
supportive were diploma holders and B.ed holders, where 81.1% and 56% respectively were supportive. Among the non-supportive categories were approved graduate teachers where 61.4% were non-supportive and Master of Education degree holders who formed 57.8% of the respondents, were non-supportive.

As far as subject specialization is concerned, all categories that is, sciences, humanities and other subjects were positive towards DE mode of learning, however majority of the officers who specialized in sciences subjects (59%) were supportive to DE mode of delivery compared to (46.8%) of those who specialized in humanities and (51.3%) who specialized in other subjects. The null hypothesis was tested and was rejected at 0.05 level of significance therefore, the alternative hypothesis that there was significant association between subject specialization of Educational managers' and support they accorded to distance learning mode of delivery was retained.

Awareness about distance education was proved to be influencing the support that educational managers accorded to DE mode of learning. Majority (59.1%) of those that were considered to be aware, were supportive of DE mode of learning. While only 40.9% were non-supportive. Among those who were said not to be aware of DE only 44.6% were supportive while 55.4% were non-supportive. It was also observed that despite the fact that the respondents were educationists they had different understanding of DE mode of delivery with some considering DE to any form, contrary to the conventional education. While others thought of DE mode of delivery as any education which is technology mediated. Others still looked at distance learning mode of delivery to be any
education offered outside the main training institution like the satellite campuses. Those
who were not supportive identified lack of support from the Government, malpractices
amongst the service providers and lack of opportunity for the youth to be socialized as
their major concerns. Time was also identified as a concern given that such DE
programmes are offered on part time basis thus learners direct from schools will have a
lot of idle time to manage. When null hypothesis to test whether there was association
between awareness about DE mode of delivery and support accorded to it by educational
managers at 0.05 level of significant, it was found that those who were exposed to DE
mode of learning in one way or another were more supportive compared to those who
had no exposure to DE mode of delivery.

Attitudes towards DE mode of learning was statistically proved to be influencing the
support accorded to DE mode of delivery. The attitudinal attributes considered were:-
cost; quality; examination process and entry criteria. Correlation and multi regression
analysis carried out to test the hypothesis whether there is any significant association
between attitudes and support, indicated that there was statistically significant
relationship between attitudes of educational managers and their support for DE mode of
delivery.

Majority of the respondents, 400 (66%), felt that the government policy influenced
support for DE mode of delivery negatively. The government policy could be influenced
by the belief of the educational managers. Out of 610 respondents included in the study,
80%(488) indicated that distance learning programmes were only appropriate for mature
learners who were autonomous and independent, therefore able to manage their time effectively. Further it was noted that the issue of socialization of young adult was a concern to many. Nevertheless, this can be dealt with by involvement of professional qualified support staff in the regions where study centres are to be established. Majority of educational officers in Western Region of Kenya still harbour the notion that distance learning is about independent learning or self study which has now evolved to technology mediated education, accompanied by institutionalized support services. It is therefore, important for the Government to raise educational managers' awareness about DE through relevant training, seminars and other deliberate initiatives. This provides an explanation as to why some distance learning programmes are not currently cost effective due to large numbers required for economies of scale to be realized.

5.4 Discussions of the Research Findings

This section covers discussions of the research findings based on research objectives. The first objective of the study was to establish the extent to which personal characteristics of educational managers influenced their support for DE mode of learning. The data in the study indicated that most personal characteristics of educational managers influenced the support they accorded to DE mode of learning. The characteristics included in the study included: Gender, Position held, working experience, educational background and subject specialization. All these characteristics were proofed to be influencing educational manager support for DE mode of learning a part from gender. One notable finding was that though some studies have showed that DE mode of learning is not preferred for some subjects especially physical sciences (Gakuu, 2006), educational managers who had
specialized in sciences were more supportive (59%) than those who had taken humanities (46.8%) See Table 4.9. This could be attributed to the fact that DE programmes for humanities have been in existence in Kenya for a long period compared to science programmes. This could be in support of content theory of motivation (Maslow,) which state that satisfied need is no longer satisfying and that once one level of need is satisfied the next level need is activated. Further the study never sought to find out whether the managers were in support of the mode in regards to specific subjects therefore the study was general. It has been reported that some lecturers may be biased when it comes to specific subject such as sciences. According to Stewart, Keegan and Holmberg (1988) academics believe that DE can only succeed in areas considered to be minor.

The second objective was to assess the extent to which the level of awareness of the educational managers about DE, influenced their support for DE mode of learning. The result from this study revealed that awareness influenced the support for DE. 59.1% of those who indicated that they were aware of DE mode of learning, were supportive of the mode compared to 40.9% who were not supportive (Table 4.14). This result agrees with other studies in the area though they used different methodologies and targeted different populations (Gakuu, 2006; NEA, 2000; Inman and Kerwin, 1999; Heath, 1996; Clark, 1993; Betts, 1998 and Omalley, 1999). These studies dealt with lecturers who had participated in teaching using DE mode of teaching, however, this study viewed educational managers as supervisors of teachers who had graduated from various modes of study. A study by Seibold (2007) which sought to compare employers decision to employ or not to employ
graduates from DE or traditional mode, indicated that personal experience influenced their decisions, the current study therefore also agrees with Seibold results.

Elsewhere studies have showed preference for graduates from conventional system as opposed to graduates from distance mode include Adams and Defleur (2005) where 98% of the 109 employers surveyed preferred to hire candidates with traditional degrees. Adams and Defluer in 2006 undertook a national polling of hiring executives. \( n = 269 \) and found out that 75% preferred applicants with a traditional degree. According to Vagt (2001), a survey conducted by New York City based employment research web site, showed that most employers (54%) favoured job applicants with traditional degree over those with DE acquired degrees; however, 45% indicated that they would give job candidates with both types of degree equal consideration. Results of the study by Flower and Baltzer (2006) largely confirmed the earlier hypothesis that most employers preferred hiring graduates from conventional system of education as opposed to graduates from DE mode of learning. A later study by Defleur and Heald (2007) considering acceptability of degree acquired through distance mode in health sector, 95% of the employers considered preferred applicant with a traditional degree as opposed to applicants with a degree acquired through distance mode. The study further revealed that 29% would select a candidate with a hybrid degree where half of the courses were taken through distance and the other half through traditional system. Seybold’s study (2007) applying qualitative approach and considering employers from five different industries, confirmed that traditional degrees are viewed to be more superior than degrees acquired at a distance. The acceptance of DE of delivery could be in line with the adoption theory which argue that for a product to be acceptable there is a process that need to be followed from
awareness stage, followed by comprehension stage, attitude formation stage, legitimation stage and finally trial stage and continuous use of the product or service (Robertson, 1971).

The third objective of the study was to establish how attitudes of educational managers influenced their support for DE mode of learning. Multi dimensions approach of attitudes of DE was considered covering various aspects of distance education these, included, the costs of DE, the quality of DE, students satisfaction (time or convenience) and entry criterion to DE programmes (Table 4.26). The study showed that attitudes of educational managers influenced their support for DE mode of learning. The correlation coefficient and regression results indicated a weak relation, this is in support of the theory of reasoned action by Fishbein and Ajzen (1975) which suggested that behaviour is influenced by both attitudes towards the behaviour as well as other subjective norms such as willingness to comply with attitudes of relevant others. This explains the reason why people say one thing and do a totally different thing (Lapiere, 1934). A study by Ofaha and Awe on perception of academics on quality assurance of academic programmes at the national open university of Nigeria, support earlier result by establishing that though 70% of the respondents in the study were supportive of distance learning programmes offered by National Open University of Nigeria, only 42.5% indicated willingness to recommend and encourage their relatives to study in NOUN. The support for DE mode of learning could be influenced by other situational factors such as scarcity of certain category of personnel and other prevailing circumstances as well as attitudes. It is also believed that the attitudes of relevant others plays a major role in determining individuals
behavior. Perhaps, this explains the low enrollment for DE programmes despite the availability of such programmes in both public and private universities. From the findings, 80% of the respondents indicated that DE programmes were not appropriate for learners who were direct from secondary schools. The major reason mentioned was that such students still require very close monitoring and counseling. Though such reasons were given they are not convincing given that those students that are admitted to conventional modes in the universities, rarely receive such services despite existence of the office of dean of students. This therefore contradicts the aim of distance education which is to make education accessible to those who qualify regardless of their age, income, geographical, racial or health disparities.

The study revealed that 80% of the respondents believed that DE was only suitable for mature learners who are autonomous and self disciplined which is in support of theory of independence and autonomous (Moore, 1973 and Titmus, 1989). The argument put across was that young adults need to work under close supervision of teachers and dean of students. This however is just an assumption that this is what happens with fulltime students at the universities. Though this is the ideal situation it never happens in actual sense due to large numbers involved and possibly university structures. Time management was also identified as a problem to young adult direct from secondary schools this however could be solved through introduction and enhancement of regional study centre to allow fulltime learning by students from the region.
5.5 Conclusions of the Study

From the study results the following conclusions can be made.

Demographic factors of the educational managers influenced the support that they accorded DE mode of learning. These factors included position held by the educational managers, professional qualification, working experience and subject specialization. Gender of the educational managers did not have any significant influence on their support to DE mode of learning.

Attitudes of educational managers in Western Region of Kenya towards DE mode of learning, was generally positive and these attitudes influenced their support for DE mode of learning. Despite the positive attitudes towards DE and the support accorded to DE mode of learning, many educational managers were hesitant to enroll their students or children on DE programmes for fear of lack of information about policy covering DE programmes. Those who stated that there was no information on DE policy were 400 or 66% of those sampled. This was a surprise given the fact that the participant of the study were all educationist. The educational managers expressed lack of financial support from the Government. It is as a result of these that distance education programmes have been said to be increasing access rates of those who are already involved in traditional education environment. This therefore means increasing access but not necessarily broadening of education which should be the aim of distance education. As far as attitude was concerned almost half of the respondents were positive towards the DE mode of learning, while the other half were negative about the mode. However, it has been revealed that the respondents were not negative about the philosophy of distance
education per se, but they were against the malpractices associated with DE mode which include default in admission process, Examination process and the quality and availability of learning materials for distance learners. This shows that the respondent were skeptical about flexibility and openness of DE mode of learning rather than the philosophy of distance education. Further 488(80%) indicated that DE mode of delivery was only appropriate to adult learners who can work independently manage their time well and are already socialized.

The level of awareness of Educational managers about DE mode of learning was proved to be having significant influence on their support for DE mode of learning. Some conceive DE to be the traditional adult education aimed at dealing with illiteracy amongst the adult, while some conceive DE as education meant to enable those who failed to join Universities in their first attempt pursue university education in their second attempt. This therefore calls for immediate action by the training institutions to revise their teacher education curriculum to include DE units, since this is a mode that is already being used in pure distance modes as well as in conventional modes, though without the consent of the users. This is likely to eliminate the misconceptions and misunderstanding that exist amongst education managers' and consequently other education stakeholders.

5.6 Recommendations

Following the findings and conclusions of the study the following recommendations were made:
1. Universities and other institutions training teachers and other education officers should introduce compulsory DE course units in their syllabus aimed at exposing students, especially those taking educational courses in DE mode of learning, exposing them to its applicability and its suitability. This will increase the level of awareness about DE amongst educators which has proved to have significant influence on support offered by DE mode of learning. These graduates, hopefully, will in turn advise their students and general public on availability of D.E mode of learning options at the universities, its strengths and weaknesses. Awareness creation will increase support for D.E and therefore increase demand for DE. This will in turn lead to reduction in competition for face-to-face mode which seems to be the only approved and highly appreciated mode of learning in Kenya as per now. When offered the option of DE as a means of pursuing their quest, students can choose solely on the merits, demerits and quality of the program offered, without fear that DE will hinder their employability. There is need for an official notification, clarifying the issue of recognition of academic qualification earned through distance mode for the purpose of employment.

2. The government should also show its commitment to DE mode of learning.

A clear policy by the government on the quality of distance education programmes need to be developed. Debate exists concerning the quality of graduates from DE programmes, but the government of Kenya seems to have been quiet about this. It is therefore important for the government to develop a policy statement disapproving or approving DE Programmes. A policy statement on the quality of DE graduates will give confidence to the training institutions as well as prospective students. This will lead to the increase
in enrollments, thus benefiting from economies of scale which will translate to lower unit cost. The saving will be of beneficial to both the students and the country as a whole.

3. The government should establish and fully support one institution of higher learning to offer DE Programmes. This will reduce the cost of education as a result of the benefits of economies of scale. As observed earlier public Universities offering programmes through distance mode, operate in isolation, resulting in operational problems such as unnecessary competition, lack of support for each other and unnecessary duplication of activities. If support was given to institutions with comparative advantage in various disciplines, it would lead to increased enrollment due to reduced competition, improved quality and reduced costs associated with economies of scale. Economies of scale bring about lower unit costs and which in turn will be beneficial both to the students through lower charges per unit translating to reduced fees and to the Government, through saved government revenue. Economies of scale are cost advantages that a business or institution can exploit by expanding their scale of production. If single learning institution was established, then the institution would benefit from technical economies of scale, where the institution can invest in expensive and specialist capital, financial economies of scale, division of labour economies of scale and also marketing economies of scale. All these economies of scale are applicable to DE offering institutions because of the production and distribution of learning materials involved, all of which follow the normal production process. Thus, an institution benefits when it purchases its inputs in bulk at negotiated discounted prices, since a large institution has sufficient negotiating power in the market. Likewise, the
machine used in production will also be put into maximum use while finance will also be made available from financial institutions at discounted rates.

4. The government should establish a quality assurance organ to monitor institutions that are coming up to offer programmes through DE mode, yet they have neither the expertise nor the capacity to offer programmes through such elaborate and involving systems as required, thus ending up lowering the quality of education offered. This would lead to change of attitudes towards DE mode of learning which is sometimes viewed as a “step brother of real education”.

5. Collaboration with other people, stakeholders the public private organizations and other countries, should be encouraged to participate in order to benefit from experiences in the implementation and use of modern technology at the higher education institutions. A national information and communication technology infrastructure for networking of ODE institutions should be created. This is likely to enable both the institutions and individual learners to benefit from economies of scale in terms of lower unit costs. The training institutions should also sensitize other stakeholders about DE learning processes, values and philosophy of DE since for any innovation to be successful; it must fit the local scene and be perceived as belong to those it affects.

6. The issue of learners' socialization emerged as one of the factor influencing educational managers' support for DE, especially for young adults direct from secondary schools. This can be circumvented by strengthening of the study centre and staff them
with qualified counselors that would assist in socializing the students. This calls for collaborative effort of the service providers.

5.7 Suggestion for Further Research

This study has revealed that awareness about DE mode of learning, personal characteristics, and attitudes of educational managers in Western Region of Kenya, all influence their support for DE mode of learning, since the study covered formerly Western province now Western Region. It is recommended that similar studies covering other regions be undertaken for comparison purposes.

The study should be replicated in the same region applying different methodologies, this is justified by the nature of some of the constructs measured in the study, though every measure was taken to ensure validity and reliability of the instruments' used, weaknesses such as acquiescence, error of leniency and socially desirable biasness associated with measurement of attitudes and support, could not be completely be eliminated. Analysis of Variance technique could also be used to tests variance of attitudes of various groups of people.

The variables measured in the study such as personal characteristics, level of awareness and attitudes of educational managers, varies with time thus can not be measured by a one time measurement. It is therefore recommended that a longitudinal study be conducted to reveal the trend of attitudes and support offered by educational managers to DE mode of learning, this information would be useful for informed decisions.
Further research need to be conducted to compare work performance of graduates from conventional mode of learning and DE mode results of which may be used to suggest areas of improvement, to legitimize or illegitimate DE mode of learning which is in most cases considered as a second rate education or peripheral of the main stream education system.

A comprehensive comparative study of academic performances of graduates of the conventional mode and of DE mode of training, need to carry out at post graduate level to establish the influence of the mode of study on future achievement of a learner. DE mode of training is normally viewed with a lot of suspicion, possibly due to lack of empirical evidence, therefore, availability of such information may clarify the matter to the stakeholders.
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LETTER OF TRANSMITTAL

JOHN MBUGUA,
UNIVERSITY OF NAIROBI,
P. O. BOX 92,
KIKUYU.

TO THE RESPONDENTS,
The researcher is a PHD student at the University of Nairobi investigating the factors that influence educational managers' support to distance mode of learning in western Region of Kenya. You have been randomly selected to participate in this research.

The study will involve completion of a questionnaire as well as an interview in which your views about various distance education issues will be sought. Your views will be held strictly confidential and will not be divulged to anybody. The information you provide in this study will be used for purposes of academic work however the government may use the research findings to make policy decisions such as admitting students under distance education mode direct from form four. In case of any question(s) concerning this study please call me through telephone number 0733-770304

Thank you in advance for the valuable information you will provide as well as for your time.

JOHN M. MBUGUA,
LECTURER,
UNIVERSITY OF NAIROBI.

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APPENDIX II

QUESTIONNAIRE FOR SECONDARY SCHOOLS PRINCIPALS/DEPUTY PRINCIPALS AND HODs (sciences, humanities and a career masters)

SECTION A

General Instruction:

Below are some Questions to do with your profile please answer them as honest as possible. Your name is not required

In items where options are given, use {✓} to select the most appropriate response(s).

1. Please indicate your gender by marking ✓ in the box provided
   Male [ ] Female [ ]

2. In the box provided mark ✓ the box that best describe your Official position
   [ ] Principal [ ] Deputy Principal.
   [ ] M.EO [ ] H. O.D

3. Indicate your working experience
   [ ] 5 years and below
   [ ] 5 – 10 years
   [ ] 10 – 15 years
   [ ] Above 15 years
4. Please indicate your educational background.

Diploma in Education  
Approved graduate teacher  
B. Ed  
Masters of Education  
Any other please specify ______________________________

5. Please provide information concerning your post secondary training institution or institutions in the box provided below.

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<tr>
<th>Institution</th>
<th>Country</th>
<th>Mode of Study</th>
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6. Have you ever participated in any distance education activity?

7. Would you like to participate in D.E. Activity? If yes, in what capacity?
   a) A trainee
   b) A trainer
   c) Any other specify

8. Would you like to be trained, through distance learning mode?
9. Would you encourage your child, a relative or a friend to enrol for a course offered through distance mode?

Highly encourage □
Encourage □
Discourage □
Highly discourage □

Please indicate your area of specialization.

☐ Sciences  ☐ Languages
☐ Humanities  ☐ Any other please specify.............................

SECTION B

Please indicate by √ (tick) the option that best suit your opinion in regards to Distance Education.

The numbers represent the following responses.

1 = strongly disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = strongly agree

1. Only qualified candidates are considered for admission in DE programmes.

2. Syllabus coverage in Distance Education is adequate
3. Teaching methods (procedures) in Distance Education is satisfying
   5 4 3 2 1
   [Blank]

4. Cheating is common under Distance Education mode of learning
   5 4 3 2 1
   [Blank]

5. Impersonation is likely to take place in DE mode of learning.
   5 4 3 2 1
   [Blank]

6. Feedback to student pursuing Distance Education programme is not possible
   5 4 3 2 1
   [Blank]

7. Time allocated for each course unit is adequate
   5 4 3 2 1
   [Blank]

8. DE mode of learning is only appropriate for working class people.
   5 4 3 2 1
   [Blank]

9. Cost of training under Distance Education is cheap
   5 4 3 2 1
   [Blank]

10. Unqualified candidates end up being admitted under DE mode of learning.
    5 4 3 2 1
    [Blank]
11. Candidates/students enrol in DE programmes as the last result

12. DE is only useful to mature learners who can not fit in other programmes.

13. There are adequate control measures to prevent cheating in examinations in DE programmes

14. Graduates of DE programmes are equally qualified.

15. Assignments and CATs under Distance Education programmes are marked and Feedback provided.

16. No learning programme can be said to be complete without some elements of face to face interaction.

17. Progress records can be maintained under Distance Education programmes without interference

18. Distance Education mode of education is cost effective
19. Admission to Distance Education is open to majority of qualified candidates.
   
20. Curriculum covered is relevant and up to date just like for face to face
   
21. Teaching methodology applied in Distance Education mode are effective.
   
22. Evaluation methods used under Distance Education programmes are appropriate.
   
23. It is possible for a student who has not satisfied the examiners to graduate under
   Distance Education programme.
   
24. Materials for learning are not available.
   
25. No much time is wasted in the course of the study.
   
26. Students pursuing Distance Education programmes access their progress records
   any time.
   
Distance Education mode of learning is economical.
SECTION C

Please tick the option that best suite your opinion. N.B.

Highly agree = 5
Agree = 4
Not sure = 3
Disagree = 2
Highly disagree = 1

1. Students /employees who have enrolled in Distance Education mode of learning should be given time off to concentrate with studies.

2. The employers should be permitting registered Students for Mode DE of learning to attend Residential Sessions held during school holidays.

3. Graduate from DE mode of learning should be treated the same way as others in regards to employment promotions and other matters.

4. Less work load should be allocated to employees who are registered students under DE mode of learning.

5. Form 4 leavers who qualify to join University should be encouraged to join DE mode of learning.

6. The government should allow students registered in DE mode of learning benefit from HELB.
7. The government should provide financial support to institutions offering education through DE mode of learning.

8. Bursary should be made available to students pursuing various programmes through DE mode of learning.
APPENDIX III
INTERVIEW GUIDE

The following interview guide was used to solicit information from Secondary schools Principals, Deputy Principals and HODs. (Sciences, Humanities and Career Master)

1. Given two graduates one from conventional mode of learning and the other from Distance mode whom would you recommend for employment?
   Please give reasons.

2. What recommendation would you give to institution training students through Distance Education mode?

3. (a) Which of the following statement best describe your recommendation to a friend or a relative to pursue a course through distance mode of learning?
   □ Strongly recommend
   □ Recommend
   □ Strongly not recommend
   
   b) What factors would you consider as the most important in making your decision in 3. (a). Start with the most important.

4. What recommendations would you give to the government concerning distance education mode of training?
   Please give reasons.
5. Does a distance degree carry as much credibility with you as a degree obtained in a traditional manner?  □ Yes  □ No

Please give at least three reasons.

6. Do you think DE is appropriate for a student who is direct from school

   Yes □  No □

   Please give reasons.

7. What do you understand by the term Distance Education

8. Given opportunity between Distance education and traditional education mode of learning which mode would you prefer for your child?

   Please give reasons.

9. During assembly meetings and other meetings with students how often do you discuss other modes of learning available to your students on completion of their current level?

   (a) Very often. □

   (b) Often. □

   (c) Rarely □

Thank you so much for your time and cooperation.
APPENDIX IV

QUESTIONNAIRE FOR DEO/DDEO/DQASO/ DDQASO

SECTION A

General Instruction:

Below are some Questions to do with your profile please answer them as honest as possible.

In items where options are given, use {√} to select the most appropriate response(s).

1. Please indicate your gender by marking √ in the box provided
   Male □   Female □

2. In the box provided mark √ the box that best describe your Official position
   □ DEO   □ DQAO, Principal
   □ DDEO
   □ QAO
   □ M.EO

3. Indicate your working experience
   5 years and below □
   5 – 10 years □
   10 – 15 years □
   Above 15 years □

4. Please indicate your educational background.
   Diploma in Education □
   Approved graduate teacher □
   B. Ed □
Masters of Education

Any other please specify ________________ □

5. Please provide information concerning your post secondary training institution or institutions in the box provided below

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   c) Any other specify

8. Would you like to be trained, through distance learning mode?

9. Would you encourage your child, a relative or a friend to enrol for a course offered through distance mode?
   Highly encourage □
   Encourage □
   Discourage □
   Highly discourage □
Please indicate your area of specialization.

- □ Sciences
- □ Languages
- □ Humanities
- □ Any other please specify

### SECTION B

Please indicate by √ (tick) the option that best suit your opinion in regards to Distance Education.

The numbers represent the following responses.

1.  = strongly disagree
2.  = Disagree
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2. Syllabus coverage in Distance Education is adequate

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3. Teaching methods (procedures) in Distance Education is satisfying

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4. Cheating is common under Distance Education mode of learning

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5. Impersonation is likely to take place in DE mode of learning.

6. Feedback to student pursuing Distance Education programme is not possible

7. Time allocated for each course unit is adequate

8. DE mode of learning is only appropriate for working class people.

9. Cost of training under Distance Education is cheap

10. Unqualified candidates end up being admitted under DE mode of learning.

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24. Materials for learning are not available.

25. No much time is wasted in the course of the study.

26. Students pursuing Distance Education programmes access their progress records any time.

Distance Education mode of learning is economical.

SECTION C

Please tick the option that best suite your opinion. N.B.

Highly agree = 5

Agree = 4
Not sure = 3
Disagree = 2
Highly disagree = 1

1. Students /employees who have enrolled in Distance Education mode of learning should be given time off to concentrate with studies.

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7. The government should provide financial support to institutions offering education through DE mode of learning.

8. Bursary should be made available to students pursuing various programmes through DE mode of learning.
APPENDIX V
INTERVIEW GUIDE

The following interview guide was used to solicit information from DEOs, DDEOs, DQASOs, and DDQASOs

1. Given two graduates one from conventional mode of learning and the other from Distance mode whom would you recommend for employment?

Please give reasons.

2. What recommendation would you give to institution training students through Distance Education mode?

3. (a) Which of the following statement best describe your recommendation to a friend or a relative to pursue a course through distance mode of learning?

- [ ] Strongly recommend
- [ ] Recommend
- [ ] Strongly not recommend

b) What factors would you consider as the most important in making your decision in 3. (a). Start with the most important.

4. What recommendations would you give to the government concerning distance education mode of training?

Please give reasons.
5. Does a distance degree carry as much credibility with you as a degree obtained in a traditional manner?  
   □ Yes  □ No
   Please give at least three reasons

6. Do you think DE is appropriate for a student who is direct from school?  
   □ Yes  □ No
   Please give reasons.

7. What do you understand by the term Distance Education?

8. Given opportunity between Distance education and traditional education mode which mode would you prefer for your child?  
   Please give reasons

9. In line of your duty have you noted any disparity between work performance of Graduates from DE mode and face to face mode?  
   Please give reasons for your answer in question no.9

   Thank you so much for your time and cooperation
During the recently concluded teacher recruitment exercise, the Commission noted a shortage of teachers for History, CRE, Geography and Kiswahili in the market.

To address this problem, the Commission has decided to allow S1 teachers with 'A' level who were previously deployed to primary schools to transfer back to secondary schools.

The purpose of this circular is to request you to identify teachers of this category who are willing to be deployed to secondary schools.

Submit the lists using the attached format to the Deputy Secretary (Staffing Post Primary) by 31st January, 2011.
To:
ALL: ASO'S/TC TUTORS/DICE/EARC
ALL: HEADS OF SECONDARY/PRIMARY SCHOOLS/TEACHERS

RE: SCHOOL BASED STUDY PROGRAMME

Attention is drawn to all Teachers Service Commission employees engaged in the above study programme within and outside the country to take note that:

1. Those studying outside the country must apply for leave over the holidays to the Secretary Teachers Services Commission through the District Education Officer copied to the Provincial Director of Education with immediate effect before the December holidays. Failure, you will be treated to have DESERTED DUTY.

2. Those studying within the country must apply for leave to the District Education Officer through the Heads of Institutions for Assistant Teachers, Principals and heads of Secondary Education Officers' direct, copy to Provincial Director of Education with immediate effect. Failure, you will be treated to have DESERTED DUTY for the holidays you have gone away for studies.

Note: on the application, attach three copies of the admission letter from the institution and specify the duration of the COURSE.

Kindly treat this as MOST URGENT as the list of those TSC employees on school based study programmes is being compiled to be forwarded to the Secretary Teachers Service Commission to confirm those illegally on the programme by the end of September 2009 (title of the leave - SPECIAL LEAVE-SCHOOL BASED PROGRAMME)

H. N. JUMA
FOR: DISTRICT EDUCATION OFFICER
MUMIAS DISTRICT

CC: Teachers Service Commission
Private Bag
MAMBIKAT

The Provincial Director of Education
P.O. Box 137,
KAKAMEGA
THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Miss/Institution

John Mwaura Mbugua
of (Address) University of Nairobi
P.O.Box 30197-00100, Nairobi

has been permitted to conduct research in:

on the topic: Factors influencing educational management's support for distance learning mode of delivery: The case of Western Region, Kenya


Research Permit No. NCST/RCD/14/2012/1498
Date of issue: 26th October, 2012
Fee received: KSH. 2,000.
RE: RESEARCH AUTHORIZATION

Following your application for authority dated 22\textsuperscript{nd} October, 2012 to carry out research on "\textit{Factors influencing educational manager's support for distance learning mode of delivery: The case of Western Region, Kenya}," I am pleased to inform you that you have been authorized to undertake research in Western Province for a period ending 31\textsuperscript{st} December, 2012.

You are advised to report to the District Commissioners and the District Education Officers, Western Province before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

DR M.K. RUGUTT, PhD, HSc.
DEPUTY COUNCIL SECRETARY

Copy to:

The District Commissioners
The District Education Officers
Western Province.