Factors Affecting Implementation of Free Day Secondary Education in Kitui- West and Matinyani Districts, Kitui County, Kenya

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DECLARATION

I declare that this thesis is my original work which has been achieved through personal reading and research and has not been submitted to any other university or institute of learning for any academic credit. All references used in this thesis have been acknowledged.

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DEDICATION

This work is dedicated to my late grandmother Francisca Kasai who brought me up and gave me a good Christian foundation. May God rest her soul in eternal peace. It is also dedicated to my parents Patrick Musewa and Christina Temea who took me to school and ensured I pursued education.

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ABSTRACT

The purpose of this study was to explore factors affecting implementation of Free Day Secondary Education in Kitui-West and Matinyani districts, Kitui County, Kenya. The study was guided by five research questions: What is the status of infrastructural facilities in day secondary schools of Kitui–West and Matinyani districts?; To what extent are the teaching and learning resources provided in day secondary schools in Kitui-West and Matinyani Districts?; What is the trend in enrolment levels in day secondary schools in the Kitui-West and Matinyani Districts?; What challenges face the implementation of free day secondary education in Kitui-West and Matinyani Districts?; What can be done to improve the implementation of Free Day Secondary Education in Kitui-West District and Matinyani?. The researcher used descriptive survey design from quantitative research paradigm as the main design, complemented by naturalistic research design from qualitative research paradigm, to study factors affecting the implementation of free day secondary education in Kitui-West and Matinyani districts of Kitui County. The study targeted all students, all teachers and all principals plus two DEOs in Kitui-West and Matinyani districts. The population of study was 31 schools in the districts where 292 participants took part. A sample of 10 schools, 10 head teachers, 40 teachers and 240 students plus 2 DEOs was included in the study. Sampling was done using stratified, systematic and simple random sampling techniques. Data was collected using questionnaires on students and teachers, interview schedules were used to get information from principals and DEOs, as well as observation checklists to collect the required information from each school and from two DEOs. Data was analyzed using SPSS version 17.0. Qualitative data was organized thematically after which the information was coded while descriptive statistics like frequencies, mean and percentages was used to present quantitative data. The findings of the study were that, there were inadequate infrastructural facilities such as electricity, classrooms, desks and chairs, toilets and playing fields for all students in day secondary schools, which seriously affected implementation of FDSE. The state of infrastructural facilities needed to be upgraded to an acceptable standard level. Free day schools were experiencing serious teacher shortage which made Boards of Governors hire BOG teachers to cushion the shortages and a big number of teachers hired in most day schools were not fully qualified which is likely to water down the quality of education given to the students. Computers are not yet in use as teaching and learning resources in most schools due to lack of electricity which has not yet reached the areas. Poverty is a major challenge threatening the implementation of the FDSE. The researcher recommended that, the government should employ more qualified teachers, schools need to be equipped with adequate facilities and state of those available urgently upgraded to an acceptable level to accommodate increasing numbers. The FDSE funds capitation per student should be doubled from the current ksh10, 625/-,be fully funded by the government and be disbursed in time before schools open every term for better running of the schools and to make it more beneficial to poor Kenyans. Parents and stakeholders should be more involved to address absenteeism and other indiscipline.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS AND ACRONYMS

ASAL	-	Arid and Semi Arid Lands
DEO	-	District Education Officer
FPE	-	Free Primary Education
FDSE	-	Free Day Secondary Education
GOK	-	Government of Kenya
KU	-	Kenyatta University
MDGs	-	Millennium Development Goals
NER	-	Net Enrollment Ratio
SSA	-	Sub - Saharan Africa
TSC	-	Teachers Service Commission
UPE	-	Universal Primary Education
USE	-	Universal Secondary Education
WB	-	World Bank

CHAPTER ONE

INTRODUCTION

1.1 Background of the problem

Education is an issue of concern in every part of the world due to its private and social benefits to individuals and society. It is viewed as a catalyst to growth and development all over the world. Education enables individuals to recognize their potential for survival in their respective environments. Consequently, both individuals and governments continue to invest heavily in education (Department of Educational Management, Policy and Curriculum Studies, KU, 2011). According to World Bank, (2005) investment in education is beneficial in a multiplicity of ways, both for individuals and for society as a whole. Kerigah (2009) asserts that education impart values, attitudes as well as creative and emotional development, it improves physical quality of life creating healthier families, lowers child mortality and improves the environmental health of communities.

Education is related to improved macro economic performance in the form of higher levels of growth rates through the associated levels of productivity and per capita income at the country level (Lewin & Caillods, 2005). Education aims at enhancing the ability of Kenyans to preserve and utilize the environment for productive gain and sustainable livelihoods (Ngigi & Macharia, 2006).

Secondary education provides a vital link between basic education and the world of work and further training. It is therefore an important sub-sector of education in preparation of human

capital for development and provision of life opportunities (Onsomu, 2006). According to Deen, (2011) an educated population is a country's greatest asset and therefore, there cannot be escape from poverty without vast expansion of secondary education worldwide.

A study by UNESCO established that, secondary education is a minimum entitlement for equipping youth with knowledge and skills they need to ensure decent livelihoods in today's globalised world (UNESCO, 2011). Secondary education has also been shown to contribute to individual earnings and economic growth. It is associated with improved health, equity and social conditions (World Bank, 2005).

At global level education is also recognized as a basic human right. Article 26 of the *Universal Declaration of Human Rights* states that everyone has the right to education and that education should be free, at least at fundamental stages (Bishop, 1989). According to UNESCO (2000), the successive commitments to implementation of this right were agreed by the international community over the years since the declaration was proclaimed in 1948, and in broad terms the progress has actually been made towards its implementation. Secondly, when the universal declaration of human rights was drawn up, only minority of the world young people had access to any kind of education.

Education is also free in many developed countries. For instance, in Britain, education up to secondary school level was fully financed by the government while parents were only required to ensure that children attend school (Moon & Mayes, 1994). At the same time, Denmark, Germany and Ireland as well as Australia have had free education at all levels while in Japan; the

government fiscal policies provide free education up to secondary school level (Easyexpert, 2008).

According to Nyaga (2005) in Nordic countries such as Sweden, education is free to an extent that there is usually no charge for teaching materials, school meals, health services or transport. The Swedish Education Act ensures that all children and youth have equal access to education up to secondary school level. Children of school going age have no option other than attend school to acquire education which is entirely funded by the government. In addition, the US federal government supports public education through power given by the constitution welfare clause, Article 1 section 8 to levy taxes and collect revenues for the support of education. In a number of developing countries, efforts have been made to provide free education. According to BBC News (2011) in Brazil, education is offered by the Ministry of Education while in Sri Lanka free education is provided by the government at different levels.

According to UNESCO (1996) during the independence era almost all countries in the Caribbean introduced free tuition policies in secondary education where countries varied in the free provision of text book, payment of examination fees and other school related expenses. Education is in form of grants and scholarships to students and may cover all or most of the student's expenses at school in countries like Greece and Argentina which provide the education at all levels, including college and university (Blurtnt, nd). Free education also exists in majority of countries in South America like Bolivia, Brazil, Cuba, Mexico, El Salvador and Panama (Katarina, 2006).

According to (UNESCO, 2008), Philippines guarantees citizens quality education through the Free Secondary Education Act which reaffirms the policy of the state to protect and promote the rights of all the Filipinos by providing children free four years of secondary schooling for those aged 12 and 15 years and compulsory education in high school level. Ngware et al (2007) content that in Costa Rica free secondary education is guaranteed to citizens as stipulated in the country's constitution.

In sub-Saharan Africa free education had not begun in many countries by 2000 (UNESCO, 2000). Since the world wide Education For All (EFA) process was initiated in Jomtien in 1990, the significant priority has been given to primary education in many sub–Saharan countries. International donors, development leading institutions as well as national policies have tended to focus most heavily on the first years of schooling. This was a necessary and significant development. However, one of the consequences is that other levels of education, mainly secondary education have escaped attention (World Bank, 2008).

Most governments in sub – Saharan Africa are intending to extend free education to secondary schools, yet they are under severe budget constrains occasioned by the global recession (Ohba, 2009). As we approach 2015, the year when international community pledged to attain the target of Education for All (EFA) and the Millennium Development Goals (MDGs), many governments, particularly sub–Saharan Africa (SSA), are considering abolishing school fees for secondary education. This is due to the domestic and international demand to achieve EFA and MDGs (Ohba, 2009). Many have therefore planned to abolish secondary school fees as a major obstacle to some children to access secondary education. It is against this background that African

countries such as Kenya have made efforts to expand secondary education.

In Kenya, provision of quality education and training has been a central policy issue since independence in 1963. This is due to increasing demand for more education for a fast growing population as well as provision of quality education, training and research as a human right for all Kenyans as per the law and international conventions (IPAR, 2008). According to Ohba, (2009) Kenya committed itself to free secondary schooling from 2008. The politics of aspiration coupled with pressures for access, arising from increased flows of primary generated policy which led to free day secondary commitment to achieve a 70 percent transition rate from primary to secondary by 2008, from 47 percent prompted the government to introduce free secondary education.

It was also introduced out of a study by the ministry of education on behalf of the government on the possibility of implementing free secondary education and also because free secondary education was one of the presidential campaign manifesto (Ohba, 2009). In 2006, there were approximately 4,000 public secondary schools compared to 220,229 public primary schools with a total enrolment of 1.17 million children of secondary school going age. This translated to Gross Enrollment Ratio (GER) and Net Enrolment Ratio respectively (NER) of 32 percent and 23 percent respectively (IPAR, 2008).

Kibua et al (nd), in Education sector report 2007/2008 noted that the sector has set a target of transition of 80 percent from primary to secondary schools by 2009 from 70 percent with enrollment doubling from 1.17 million students in 2007 to about 2.8 million in 2012 and tripling to 3.51 million by 2015. The increase in high school enrolment has been hindered by high cost of

secondary education. In recognition of the problem the government officially launched the Free Day Secondary Education (FDSE) programme at the beginning of 2008. When the former president Kibaki launched the programme, he indicated that the Kenya government will pay tuition fees for students while parents will meet boarding costs for their children (Republic of Kenya, 2008).

The objectives of the FDSE are: First to enable academically qualified children gain access to secondary education. Secondly, it was to ensure that children from poor households have a quality education that enabled them gain access to opportunities for self advancement and become productive members of society (Kibaki, 2008).Thirdly, the programme aimed at making secondary education affordable when the government disbursed funds on per capita basis of ksh.10, 625 per child annually to cater for tuition fees and operations costs for all students in public secondary schools.

In spite of efforts by government to provide free secondary education the initiative has encountered many problems. First, there has been a growing concern on delays in disbursement of funds by the government of Kenya and the adequacy of the funds to public schools. Secondly, the government disbursement of funds has led to increased enrollments which have generally raised concern on status of infrastructural facilities in secondary schools. Thirdly, there is a growing concern on increased student – teacher ratios and the quality of the secondary education being offered. For instance, the recent government efforts to introduce subsidized secondary education programme has led to influx in enrolment in schools which has raised concerns about student-teacher ratio in schools (Nekesa, &Sirima, 2010). There are reports of increasing high dropout rate

of some students due to hidden costs not being covered by the government, such as uniform, development fund and transport costs (Ohba, 2009). In spite of these factors, the researcher was interested in finding out if the factors highlighted were the same factors affecting implementation of FDSE in Kitui-West and Matinyani districts. Due to all these concerns facing the free day secondary education in Kenya there was need to study the factors affecting the implementation of FDSE in Kitui-West and Matinyani Districts. The two districts are being studied because the researcher began the study when it was one district (Kitui-West) but it was split into two in the process of the study.

1.2 Statement of the problem

The Kenyan education sector has faced serious challenges over the years particularly those relating to access, equity, quality and relevance (MOE, 2006). In 2008 the Kenyan government introduced Free Day Secondary Education in an effort to improve access, equity, participation and quality.

According to Ngware (2007) implementation of Free Day Secondary Education (FDSE) was expected to increase access to secondary education by providing free tuition while relieving the cost burden to parents. A study by Oyaro, (2008) indicate that, five years after Kenya began offering free primary schooling to all the country's children, the education system is still struggling to adjust to the influx of students even as it absorbs yet another surge of students attracted by its offer of FDSE. Therefore, there are not adequate Form I places to cater for increasing primary school leavers.

. To overcome the problem of infrastructure in schools the Government through the Ministry of education (MOE) sends funds to some selected schools. However, this raises concern on whether the funds are enough to build and complete classrooms and therefore boost implementation of free day secondary education or not.

According to literature (Government of Kenya, 1999) the Kenya Government has tried to give bursaries and relief food to retain students in school, but dropout cases have persisted in various parts of the country. The problem is rife particularly in ASAL regions such as Kitui owing to persistent drought in the area which has always led to famine caused by perennial crop failure. Kinjo, J. (*Personal communication*, 15th June, 2012) in a recent Parents'/prize giving day, in one of the schools, the District Commissioner Matinyani District, expressed concern about chronic absenteeism.

A review of literature has shown that limited research has been done on the issue of implementation of FDSE in Kenya. For example Machila (2005) has focused on implementation of free primary education where he identified factors affecting FPE in Taita Taveta district. Ohba (2009) did a study in rural Makueni on whether free secondary education enabled the poor to gain access. However, the study was concerned on access pegged on affordability but not factors affecting implementation of free day secondary education such as level of provision of infrastructural facilities, teaching and learning materials and enrolment levels.

A review of literature indicates that although a number of researches have been undertaken on the subject of free education in Kenya, none has directly focused on the issue of FDSE in Kitui-

West and Matinyani Districts. At the same time, in order to improve the implementation of FDSE, there is need for extensive research data relating to the current status of the programme which will help in policy making and implementation process in all parts of the County. Therefore this study investigated on factors affecting the implementation of FDSE (Free Day Secondary Education) in Kitui-West and Matinyani Districts of Kitui County.

1.3 Research questions

The study was guided by the following research questions.

1. What is the status of infrastructural facilities in day secondary schools of Kitui–West and Matinyani Districts?
2. To what extent are the teaching and learning resources provided in day secondary schools in Kitui -West and Matinyani districts?
3. What is the trend in enrolment levels in day secondary schools in Kitui-West and Matinyani districts?
4. What challenges face the implementation of free day secondary education in Kitui-West and Matinyani Districts?
5. What can be done to improve the implementation of Free Day Secondary Education in Kitui-West District and Matinyani?

1.4 Significance of the study

The findings of this study will be useful in a number of ways. First, the educational policy makers and ministry officials could use the findings of the study to develop appropriate strategies and programmes that will assist in effective implementation of FDSE. Secondly, the research will generate useful data that can be used by school administrators and teachers, to solve the challenges facing FDSE and positively contribute to its successful implementation. The findings will awaken parents and guardians who may not be actively participating in the effective implementation of the program to take their rightful role in ensuring that their children are retained in the schools to exercise their right to education. The findings will enable students realize the benefits accruing from free day education and haste to take the advantage in large numbers. The students will also understand their role in implementation and assist in making the program successful. The findings will provide useful data that can be used by other researchers, educators and students to investigate issues related to the implementation of FDSE in other geographical areas and enhance understanding of the issue in Kenya.

1.5 Scope and limitations of the study

The study was limited to Kitui–West and Matinyani Districts of Kitui County. These districts were one at first but just got split into two as the researcher went on with the study. It focused on public mixed day secondary schools in the districts that are receiving free day secondary education government funds. Although FDSE is being implemented across the country, this study focused on Kitui - West and Matinyani districts due to limitation of time and resources

available to the researcher. The area is unique in that, besides the fact that education was introduced by missionaries in the pre-colonial times many people are still poor and affected by persistent famine caused by crop failure in the semi arid region. There are many issues involved in the implementation of FDSE. However, this study concentrated on a few areas such as infrastructural facilities, teaching and learning resources, enrolment levels, challenges and strategies of implementation of FDSE.

1.6 The theoretical framework

The study was based on Curriculum Implementation Theory that was propounded by Gross (1961). In the theory, Gross advocates five major elements that influence implementation of curriculum, such as availability of facilities, clarity of innovation, implementers' capability, management support and the students and teachers' attitudes on the innovation. This theory states that implementation of any educational programme should take into consideration factors such as facilities, facilitator's capabilities, management support, compatibility with organizational arrangement and clarity of the implementer on what is to be done.

In support of the theory Rogan and Grayson (2003) contend that, the capacity to innovation is an attempt to understand and elaborate on the factors that are able to support or hinder the implementation of new ideas and practices in a system such as a school. Possible indicators of capacity to support innovation fall into four groups: physical resources, Teacher factors, learner factors and school ecology and management.

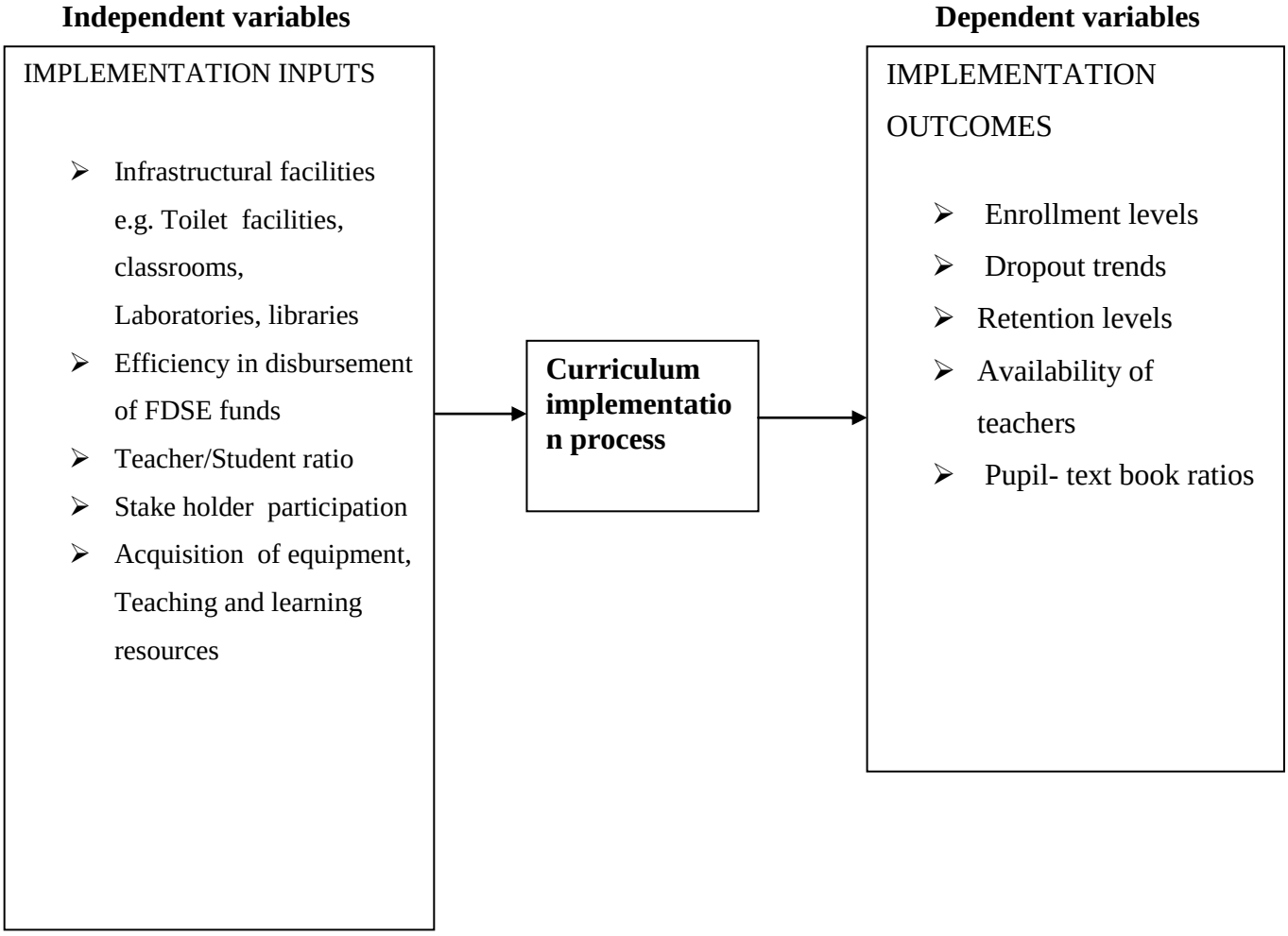
The second factor is the availability of facilities. Gross argues that if the required resources which facilitate teaching and learning such as text books, teachers' guides, chalk, charts, wall maps, science laboratory materials, computers and any other required materials are available, relevant and adequate, then programme will be effectively implemented. Physical facilities like a classroom influence what will take place at classroom level (Rogan & Grayson, 2003). This is because with adequate physical facilities performance is likely to improve. According to Rogan and Grayson (2003) physical resources are one major factor that influences capacity. Poor resources and conditions can limit the performance of even the best teachers and undermine learners' efforts to focus on learning.

Thirdly, on facilitator's capabilities, Rogan and Grayson (2003) contend that, the teachers own background, training and level of confidence, and their commitment to teaching determines effective implementation of curriculum while lack of subject matter and knowledge by teachers is a major problem. The fourth factor is management support. Local administrators must show specific form of support for school management and teachers through for instance, expert consultation and in-service training (Altritcher, 2005). In this case administrators could support program through supervisory activities. For example, principals and their deputies could visit classes to observe use of resource materials during curriculum instruction. In this way, the head teachers could be able to give support by buying more teaching and learning resources after they note that those available are inadequate. The board of governors may support such a programme by approving expenditure to support the free day secondary education.

The fifth factor is clarity of innovation. According to Altrichter (2005) teachers expect that teaching strategies are clearly described and material well thought of. Altricher (2005) as cited in Lutgert and Stephan (1993) have interpreted need for clarity as expression of a feeling of role ambiguity in a situation of uncertainty produced by new challenges of the innovation on one side and partly lacking competencies on the teacher's part. The final factor is the students' and teachers' attitude on the innovation in which Gross argues that, it is an important aspect in curriculum implementation. In this case if teachers have positive attitude towards FDSE, they would easily accept to teach the growing numbers of students in a class to achieve the set goals and objectives. Given that the FDSE has come with increased enrolments, teachers need to have a positive attitude to assist the students to achieve set goals and objectives of the programme. They need to work tirelessly without complaining about the heavy work load to ensure students perform well in their exams despite continued teacher shortage. On the other hand, learners should have a positive attitude of the programme so that they could perceive it as giving them equal education value as their colleagues in boarding schools. This way the implementation will enable them achieve desirable performance.

1.7. Conceptual framework.

Figure 1 depicts the entire structure of linkages in the free day secondary education curriculum implementation process.



Source: Adopted from Gross (1961) with modifications.

In order to address the research questions, a conceptual framework has been created which illustrates the various variables involved in the study. The conceptual framework presented in Figure 1 has been developed to incorporate the variables in the curriculum implementation theory, which has been identified in literature as independent variables that affect the outcome of the

implementation of FDSE. Availability of infrastructural facilities such as classrooms, desks and toilet facilities would improve enrolment and limit drop outs making implementation possible while lack of it would lead to reduced enrolment.

Efficient disbursement of funds would make schools able to hire more teachers to cushion shortage, thus making teachers more available. Efficiently disbursed funds will also increase students' population and improve retention levels as well as reducing students drop out rates; thus, making implementation possible and vice versa. Acquisition of equipment together with teaching and learning resources will attract more students and enable them learn making implementation easy. A high teacher/student ratio would improve implementation as opposed to low teacher /student ratio which would challenge implementation.

Increased stake holder participation like increased parents and community involvement in provision of facilities and playing their rightful roles would improve implementation as opposed to passive participation.

1.8 Operational definitional of key terms

Dropout rate: This is the proportion of students who leave school during the year including those who do not return to school the following school year to the total number of students enrolled during the previous school year.

Dropout: Refers to a student that terminates studies at any stage of schooling before officially completing the required secondary school four years course.

Enrollment levels: Refers to the level at which the number of students who get admitted to school at secondary level as measured by the total number of students irrespective of their class.

Free Day Secondary Education (FDSE): Refers to subsidized public secondary education in Kenya where the government has paid funds to cater for tuition and operation costs in mixed day secondary schools in order to enable the poor access secondary education.

Implementation: Refers to the process of managing of human and non human resources so as to achieve the intended objectives of free day secondary education (FDSE),

Poverty: Is the inability of parents/guardians to pay free day secondary education fees, other school requirements and meet their basic needs such as food, clothing, shelter and health services.

Pupil/Teacher ratio: This is the number of pupils enrolled in a secondary school divided by the

number of secondary school teachers regardless of their teaching assignment.

Retention rate: Refers to the ability of students to remain and progress in schools up to completion of their four years course.

Teacher: Refers to a person registered by TSC in accordance with section seven of the TSC Act 2012 of Kenya, to teach the Kenyan secondary school approved curriculum.

BOG teacher: Refers to a trained or untrained personnel employed by school managers to give curriculum instruction in a secondary school.

Head teacher: This refers to personnel who have been given the mandate by the Teachers Service Commission to head respective schools as administrators. The officer is also referred to as school Principal.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This section is organized in the following themes: Emergence and history of free education; status of infrastructural facilities; extent to which teaching and learning resources are provided; the trend of enrolment levels in day secondary schools; challenges affecting implementation of free day secondary education and; strategies to improve implementation of FDSE Programme

2.2 Emergence and history of free secondary education in Kenya

Free education has its origin in industrialized world. According to Stevens and Weale, (2003) some education has been available since ancient times. In England, a fairly good number of schools trace their origins back to the days of Queen Elizabeth. In the United Kingdom elementary education did not become compulsory until 1870 while very limited free secondary education was introduced in 1907 and it was not until 1944 that universal FSE was introduced. In 2007, Uganda government started free universal secondary education (USE) policy which was the first in all sub-Saharan nations (Asankha & Takash, 2010).

According to Andrean (2009) education has a long history of significance in Kenya. Before the nation achieved independence, access to education was extremely limited under colonial rule. While primary education was a requirement for all British children, very few Kenyans had the opportunity to go to school even if they desired it.

In Kenya the clamour for free secondary school started after 1963, after the country became independent. This was due to increased demand for labour for middle and upper level government personnel (UNESCO, 2007). Kenyatta promised free education to disadvantaged peoples living in Arid and semi-arid lands of Kenya in 1971.

Report from *Kenya National Assembly Official Record (Hansard)* (2008), indicate that due to swelling of enrollment in Kenyan primary schools which was made to increase the transition rate from primary school to secondary school, the country is to be faced with a major wastage of students who would have finished primary school education, but are unable to proceed to secondary school. That is the rationale behind the offering of Free Day Secondary Education (FDSE). The report indicated that Free Secondary Education is internationally recognized as confined to free day secondary schools.

The report indicated that, the kind of Education Kenya would want to offer to our students rests on the four pillars articulated in Sessional Paper No. 1 of 2005. One of these fundamental pillars is access to education which is meant to ensure that all students irrespective of their social circumstances or physical abilities proceed to school.

2.3 Review of key issues in FDSE in Kenya

2.3.1 Status of infrastructural facilities

Infrastructural facilities include resources such as classrooms, desks, science laboratories, computer laboratories, toilets, water, electricity and playgrounds.

According to Sutherland-Addy (2001), the absence of toilet facilities where girls could change their sanitary in privacy has been a factor affecting learning. It has led to the construction of separate toilets for boys and girls in mixed schools in Ghana and Uganda. James and Gerretsen (2012) supported that the absence of facilities relevant to different needs of students like girls such as provision of sanitary towels and adequate toilets had direct impact on girls than boys' educational opportunity while play grounds, water and electricity enhanced learning.

According to GOK (2005) lack of adequate secondary schools to match that of primary schools has been one of the factors constraining growth in secondary school enrolment. For instance, in 2003 there were 3661 public secondary schools compared to 18,081 public primary schools. Mulama (2008) noted that when it came to power at the end of 2002, the National Rainbow Coalition government introduced free primary education in Kenya, a policy shift that made classrooms filled to overflowing, with teachers obliged to conduct lessons outdoors. USAID (2008) in a study on expansion of secondary education noted lack of infrastructure as a serious challenge to existing schools. The current study has sought out if adequate secondary schools infrastructures have been built to enable smooth implementation of FDSE in the area under study.

According to Kenya National Assembly official Record (Hansard) 7th October (2008), despite the impressive record of introduction of FDSE, there are still many children out of schools especially in urban slums and ASAL regions where many schools in the regions were in a state of repair in addition to inadequate classrooms and other facilities to cater for the learning needs of the increasing numbers of children.

However this was a general report of the whole country; therefore, there was need to find if insufficient facilities are a serious challenge affecting the implementation of FDSE in the area under study. A review of literature also indicates insufficient research information on the current status of FDSE implementation in the area under study which this research has provided.

2.3.2 Extent to which teaching and learning resources are provided

UNESCO (2008) in a global monitoring report established that, learning environments must be improved in order to facilitate successful implementation of educational programmes. In addition, as noted by Otieno and Colough (2009) instructional materials like text books, teachers' hand books, charts and other teaching materials have a significant influence in the teaching – learning process.

According to UNESCO (2010) in Pakistan, text books are provided by the government free of charge up to the middle level, but students needed to arrange for uniforms from their own resources. A study by UNESCO in Ghana (2006) indicated that the effectiveness of public secondary schools remained low due to lack of instructional materials and equipment and their inefficient use. The pupil- text book ratios were high in rural areas and urban slums (Government of Kenya, 2005). The researcher sought to know if in Kitui-West and Matinyani Districts, availability of textbooks as teaching and learning materials affected implementation of FDSE program.

2.3.3 Increase in enrolment levels

A study done by Baker and Baker (2003) in Vietnam indicated that lower secondary enrollments increased significantly from 3.1 million students in 1993 to 5.3 million in 2003, a rate of 14%. It was projected that the population would reach 7.9 million in 2005. The findings of the study indicated that the rapid expansion resulted in deteriorating quality of lower secondary education, which was aggravated by double and triple scheduling of classes in schools to accommodate such rapid expansion. The researcher sought to find out the effect of enrolment in free day schools.

Since independence in 1963 the number of students enrolled at various levels of education has substantially increased (Government of Kenya, 2005). A survey by World Bank in 2005 indicated that countries that removed fees had substantial increases in enrollment rates in the secondary sub sector (Kattan, 2006). In 2008, Kenya introduced a free day secondary education programme with a target of raising student enrolment to 1.4 million by the end of the year (BBC News, 2008). This increase is likely to reduce disparities in access to education. However, very few studies have been done to find out the situation on the ground.

According to literature (Ministry of Planning and National Development, 2007) introduction of FPE in Kenya had left more disposable income on families as the government caters for majority of the education expenses. The money that was being used to pay fees and buy text books was used in improving the welfare of households through investment in income generating activities, pay for secondary education and caters for other household needs such as

food, clothes and healthcare. According to World Bank (2007), among the four countries that have witnessed the largest post- abolition surges are Kenya, Malawi, Tanzania and Uganda. While much literature focuses on these increases, considerably less is known about how FDSE benefited students and teachers of Kitui-West and Matinyani Districts.

2.3.4 Level of school dropout in day secondary schools

Report by Dearden , Emmerson , Frayne and Meghir (2005) on studies carried out in developed countries indicated that Japan, Korea and Sweden had high dropout in secondary schools, the proportion of youngsters dropping out of school at age of 16 and failing to obtain upper education qualifications in the UK was high compared to most developed countries. Their research also noted that there had been a world focus on school dropout problems and a number school dropout rates.

A study by UNESCO (2008) on Philippine education indicates that, the problem of school dropout has been rampant in many secondary schools in the world despite the provision of free education. For instance, Filipinos have deep regard for education which occupies a central place in their life. It has been viewed as a pillar of national development. However, among the issues to be resolved include high dropouts who have in turn resulted to a considerable number of out of school youths and graduates who are not prepared to work.

Sabates, Hossair, and Lewin (2010) in a study on school dropouts in Bangladesh found out that, children whose parents/siblings fell ill were expected to be care givers for the sick relatives, at times causing them to miss or drop out of school. There was need for investigation into causes of

school drop outs in the area of study and if the level of school dropout is affecting the implementation of FDSE programme in the area of study. The study also found out that direct and indirect cost of schooling can exclude some students from school such as costs of pens /pencils, copy books, private coaching, transportation and school uniform which was a relative burden for many households.

A study done by Kattan (2006) found that 48% of parents in Uganda were unable to pay fees for their children and was the reason they left school and despite elimination of direct fees, many households were unable to pay for uniforms, notebooks and pencils.

Mukama (2012) in a study done in Uganda states that dropout rate has been a challenge in Uganda secondary schools and the rates remain high especially for girls. At secondary level there are fewer than four girls enrolled for every five boys according to UNICEF report. The study noted that there has been a challenge in Uganda secondary schools and the rates remain high especially for girls and as such there are fewer than four girls enrolled for every five boys. It was noted that with some girls in Uganda having opportunities to go to school, they still face a challenge of early pregnancies and school drop outs.

According to Kadamira and Rose (2003) lack of money to buy essential school materials for children's schooling was a likely cause of lack of enrollment or potentially high drop out at a later stage. The findings indicated reduced drop outs due to FPE. However, those dropping out could also be due to poverty, early pregnancies and drug abuse. The findings revealed that school based factors such as lack of physical facilities, uninteresting curriculum, and school based policies

such as repetition, indiscipline and lack of encouragement by parents influenced participation.

2.4 Challenges facing the implementation of FDSE

2.4.1 Financing of education

Education involves costs for it to be acquired, some of which are covered by the state known as social costs while others are by individual households referred to as private costs. According to World Bank (1980) parents directly incur expenditures on their children's public schooling on books, clothes (uniform), school fees and examination fees. It also noted that secondary education is hampered by the limited resources.

Studies carried out in Sri Lanka found out that, despite government spending on education, a significant proportion of private spending such as private tuition, was the main factor constraining access to schooling in the country. This portion of spending disadvantages children from poorer families, who could not afford that cost while other areas of spending included books, stationary and uniforms (Onsomu, 2006).

According to Oyaro (2008), school heads have complained of delays in receiving subsidies which oblige them to seek operating funds in the interim is also a matter of how far the government’s school subsidies stretch. According to the MOE (2010) the government of Kenya decided to introduce FDSE in government funded schools via the provision of support funding so that day secondary costs on parents would no longer prevent learners from poor households from achieving affordable access to secondary education. This study sought to find out the challenges

facing implementation of FDSE in the area under study.

2.4.2 Availability of teachers

A global monitoring report by UNESCO (2008) indicated that, acute teacher shortages were common in developing world. Many governments were hiring contract teachers to save costs and rapidly increase teaching force, but lack of adequate training and service conditions was having a negative impact on the quality of education.

Huebler, (2008) asserted that the pupil/teacher ratio is an indicator of education quality. He adds that, in crowded classrooms with a high number of pupils per teacher the quality of education suffers. For pupils it is difficult to follow the course and teachers can dedicate less time to the needs of each individual student. USAID (2008) in a study on expansion of secondary education and need for teachers noted that, as the number of pupils completing primary education continues to grow, teaching staff amongst other resources will become an increasing problem.

According to Kenya National Assembly Official Record (Hansard), (2008) it has been proven internationally that if you offer education per se and it has no quality you end up with educated people who will not be in a position to utilize that education. In addition the report noted that, Kenya has continued to lay emphasis on provision of quality education because it is fundamental. However, there are constraints because the country requires sufficient teachers in order to offer quality education. There was need to find out if lack of sufficient teachers is a factor affecting implementation of free day secondary education in Kitui-west and Matinyani Districts.

A report by GOK, Ministry of Planning (2007) cited in adequacy of teachers that made it hard to complete the syllabus which is an added factor to declining academic performance. The report indicated that, in some cases, the available teachers combine several streams in to one class resulting to overcrowding. Teachers are not able to mark students' home work, which makes it difficult for them to monitor pupils' progress, the report revealed. This study sought to find out the extent the inadequacy of teachers has affected implementation of FDSE in the area of study.

2.4.3 Stakeholder support

A study by UNESCO (1996) indicated that in Caribbean countries, Governments have introduced additional measures to bolster the financing of education such as community and private sector participation and reinforcement of fees under the label of cost sharing. Report from UNESCO (2010) on secondary education in Pakistan indicates that, the current National Education Policy (1998-2010) encouraged private investment in Education. It was also noted that the government alone could not carry the whole burden of the process and that it was imperative to promote community participation and private partnerships. There was need to find out the level of stake holder support in implementation of FDSE in the area under study.

According to MOE (2010), the teachers' role in implementation of FSE is key to its success; hence, should have adequate training and in-service training supported by the government on a continuous basis and provides good quality education in line with the new curriculum. Secondly, teachers need to give support through preparing and using locally available Learning materials and resources as well to counsel and guide pupils during school hours and advise parents

where necessary on the children's welfare.

Parents' role in the implementation of FSE Programme as noted by MOE (2010) is to have a positive attitude towards education and participate in decisions affecting their child's education. They should also participate in community initiatives to support the implementation of FSE. There was need to find out the level of teachers and parents support in the implementation of FDSE in the area of study.

2.4.4 Poverty

Reports from UNESCO (2010) indicate that poverty motivates children in search for income generating activities resulting in frequent non-attendance in school which makes them lag behind in their school work and consequently lead to their marginalization in school and subsequent dropping out. A report by Ministry of Planning and National Development (2007) cited poverty as a constraint to FPE access. It cited poverty as caused by natural and environmental causes like drought, unemployment, low wages and large families, since one is unable to educate many children in secondary and tertiary institution.

The report noted that, when poverty strikes a household, all members of the house hold suffer but most communities were unanimous that women and children suffer most. It revealed that children suffer because they have no food and clothes. They do not go to school since the parents cannot afford and are sent to work as "house maids, house boys and herd boys". There was need to find out if poverty has affected implementation of free day secondary education in Kitui- West and Matinyani districts.

2.5 Strategies for improving FDSE

A number of strategies have been suggested towards improvement of access to secondary education that will go a long way in improving FDSE in Kenya. The following strategies which also the Government of Kenya (2005) and KESSP, (2005) has laid down as part of government initiatives to improve access to education should be put in place.

2.5.1. Reduction of secondary education costs

According to Onsomu (2006) one of the mechanisms of reducing costs related to secondary education is to build more day schools. However, a lot of awareness will need to be provided to parents and students to eliminate the attitude that day schools are of low quality despite that all teachers are centrally trained. Kabera (2006) did a study on day schools in Meru –North, using descriptive survey design. The researcher suggested that communities should be more sensitized on importance of day schools as the most affordable avenue for secondary school expansion at present. In addition day schools should be encouraged to initiate income generating projects in order to strengthen their financial base. This study was carried out away from the area of study thus the researcher sought to find out the strategies being adopted to improve implementation of FDSE in Kitui-West and Matinyani districts.

2.5.2 Disbursement of government subsidies to schools

Disbursement of government subsidies to schools should be done on vacation before schools open for the following term to improve smooth implementation of the programme.

According to Njoroge and Kerei (2012), a task force reviewing the education system in line with the constitution wants schools to open in September, after parliament has passed the budget. It recommended doubling the amount disbursed to secondary schools to reflect the raising costs of living, which means that each child is to get Ksh 21,250 under the free day secondary education whose schools are more than 7,000 under government free education program, started in 2008. The researcher sought to find out if disbursement of funds had an effect on implementation of FDSE in Kitui-West and Matinyani districts.

2.5.3Provision of more teachers

UNESCO in a global monitoring report (2008) asserts that shortages of teachers threaten the achievement of EFA. The report revealed that the teacher numbers have grown slightly less rapidly than enrolments. This calls for training and recruitment of more qualified teachers since quality education cannot be achieved without numbers of properly trained qualified teachers. This research will seek to find out the extent teacher shortage has threatened the implementation of FDSE and the level of Government provision of trained teachers to curb shortages. The report acknowledges fundamental principal of learning that the interaction between a student and the teacher is the key determinant of quality of educational programme. The report also suggests small class sizes because they guarantee maximum teacher–pupil interaction and enable the teacher to attend to each individual learner's needs.

The study also indicated that in some cases, expansion of education service is not accompanied by appropriate teacher recruitment measures to cater for increased enrolment, which

negatively affects the quality education (UNESCO, 1996). This study was general; hence, there was need for the researcher to conduct a particular study in Kitui- West and Matinyani Districts to find out how the issue of teacher shortages was being tackled. There is need to recruit more teachers to improve the teacher - student ratio, in order to attain the required 1:45 teacher to student ratio. However, research studies on government efforts to improve teacher/student ratios in the area under study have not been available.

2.6. Use of ICT and modernization of schools

A study by UNESCO (1996) on achievements and challenges of education in Caribbean, found out that strong moves were afoot in almost all countries to modernize secondary education through use of information technology through policies related to administration and instruction. The study indicated that management information systems in ministries of education, with linkages to schools, use of computer technology in class across the world through the internet is part of planned future in most countries. Parents, communities, the private sector and schools have joined hands with governments to achieve these goals. However, technical support infrastructure needs to be put in place to sustain the maximum use of both hard ware and soft ware in the achievement of the administrative and instructional goals (UNESCO 1996).

According to Third International Policy Dialogue Forum of the International task force on Teachers for Education for All (2011), ICT is currently one of the subjects taught during pre-service. With the world now racing towards the perfection in ICT development, many teachers in rural schools have no access to computers and therefore can not embrace the use of ICT.

Briseid &Caillods (2004) in their study on trends in secondary education in industrialized countries and their relevance to African countries content that, ICT which is in all countries is about to become a very important pedagogical tool for learning and differentiation purposes .Most developed countries such as Canada, New Zealand are advanced in the number of computers. Their studies reveal that the number of pupils per computer in lower secondary varies from nine (9) in Canada and New Zealand to about 14 in Finland and Norway. This study was done in developed countries far away from Kenya and there was no study that had been done in the area of study on availability and the ratio of computers to students. It will also seek to find out if computers were being used as tools for teaching and learning.

In a number of countries the main challenges lies in making teachers familiar and comfortable with the pedagogical possibilities of ICT. There is need to find out if schools in the area of study have computers used for teaching and if teachers were familiar with ICT. The researcher also needed to find out if use of ICT was being considered as a strategy towards improvement of free day secondary education in the area of study.

2.7 Review of other empirical studies on free day education

Akankha and Takash (2010) used longitudinal survey on 940 households in all regions but the north to evaluate the impacts of Uganda Secondary Education (USE) policy study on USE policy in Uganda. They noted that even though USE policy has considerably improved the enrollment rates to public secondary schools from poor households, there were still lots more to be done to improve the quality of secondary schools in Uganda, since most rural secondary schools

lack even basic school facilities such as desks, blackboards, chairs, drinking water and toilet facilities. It indicated that girls from poor households benefited more from the policy. They recommended that the government should prioritize to improve school facilities and for appointment of more teachers to secondary schools, as well as training of more teachers to improve quality of teaching. The current study used descriptive survey design to investigate factors affecting the implementation of FDSE in the area under study.

Nyabanyaba (2009) did a study on factors influencing access and retention in secondary schooling for orphaned and vulnerable children and young people in Lesotho. The researcher found that introduction of FPE initiative in the year 2000 has seen a larger than usual pool of learners reach secondary education constrained educational access to secondary education in the country. The researcher also noted that the huge flow of learners comes when Lesotho continued to struggle with poor access and high inefficiency rates at secondary education. This research was done away from the area of study; hence, the researcher needed to investigate if Kenya was prepared for the flow of learners in to the secondary in January 2008 with the onset of Free Day Secondary Education (FDSE).

Rawat, Zaman, Shams and Halal (2012) in a study on impact of free text books distribution on learners' retention rate in Pakistan noted that, text books are tools that play a significant role in secondary education because they facilitate individual and class teachings and self-directed activities of the learners. They quoted Mahamood (2006) who supports this view and argued that learners who receive textbooks achieved better academically than those who did not. There was need for the researcher to find if text books were available and the extent they contributed to

academic performance in the area of study.

Kioko (2010) did a study in Nairobi North on availability and utilization of text books for teaching and learning effectiveness in public secondary schools. The study used survey design, questionnaires; interview and observation guides. The study established that the quality of education was faced by challenges such as inadequate text books with a ratio of 1:3 and that teachers had few reference books and lacked libraries which forced them to keep books in stores where they got damaged. The study further found out that both teachers and students dependent on text books for reference and note making but the books were inadequate due to theft and poor binding.

The study recommended that PTA together with stake holders should ensure that all schools were equipped with enough text books through ways as organizing book harvests and build libraries to ensure access and book safety. However, this study was done in Nairobi which is urban while the current study was done in ASAL rural schools of the area under study. Secondly there was need to establish the student /text book ratio and if it was a challenge to implementation of free day secondary education in the area of study.

Ogola (2012) carried out a study on challenges faced by head teachers in the management of free secondary education and its implication on quality of education in Usigu division, Siaya County. The researcher used questionnaires and interview guides to collect data only. However, observation checklists would have generated data for triangulation purposes. It indicated that most head teachers experienced challenges such as shortage of instructional materials; which interfered

with quality of education since introduction of free secondary education. The researcher recommended intensification of supervision on use of instructional materials, and training in guidance and counseling.

Kabera (2006) did a study in Meru-North District to investigate the socio economic constraints facing emerging day secondary schools and how they were tackling them. The researcher used descriptive survey design, stratified, random and systematic sampling to identify research units in the study. Data was collected using questionnaires and observation schedule but left out interview schedule which this current study used to generate first hand information and also reflect the situation in the ground. The research also indicated that the status of physical facilities, resource materials and finance were inadequate and high poverty levels made parents and guardians unable to satisfactorily meet responsibility of paying fees and other levies.

Achoka (2007) in a study on school dropout pandemic in Kenya indicated that the school dropout in Kenya is alarming. The researcher noted that the average drop out and completion rates for girls between 1992-2002 was 20% and 80%, while for boys were 45% and 87% respectively. The dropouts were due to poverty, early pregnancies and marriages, HIV/AIDS and drug abuse. The researcher proposed change in managerial approaches to enhance retention and recommended that, principals needed to develop academic and co-curriculum programmes that are attractive and competitive in order to occupy all students while at school. Also students and parents should appreciate the need to be educated, provide the best climate to entice students to complete schooling and identify possible threats against retention rates like drug pushing and consumption and reverse the trend.

Mutwol (2009) did a study to assess the factors influencing participation of students in public secondary schools in Marakwet District. The study used descriptive survey design; it used random sampling to select the respondents and collected data using questionnaires. The findings revealed that poverty, lack of basic needs and school based factors such as lack of physical facilities, uninteresting curriculum, and school based policies such as repetition, indiscipline and lack of encouragement by parents influenced participation. The study recommended that the government should promote more partnerships and collaboration with churches and NGOs to promote retention and completion rates. The study was however done away from the current location of the study and was general about public secondary schools. It did not directly deal with issues under this current study.

Wamichwe (2009) carried out a study on factors affecting the implementation of FSE in Nyandarua North district. The study adopted a descriptive research design and collected data using questionnaires to principals, teachers and DEOs. It looked into factors affecting implementation of FSE and noted that they were inadequate physical resources, mismanagement of the Government subsidy, inflation and emerging issues like post election violence. The study found out that, the FSE program has been seriously affected by delays in disbursement of funds which forced schools to procure goods and services on credit at hiked prices and at times made suppliers refuse to supply goods to schools causing strain.

The delay in disbursement also delayed BOG workers salaries which lowered morale and productivity. The study only focused on implementation of FSE in one district. It also delt with both day and boarding schools and so there was need to conduct research in Kitui-West and

Matinyani districts on day secondary schools to find out how the program was being implemented.

Ncariba (2012) did a study in Meru central District to investigate factors that affect access and participation in secondary school education. He sought to find out the factors that lead to poor access and transition rates from primary school to secondary school education and find out why they dropped out. The study adopted survey design, purposeful and simple random sampling to get the respondents which was composed of 160 students, 8 secondary schools principals, 14 primary school head teachers 40 teachers, 40 parents and one DEO. The research revealed that high cost of schooling was the major factor contributing to poor access and participation in Meru. He recommended that the government through MOE should provide a highly subsidized fund.

Mulonzi (2010) did a study on Challenges facing implementation of free tuition programme in Katangi Division in Machakos district. The study however, delt with challenges leaving out other factors affecting the implementation of FDSE. Chabari (2011) did a study on challenges facing effective implementation of free secondary schools in Kangundo district, Machakos. The study delt with adequacy of learning resources and funding leaving out key factors affecting implementation such as infrastructural facilities, enrolment trends and challenges which forms the basis of this study.

2.8 Summary and identification of knowledge gap

The above review of literature indicates that a number of issues need to be investigated on factors affecting implementation of FDSE. These include the status of infrastructural facilities,

extent to which teaching and learning resources are provided, enrolment levels, challenges affecting implementation of free day secondary education and strategies to improve implementation of FDSE Programme. There is evidence that a number of studies have been carried out on the issue of free secondary education. However, as indicated in the review of these studies most of them suffer from various limitations.

Firstly, most of the studies that have targeted on free day have delt with one or two aspects of the issue of FDSE. For example some have focused on resources while others have delt with the challenges. The studies reviewed have not adequately addressed the issue of implementation of FDSE concerning areas like adequacy of infrastructural facilities, teaching and learning materials, enrolment trends, status of school dropouts in day secondary schools, factors affecting implementation of FDSE and corrective Measures to the challenges facing implementation of free day secondary education. There is obviously need for a combined study that involves an examination of the situation on the ground as far as the several issues are concerned.

Secondly, some of them have used weak research methodologies such as proportionate sampling and used only one or two types of data collection instruments without effort to ensure triangulation. Thirdly, most of the studies have focused on free primary school education. Finally, none of the studies has been done in the geographical areas (Matinyani and Kitui West) targeted by the proposed research undertaking. This limits the data generated in improving the implementation of FDSE in the area.

The overall conclusion that can be made is that, although studies have been done on the issue of free secondary education, there is shortage of sufficient relevant data that can be used to enhance the implementation of FDSE in Kitui County. There is therefore justification for the study which focuses on factors affecting implementation of free day secondary education in Kitui- west and Matinyani district.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In this section the researcher presents the design used in the study and justifies the choice of the design. It describes the target population, sample and sampling procedures, description of research instruments and data collection procedures.

3.2 Research design

The study used the descriptive survey design from quantitative research paradigm as the main research design. The design was complemented with naturalistic design from qualitative research paradigm. Descriptive survey was preferred in order to answer questions concerning the current status of the subject in the study (Mugenda & Mugenda 1999). It is a method of collecting information by interviewing or administering questionnaires from sampled individuals (Orodho, 2002).

The researcher also preferred this method because the area being covered was expansive and therefore wanted to determine and give report on the way the situation was; thus, was the most appropriate to use in this research. The qualitative data was collected to get in-depth information on FDSE in Kitui-West and Matinyani districts. In collecting the qualitative data the researcher used observation checklist, interview schedules on principals and two DEOs in the area under study.

3.3 Target population.

The target population of this study was all mixed day secondary schools, all students in Form 1 to Form IV, all teachers and all principals of Kitui- West and Matinyani districts of Kitui County. It also targeted both DEOs of the two districts. Only public secondary schools were targeted due to their homogenous characteristics in receiving FDSE government funds. According to Kombo and Tromp (2006) a target population is a large population from which a sample is drawn. There were thirty one (N=31) mixed day secondary schools in the two districts. These schools had a total of 2106 students in Form I up to Form IV, 242 teachers and 31 principals.

3.4 Sample and sampling procedures

A sample size of 292 respondents consisting of 240 students, 40 teachers, 10 principals and 2 DEOs of Kitui-West and Matinyani districts was used in the study. In order to select the various samples, the researcher used probability sampling as the main sampling design. This is because it draws randomly from a wider population and the researcher wished to make generalizations, because it seeks representativeness of the wider population (Cohen, Manion & Morrison, 2000).

3.4.1 Schools

The researcher selected a sample which was composed of 10 out of the 31 schools in the two districts and which make 32.258% of the total number of mixed day schools, using Simple random sampling was used to select the particular mixed day schools. The researcher made a list of all mixed day schools in Kitui-West and Matinyani districts, wrote equal strips of papers, after

which they were folded tightly then put in a container and shaken. The shaken papers were poured on a table then picked at random to get the right number required. This method enabled each school have an equal chance of being selected.

3.4.2 Students

A total of 240 students were involved in the study from the 10 sampled schools. Stratified sampling was used to select students by categorizing them in each form into their respective gender. From each stratum, 3 boys and 3 girls were selected using systematic sampling. Students in each stratum were assigned a number and every n^{th} element was picked bringing the total number of students selected to 6. The same procedure was repeated in each form until the required number of 24 students was attained.

All students participated because they were receiving free day education funds and sharing the same experiences pertaining to FDSE. In addition, students are the consumers of the education.

3.4.3 Teachers

Stratified sampling was used to select 2 male and 2 female teachers from the 10 sampled schools making a total of 40 teachers. Simple random sampling was employed in selecting a representative sample of teachers from each sampled school in the two districts. To do this the researcher got a list of teachers' from the principals' offices in each school and wrote their names. Separately, their names were wrapped in strapped pieces of papers and were put in a container, shaken and then picked randomly until the number required for male teachers was attained. The

same procedure was used for the female teachers. Teachers were used in the study because they implement FDSE directly.

3.4.4 Head teachers and District Education Officers

From the 10 sampled schools, 10 Head teachers and the 2 DEOs were included in the study. The principals were automatically included because of their management position and their role in curriculum supervision at school level. The DEOs participated because they are supervisors of curriculum implementation at district level. They were also included in the sample as key informants in order for the researcher to acquire information concerning the study.

Table 3.: Sample summary framework

Participants	Sampling procedure used	Population	Actual sample	Percentage (100%)
Schools	Simple random sampling	31	10	32.258%
Students	Stratified sampling, Systematic sampling	2106	240	11.39%
Teachers	Stratified sampling, simple random sampling	242	40	16.5 %
Principals	Automatically included	31	10	32.258%
DEO	Included	2	2	100%
Total		**2410**	**302**	

A sample summary framework has been provided to represent a sample and sampling procedures that have been used to select schools, students, teachers, head teachers and DEOs. The summary has also actual percentages, actual samples and percentages used in each case.

3.5 Description of data collection research instruments

The study employed three instruments namely: questionnaires, interview schedules and observation checklists. The researcher used questionnaires and interview schedules because of their ability to collect both quantitative and qualitative data on the topic under study. These instruments are also cheap in terms of cost and time. Questionnaires were administered on students and teachers while interview schedules were administered to collect information on Principals and

DEOs of Kitui-West and Matinyani districts.

3.5.1 Interview guide for principals.

This instrument was divided into two sections. Section one collected demographic data while section two contained structured and semi structured questions which required them to attempt to respond to questions concerning FDSE. The questions involved status of infrastructural facilities and adequacy of teaching and learning materials. It also contained questions related to trend in enrolment levels, challenges facing implementation of FDSE and also strategies for improving the program.

3.5.2 Questionnaires for teachers.

The questionnaires were divided into five sections A, B, C, D and E. Section A required demographic information of the teachers. Section B contained questions on status of infrastructural facilities. Section C contained questions on extent of provision of teaching and learning resources. Section D was composed of items that sought answers on trend in enrolment levels while Section E delt with questions on challenges and strategies of improving FDSE.

3.5.3 Students' questionnaire

This questionnaire was composed of 4 sections with A, B, C and D. Section A collected demographic data, part B solicited information on status of infrastructural facilities. In section C students responded to questions related to extent to which teaching and learning resources were provided and finally section D sought information on trend in enrolment levels. The sections had

both closed and open ended questions.

3.5.4 Interview schedule for DEOs

According to MacMillan and Schumacher (2001) interview guides provide flexibility and provide the ability to probe and clarify responses, note verbal and nonverbal communication and provide high response rates. The interview schedule had general questions on FDSE such as enrollments, facilities, teacher shortage, challenges facing implementation and strategies being adopted.

3.5.5 Observation checklist

According to Kasomo (2007), this is a checklist with a list of behaviors exhibited by particular aspects used by the research. It contained items that guided the researcher to obtain information on the programme as it occurs, in their natural setting. The researcher used it in schools under study to determine two aspects expected to be physically available: the nature and status of infrastructural facilities like, classrooms, desks, computer laboratories and libraries. It was used to determine the availability of teaching and learning materials such as text books, science materials, computers and other aids.

3.6 Validity and reliability of instruments

3.6.1 Validity of the instruments

According to Orodho (2004) validity is the process of establishing whether the research

instrument is measuring what it is supposed to measure. The researcher presented the instruments to be used to research specialists for validation. First, the researcher's fellow colleagues read the instruments and advised appropriately. Secondly, the instruments were presented to the two supervisors at the Catholic university to assess validity after which they read and guided the researcher to improve where necessary.

Thirdly, piloting was carried out in two mixed day schools of the neighbouring Kitui central district that were randomly sampled due to their similarity in characteristics with schools under study, after which the pilot test helped the researcher to adjust and correct the research instruments to improve validity. The schools were not the sampled schools under study. Finally, the researcher used triangulation of instruments by use of interview guides and observation checklist along with the questionnaires.

3.6.2 Reliability of the instruments

This refers to the consistency of instruments. According to McMillan and Schumacher, (2001) it is an instrument that measures the degree a research instrument yields consistent results of data after repeated trials. In the study the researcher tested reliability by subjecting the instruments to a pilot study through split-half technique which required one testing session. The scores of even numbered items were correlated with those of odd numbered items using the Spearman-Brown prophecy formula to compute a reliability coefficient.

The researcher used SPSS window computer version 17.0 to run the reliability of the instrument at the pilot testing. According to Mugenda and Mugenda (1999), if the reliability of 0.8

levels is attained the instrument was considered, acceptable and adopted. The researcher obtained a correlation coefficient of 0.76 which is approximately 0.8.Therefore; the researcher proceeded with the study.

3.7 Data collection procedures.

After approval of the research proposal by the university, the researcher proceeded with the introduction letter from the university ready to do research. The researcher got permission from the ministry of education head quarters and gave copies of the permit to the District commissioners of Kitui-west and Matinyani, and District education officers of Kitui-West and Matinyani districts. After submitting the letter, the researcher was permitted to carry out the study.

The researcher then proceeded to visit each sampled school and DEOs offices to administer the research instruments. The researcher booked appointments with the sampled respondents who were requested to fill the questionnaires and collect the instruments same day so as to have high response rate. The questionnaires were administered to the principals, teachers and Form I, Form II, Form III and Form IV in each sampled school. Meanwhile, the observation checklist was also administered by the researcher to get additional in-depth information. The researcher also made an appointment with the DEO of each of the two districts on the convenient day to be interviewed, and then personally administered the research instruments on them.

3.8 Data analysis Technique

The data collected was analyzed on the basis of the research questions. The researcher did data cleaning. All responses that were given to open ended questions were grouped according to themes after which they were coded. The researcher analyzed the collected data using SPSS version 17.0 where variables were defined and entered in the computer followed by data entry, which was followed by data analysis. Numerical data was summarized to produce frequencies and percentages. Qualitative data was also analyzed using explanations, discussions and citations.

3.9 Ethical considerations in research

Mugenda and Mugenda (2003) have noted that, ethical issues are important in every research; thus, must be considered. In these considerations the researcher sought to observe the following:

(i) Confidentiality-was guaranteed by assuring the respondents that the information provided was only for research purposes.

(ii) The researcher avoided plagiarism by ensuring all sources quoted were properly acknowledged.

(iii) The researcher also sought consent of the respondents before the study so that they could be allowed to willingly participate in the study. Consent of learners was given by the principals of sampled schools

CHAPTER FOUR

PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents the findings of the study. This includes data analysis, discussion and interpretation of the gathered data from the research on factors affecting the implementation of free day secondary education in Kitui-West and Matinyani Districts. The first section of the chapter represents demographic information of the participants; the second section is on the status of infrastructural facilities in mixed day secondary schools in Kitui -West and Matinyani Districts in the light of FDSE implementation.

In the third and fourth sections, the chapter presents the provision of teaching and learning resources in day secondary schools and the trend in enrolment levels in day secondary schools in Kitui- West and Matinyani districts respectively. The fifth section is on challenges facing the implementation of free day secondary education in Kitui-West and Matinyani districts and finally, the sixth section is about the suggestions for improving the implementation of free day secondary education in Kitui- West and Matinyani districts.

4.2 Questionnaire return rate

The study had sampled 292 respondents including 240 students, 40 teachers, 10 principals and 2 DEOs. Out of these, the students and the teachers were issued with questionnaires for filling while the principals and DEOs were interviewed by the researcher.

At the end of the data collection exercise, the researcher received 198 and 34 filled questionnaires from students and teachers respectively. Therefore, the questionnaire return rate for students and teachers was 83% and 85% respectively. All the interviews were successfully conducted giving a return rate for both principals' and DEOs' interviews at 100% respectively. Owing to this, the actual sample size that participated in the study was 244. This represents an overall return rate of 84%.

4.3 Demographic information of the participants

This section contains the demographic information of the participants.

4.3.1 Background information of the students

Table 4.1 presents demographic information of the students according to gender, age in years, who pays their fees and occupation of their parents. Out of the 198 students who completed the questionnaires their responses were shown on Table 4.1.

Table 4.1 Background information of students

	Frequency	Percentage
Gender		
Male	97	49.0
Female	101	51.0
Total	**198**	**100**
Your age in years		
Below 15 years	23	11.6
16-17 yrs	129	65.2
18-19 yrs	40	20.2
20 yrs and above	6	3.0
Total	**198**	**100**
Who pays your fees in school?		
Parent	162	81.8
Guardian	25	12.6
Well wishers	10	5.1
Missing	1	0.5
Total	**198**	**100**
Occupation of parent		
Farmer	136	68.7
Teacher	16	8.1
Lab Tech	4	2.0
None	11	5.6
Secretary	2	1.0
Businessman	10	5.1
Researcher	1	0.5
Missing	18	9.1
Total	**198**	**100**

Table 4.1 shows that 51% of the respondents were female. This could be due to the fact that this study was conducted in mixed secondary schools. Bearing in mind that even the national census have always indicated that the female population exceeds that of their male counterparts.

These findings also show that there are more female students registered at secondary school level than males.

The table also shows that 76.8% of the sampled students were aged below 18 years. This is significant since the study was conducted in secondary schools. The average age for secondary school going age is between 13-18 years. Beyond this, most students would have completed their secondary school education and joined either tertiary colleges or universities for their professional training. However, the 23.2% of the students who are aged above 18 years could be because of the introduction of FDSE in the day secondary schools. Due to this programme, it is possible that some students who could not afford to pay fees could now find their way into schools. This explains why some of the students were age over 18 years.

Table 4.1 indicates that 81.8% of the students had their school fees paid by their biological parents as compared to the remaining 17.7% that depended on guardians, relatives and well wishers to cater for their school fees. This reveals that many parents perceive investment in education as beneficial in a multiplicity of ways, both for individuals and for society as a whole. Therefore, there are many parents who strive to provide education to their children. The number of students relying on guardians and other people to meet their school fees could be as a result of death of parents from factors such as HIV/AIDS and poverty among others.

From Table 4.1, 68.7% of the students' parents were peasant farmers. This shows that majority of the parents were not in any formal employment. This could be due to the high levels of unemployment coupled with lack of academic qualification as well. Only 11.6% of the parents

were in formal employment. Therefore, the many parents who cannot afford to pay school fees for the secondary education in boarding schools have their children attending day secondary schools.

4.3.2 Background information of teachers

The researcher asked teachers to provide information about their gender, age, highest qualification, teaching experience and duration in current station. Their responses are shown in Table 4.2.

Table 4.2 Background information of teachers

	Frequency	Percentage
Gender		
Male	18	52.9
Female	16	47.1
Total	**34**	**100.0**
Age		
Under 25 yrs	12	35.3
26-30 yrs	5	14.7
31-35 yrs	2	5.9
36-40 yrs	5	14.7
Over 41 yrs	10	29.4
Total	**34**	**100**
Highest training qualification		
P1 certificate	1	2.9
Diploma in education	5	14.7
B. Ed	22	64.7
M. Ed	2	5.9
Missing	4	11.8
Total	**34**	**100**
Teaching experience		
Below I yr	7	20.6
1-5 yrs	9	26.5
6-9 yrs	1	2.9
10-15 yrs	5	14.7
Over 16 yrs	10	29.4
Missing	2	5.9
Total	**34**	**100**
Length of time in your current station		
Below I yr	10	29.4
1-5 yrs	22	64.7
6-9 yrs	1	2.9
Missing	1	2.9
Total	**34**	**100**

The table shows that there were more male participants than females in the study. This was also true for principals interviewed where majority of principals interviewed were males against a few females.

The researcher asked the participants to state from a list of choices their age brackets. This information was necessary as it enabled the researcher to gain a deeper understanding of the sample. Findings showed that 70.6% of the teachers were aged 40 years and below. This is the prime age for employment. Therefore, most teachers are likely to be in this age group. Very few teachers were aged above 41 years as shown in the table. The variation in age brackets of teachers can be attributed to the fact that teachers graduate every year into the field and posting does not discriminate on age but qualification.

Information from interview of principals indicated that the age for more than half of them was 40-45 years while a few were over 46 years. The two DEOs interviewed had their ages between 40 and 46years. The difference in age between the principals is not very wide due to the fact that the principals are usually promoted after an accumulated experience period in teaching. The leadership style in this country still esteems the role of different gender in management of respective schools.

As shown by Table 4.2, 70.6% of the sampled teachers had a minimum academic qualification of a Bachelor of education degree. This shows that most of the teachers met the minimum requirement for the teaching profession at secondary school level while out of the Ten principals interviewed, half had degree qualifications. Therefore, these teachers were qualified to

be teachers and principals in secondary schools.

There were another 5.9% of the teachers and a minority of principals who had acquired masters of Education as noted from Table 4.2 and interview results from Principals respectively. This could be as a result of the increasing continued teacher education by teachers in the country which has led to there being some teachers with higher qualification teaching at secondary school level. From table 4.2, 55.1% of the teachers had been in the teaching profession for 5 years and below. This could be attributed to the fact that the government, through the MOE, has in the recent past intensified teacher recruitment in the country. Therefore, it is possible that a good number of the teachers in secondary schools have not served for over five years. The remaining 57% of the teachers had served for over 5 years. The numbers in this age group could be due to factors such as attrition, turnover and untimely deaths among teachers.

Reports from interviewed principals indicate that most principals had been in their current stations for relatively short time of between 3 to 5years while a few had been in their stations for less than one year. This could be attributed to the fact that FDSE is a relatively a new progamme introduced in Kenya in 2008 ; thus, attracting majority children from primary to secondary which led to mushrooming of new free day secondary schools to accommodate the influx. This required deployment of teachers to head the schools which justifies their length of stay.

4.4 Status of infrastructural facilities in day secondary schools in the face FDSE

4.4.1 Availability of infrastructural facilities

The researcher asked the students and teachers to answer questions related to the status of infrastructural facilities in their schools. Data collected is presented in Table 4.3

Table 4. 3 Availability of infrastructural facilities

Facility	Yes		No		Missing	
	f	%	f	%	f	%
Students						
Does your school have a library?	18	9.1	179	90.4	1	0.5
Does your school have electricity?	62	31.3	132	66.7	3	1.5
Teachers						
Classrooms spacious enough for all students in your class	27	79.4	6	17.6	1	2.9
Do some students share chairs/desks during your lesson?	9	26.5	24	70.6	1	2.9
Does your school have constant supply of fresh water?	19	55.9	13	38.2	2	5.9
Does your school have electricity?	12	35.3	21	61.8	1	2.9
Change in state of infrastructural facilities with FDSE	23	67.6	5	14.7	6	17.6

From Table 4.3, most schools do not have libraries. This is shown by the 90.4% students who said that their schools had no library. This could be attributed to the limited resources that the schools receive from the MOE to support the FDSE. This was confirmed from the researcher's checklist which revealed that none of the schools had a library and most books were kept by the teachers in their staffrooms or kept in the principal's office. It is possible that the funds are insufficient for setting up infrastructure such as a library.

These findings from the students disagree with the results from teachers which indicate that there are spacious classrooms for students in most mixed secondary schools in Kitui-West and

Matinyani districts. From the researcher's observation checklist the report indicated that almost half of the sampled schools did not have enough classrooms for all forms. For example in one of the schools the principal gave a comment that, ''in fact this school of ours is in a former church compound and three of the class rooms were partitioned from the church donated to us by the sponsor". It was also observed that three schools used classrooms borrowed from the nearby primary schools, while in another school one room used as a form four classroom had been lent from a health centre as the school waited to build theirs. Many schools also did not have classrooms for elective subjects such as Physics, Geography and Business studies and so learning in three schools was conducted from outside and in one school a makeshift classroom was in use.

At the same time, Table 4.3 indicates that 66.7% of the students said that their schools did not have electricity. These findings are very close to those raised by teachers among whom 61.8% taught in schools that did not have electricity. The same was also true from the ground where the researcher noted using observation check lists that, majority i.e. seven out of the ten sampled schools had no electricity while two had electricity and one used solar energy. This means that the teaching learning activities can only be carried out during the day when there is natural lighting. Considering that this study sampled day schools only, and then it is possible that most schools lacked electricity because by evening and night, students have already returned to their homes. Therefore, electricity in such schools may not be a first priority. The researcher through the observation checklists in addition noted that, most of the schools were also located in the rural areas where electricity had not yet reached.

From the observation check lists it was clear that majority of the schools had sufficient water for use by students. They had tapped water in many points; others had big tanks which could hold water for a long time while a few relied on water from rivers or local handmade dams.

In addition, toilet facilities were found through researcher's checklists to be inadequate in majority schools, with seven of the sampled ten schools using primary school latrines, two of the schools shared with church while another used latrines that belonged to a health centre. This caused congestion, inconvenience as well as delay of students to class and other activities.

Although Table 4.3 shows that most mixed day schools have spacious classroom for teaching-learning process, the table also shows that there is an inadequacy in chairs for the students. This is shown by the 70.6% of teachers who said that students share chairs during their lessons. This was also confirmed by the observation checklist which revealed that some schools did not have chairs for all students. Specifically, students in one of the sampled schools were using borrowed plastic chairs from a health centre. Another one school had seats from the sponsor church while the other used borrowed desks from the neighbouring primary school. These findings reveal that the status of infrastructural facilities in mixed day secondary schools is wanting.

4.4.2 Availability of playgrounds for games

The researcher sought to establish the availability of games facilities in the sampled day secondary schools for students' co-curricular activities. In order to get responses to this question, the researcher asked related question to the teachers. This question was asked to the teachers since

the researcher felt that they were better placed to make the right judgment about this question. Their responses are as shown in Table 4.4.

Table 4.4 Availability of playgrounds for games

Game	Frequency	Percentage
Football	16	47
Netball	12	35
Rugby	2	5
Handball	23	68
Volleyball	10	29
None	6	18

n=34

According to Table 4.4, handball was a popular game in the sampled schools with 68% citing the availability of the playground for the same. Since the study was conducted in mixed day secondary schools, this could explain why handball is popular as it is a unisex game. Therefore, in an attempt to ensure equal opportunities, the playground for handball are provided. It was observed through checklists that, all the ten sampled schools did not have play grounds of their own but rather shared with the neighbouring primary schools.

According to Table 4.4, 47% of the teachers admitted having football pitches in their schools. This was contrary to the physical observation by the researcher through the checklists that the pitches belonged to the primary schools where the schools were located while one of the sampled schools used a public playground for foot ball, net ball and handball games. It was observed using checklists that, no school had rugby game played in the mixed day schools of the two districts contrary to the responses given by the teachers. It is clear that inadequacy of infrastructural facilities affected the implementation of FDSE.

4.4.3 Overall status of infrastructural facilities in mixed day schools

The researcher asked the teachers to rate the current status of infrastructural facilities in their schools. This was to enable the study capture an overall status of these facilities.

Table 4.5 Overall state of infrastructural facilities in mixed day secondary schools

Condition	Frequency	Percentage
Very good	0	0.00
Good	14	41.2
Fairly good	14	41.2
Bad and needs repair	3	8.8
Missing	3	8.8

From the Table 4.5, the teachers rated the state of infrastructural facilities available in their schools as good with 8.8% feeling that they required repair. Through the researcher's observation checklists, it was found out that half of the ten sampled schools had their classroom floors in good state of use while a few of the schools' classrooms had chipped floors which required repair. Out of the ten sampled schools, almost half had their classrooms without window shutters which made students using them uncomfortable and unable to concentrate in class during learning process. In addition, one school had not yet put doors in the classrooms. However, all in all, majority of the schools, the classrooms were well lit and spacious with some of the sampled ten schools congested. These findings show that although schools may have limited facilities, they have maintained them in fairly good conditions. From these findings, it can be concluded that the teachers and students in the sampled schools have a sense of ownership towards the facilities that they have. This explains why 82.4% of the teachers gauged the facilities as being in fairly good condition and better. From observations made in the field, the status of facilities was fairly good

which was in agreement with teachers' responses.

4.5 Provision of teaching and learning resources in day secondary schools in Kitui -West and Matinyani districts

The researcher sought to establish the extent to which teaching and learning resources are provided through the FDSE in the two districts. Consequently, related questions were asked to the respondents. Their responses are presented in Table 4.6.

4.5.1 Provision of teaching learning resources according to students

Responses given by students from the sampled schools are tabulated in Table 4.6

Table 4.6 Provision of teaching and learning resources according to students

Teaching learning resource	Yes		No		Missing	
	f	%	F	%	f	%
School has a computer lab	30	15.2	165	83.3	3	1.5
Teachers teach use of teaching aids such as charts, maps and Microscopes	181	91.4	14	7.1	3	1.5
Do you have science laboratories for science?	189	6	95.6	3.0	3	1.5
Teachers are available for practical class	176	88.9	10	5.1	12	6.0

Table 4.6 shows that only 15.2% of the sampled mixed day schools had computer laboratories. These findings show that computer studies and literacy is still unpopular among students attending mixed day secondary schools in Kitui-West and Matinyani districts. This could be due to the findings in section 4.3 which had earlier on shown that 66.7% of sampled schools did not have electricity. It follows that such schools may not have computer laboratory since this requires electricity for it to operate. These findings show that there is an increasing trend towards

the introduction of making ICT an important pedagogical tool for learning and differentiation purposes (Briseid & Caillods, 2004).

The table also shows that 91.4% of the teachers use teaching aids during their lessons while the table 4.6 also indicates that, 95.5% of the schools did not have science laboratories for learning. According to report in Table 4.6, 88.9% of the teachers availed themselves for practical lessons despite shortage of laboratories. This could be due to increased provision of instructional materials like laboratory materials, text books, teachers' hand books, charts and other teaching materials as indicated in earlier section of this chapter (4.3.1).

However, although 88.9% of students in the sampled schools indicated that teachers were available for of the teachers availed themselves for practical lessons, this contradicted reports from interviewed principals that teachers were inadequate in all schools. This is because the TSC has not sent enough trained teachers to the schools. The reports indicated that, most schools had hired Board of Governors (BOG) teachers to cushion the shortage. One of the principals was quoted saying that,

> "hiring of BOG teachers compromised standards because in his school he had been employing his former students some of whom completed form four in 2012 to help others due to shortage of funds. This is one of challenges in implementation of FDSE".

All the principals interviewed had inadequate teachers in all subjects in their schools. This has been attributed to the fact that the government through the TSC had not posted teachers due to current teacher recruitment freeze, which has caused relatively high student to teacher ratios

in some of the schools, in turn making teachers have heavy work load. At the same time, Boards of Governors had inadequate finances to employ trained unemployed teachers due to financial strain in the schools. The two DEOs interviewed also confirmed that there were shortages of teachers in schools of their districts.

4.5.2 Provision of teaching and learning resources according to teachers

The researcher asked the teachers questions related to the provision of teaching and learning resources in the sampled schools. Their responses are as shown in Table 4.6.

Table 4.7 Provision of teaching and learning resources according to teachers

Teaching aid	Frequency	Percentage
Maps	8	24
Text books	29	85
Chalk	28	82
Microscope	9	26
Test tube and other apparatus	18	52.9
Charts	17	50
Chalkboards	20	58.8
Exercise books	14	41.1

According to Rawat, Zaman, Shams and Halal (2012) text books are tools that play a significant role in secondary education because they facilitate individual and class teachings and self directed activities of the learners.

From Table 4.7, 85% of the teachers agreed that text books were provided for their teaching subjects. There was also 82% who had access to chalk. This shows that most teachers had text books for reference purposes and planning for their lessons. Researcher's observation

checklists reports indicated that the book ratio was 1:3 in half of the sampled schools while in some of the schools, the ratio was 1:4 and above while in a few other schools two students shared a book. It was observed that most books were either lost by students or too torn for use thus required repair. Other learning materials were fairly provided in most schools.

Therefore, the availability of textbooks in the sampled schools shows that the implementation of FDSE is taking this vital factor into consideration. Availability of text books and other teaching and learning materials could be attributed to availability of FDSE funds for the same by the government. However, for smooth implementation on the programme the materials will need better care to prevent them from misuse and loss. This literature was backed by Kioko (2010) who found out that schools lacked libraries which forced them to keep books in stores where they got damaged. The books were also inadequate due to theft and poor binding.

The table also shows that there are 59% of the teachers have access to the chalkboard. Bearing in mind that the chalkboard is a basic teaching learning aid that every class should have, and then it is alarming to note that some teachers had no access to the same. This could be due to the fact that some of the sampled schools had very few classrooms. As a result, some lessons were conducted outside in the open under trees.

4.6 Trend in enrolment levels in mixed day secondary schools in Kitui-West and Matinyani Districts

The researcher sought to determine the trends in enrolment levels in mixed day secondary schools following the implementation of the FDSE.

4.6.1Trends in enrolment levels in mixed day secondary schools according to students

The research sought to find out the trends in enrolment levels from students. The Table 4.8 shows the responses from the students on the enrolment trends in their classes.

Table 4.8 Trends in enrolment levels in mixed day secondary schools according to students

Statement	Yes		No		Missing	
	f	%	f	%	f	%
Have new students joined your class since last year?	177	89.4	19	9.6	2	1.0
Are there students who dropped out from your class?	145	73.2	50	25.3	3	1.5

From Table 4.8 shown, 89.4% of the students attested to the fact that new students had joined their classes since last year. This trend in increased enrolment could be as a result of the introduction of Free Day Secondary Education (FDSE). With reduced levies, most students from poor backgrounds are most likely to get enrolled for secondary school education in the day schools. These findings agree with Kattan (2006) that countries that removed fees had substantial increase in enrolment rates in the secondary sub sector. They also confirm that, Kenya's target of introducing FDSE was to raise student enrolment to reduce disparities in access to education. According to 9.6% of the students' respondents, no students joined their class since last year while 1% did not respond to this question.

4.6.2 Trend in enrolment level according to teachers

The researcher sought to determine the enrolment levels according to teachers in their classes. The teachers were asked to accent to the enrolment level as rising, constant, dropping or

unstable.

Table 4.9 Number of students in class according to teachers

No. of students	Frequency	Percentage
Less than 15	1	2.9
15-30	18	52.9
40-50	11	32.4
Above 50	2	5.9
Missing	2	5.9
Total	**34**	**100**

According to Table 4.9, most of the classes in the sampled schools had student population of not less than 15 students. From the Table, 85.3 % of the sampled teachers stated that their class sizes were ranging between 15-50 students. This shows that most of the schools were not under populated.

Responses from the teachers in Table 4.9 indicate that 32.4% had a student population of 40-50 in their classes while 5.9% of the teachers taught more than 50 students in their classes. This shows that some schools were over enrolled beyond the required 45 students per class as per the government policy.

4.6.2 Trend in enrolment levels in mixed day secondary schools according to teachers

The responses given by teachers on the enrolment levels were as shown in Table 4.10.

Table 4.10 Trend in enrolment levels according to teachers

Trend	Frequency	Percentage
Rising	26	76.5
Constant	2	5.9
Dropping	1	2.9
Unstable	1	2.9
Missing	4	11.8
Total	**34**	**100**

Table 4.10 shows that, 76.5% of the teachers agreed that the enrolment levels in the classes they teach was rising. This is in agreement with the findings from the students who stated in earlier section that they had witnessed new students join their classes. Responses from some of the interviewed principals and DEOs confirm the teachers' responses. One of the DEOs said "the district has new class every year in some schools due to high student influx to secondary schools". The increase was also confirmed by the researcher through the observation checklist where in some schools classes were found to be congested. The increase in the enrolment trend level could be attributed to the introduction of FDSE. Therefore, from these findings, the researcher can conclude that increased enrolment levels are one of the factors affecting the implementation of FDSE in Kitui West and Matinyani Districts.

Table 4.11 Crowded classes according to teachers

	Yes		No		Missing	
	f	%	f	%	f	%
Level of enrolment causing crowding	13	38.2	18	52.9	3	8.8

The Table 4.11 indicates that there was no crowding in the classrooms. This is shown by the 52.9% of the sampled teachers who indicated that their classrooms were not crowded. However, according to Table 4.11, 38.2% of the teachers responded that their classes were crowded.

Researcher's observation checklist report also indicated that some classrooms in the sampled schools were overcrowded. This means that classrooms were affecting the implementation of the FDSE programme in some of the sampled schools.

Table 4.12 Dropout rate of students according to teachers

	Yes		**No**		**Missing**	
	f	%	f	%	f	%
Students dropping out since introduction of FDSE	13	38.2	19	55.9	2	5.9

Table 4.12 shows that the dropout rate since the introduction of FDSE had declined in most schools. The table shows that 55.9% of the sampled teachers had not experienced student dropout in their teaching subjects since the FDSE started. This can be because many students who could not afford to pay fees are now benefiting from the programme.

Table 4.13 Main causes of dropout among students

Cause	**Frequency**	**Percentage**
Lack of fees	19	55.9
Poverty	4	11.8
Pregnancy	2	5.9
Optional subject	1	2.9
Missing	8	23.5
Total	**34**	**100**

From table 4.13, 55.9% of the teachers stated that the main cause of dropouts among students was lack of fees. There was 11.8% who felt that dropout was a result of poverty while 5.9% attributed it to pregnancies. These findings agree with those found out earlier in Table 4.12 of this thesis which showed that the dropout rates had reduced. Since teachers have indicated lack of fees as the main cause of student dropout, then it is possible that with the introduction of FDSE

many students are likely to stay longer in school.

The findings also agree with responses from the principals' interviews which revealed that,

> "student population had gone up since 2008 when free day secondary education program was introduced by the government. The students had increased from ten to one hundred and ten in one of the schools while the other witnessed forty to three hundred and fifty".

The principals attributed the increased enrolments to disbursement of FDSE funds which had made education cheaper; thus, attracting many day students from poor backgrounds. They argued that, some of the students flocking to the schools were from boarding schools which were more expensive. In addition, one principal stated that,

> "Parents thought education was going to be totally free, so many children moved to secondary increasing population in day secondary schools."

One of the principals however, felt that population in his school had been reducing due to competition from the neighbouring newly opened day schools. Responses solicited from DEOs through interviews indicated that, trend in enrolment in public day secondary schools had been rising since introduction of free day secondary education program in 2008. Both DEOs attributed the increased enrolment to disbursement of FDSE where students' fees had been lowered. In fact, one DEO gave a comment that,

"the low cost of education in day secondary schools has attracted many students including overgrown students and if funding continues, transition rates will improve to over ninety per cent from the current seventy six".

The interviewed education officers felt that FDSE programme was being implemented as per government policy and according to one of the DEOs, "no child should be denied education and sent home for fees", which made majority students access secondary education. As a result trends in enrolment were on the upward direction. However, from the earlier Table 4.8, 9.6% of the students had not witnessed new students joined their classes. This small percentage could be the Form IV students. In most schools, the policy does not allow new admissions in form four. As a result, it is not possible to have new entries at this level. Another 1% of the students did not respond to this question.

An earlier Table 4.10 also indicated that, 5.9% of the teachers agreed that enrolment in their schools was constant. This response matched that of one of the interviewed principals in the sampled schools who felt that enrolment in his school was actually not going up. According to Table 4.8, 73.2% of the students had witnessed student drop out in their classes. The findings counter findings in the earlier section of this section which showed that enrolment rates were on the increase.

From the Table 4.10 earlier shown, 2.9% of the teachers noted a drop in students' enrolment trend in their schools while another 2.9%of teachers witnessed that an unstable enrolment trend since introduction of FDSE in 2008. The Table indicates that, 11.8% did not

respond to this question. Although most students enroll to benefit from FDSE programme, these findings show that their retention rates are very uncertain. A few of the interviewed principals concurred with students' responses where one principal responded that,

> ''although student enrolment had been rising, there was no consistency since students keep dropping while others had been joining the school from other schools that were full boarding with higher fees''.

These findings agree with Kadamira and Rose (2003) that lack of money to buy essential school materials for children's schooling was a likely cause of potentially high drop out at the later stage. The findings also confirm Sabates R., Hossain A. & Lewin M.K. (2010) that direct and indirect cost of schooling can exclude some students from school such as costs of pens/pencils, copy books, private coaching, transportation and school uniform which was a relative burden for many households. However, the findings disagree with Kadamira and Rose (2003) that indicated reduced drop out due to FPE. They also contradict the World Bank (2007) and Baker and Baker (2003) that indicated that FDSE led to increased enrolments in lower secondary levels.

An earlier stated Table 4.8 also indicates that, 25.3% of the students had not witnessed drop out cases in their classes. These findings could be an indicator that dropout rate is still a challenge that remains high especially for girls (Mukama, 2012). In this study, this could be due to the fact that the sampled schools were mixed schools and that at secondary school level, there are fewer than four girls enrolled for every five boys according to the UNICEF report.

4.7 Challenges facing the implementation of FDSE in Kitui -West and Matinyani Districts

The researcher sought to establish the challenges encountered during the implementation of the FDSE in day secondary schools in Kitui-West and Matinyani districts. The question was asked to the teacher respondents. The respondents were asked to state main challenges they faced related to the implementation of FDSE. Their responses are presented in Table 4.14.

In Table 4.14 shown, the researcher presents the challenges to the implementation of the FDSE as mentioned by the teacher respondents:

Table 4.14 Challenges of implementing FDSE according to Teachers

Challenge	Frequency	Percentage
Poverty	9	26
Absenteeism	7	21
Insufficient teaching aids	4	12
Delayed disbursement	4	12
Overcrowding	3	9
High work load	3	9
Drug abuse	3	9
Less entry marks	1	3

(n=34)

The findings on Table 4.14 show that poverty was a major challenge to the implementation of FDSE programme in the districts of Kitui-West and Matinyani. The data collected from teachers agrees with those from the principals' interviews most of whom revealed that poverty was a major challenge affecting implementation of the programme. One principal said:

> "poor parents were the ones who took their children to the schools and therefore fees was very poorly paid, with some parents paying in kind inform of firewood, sand and other materials".

The findings also agree with Achoka (2007) that showed that most causes of school dropouts were due to poverty, early pregnancies and marriages, HIV/AIDS and drug abuse. All these can stem from poverty with students from such backgrounds getting lured into risky sexual behavior in exchange for money and other material items. The findings also confirm findings by Kabera (2006) which showed that the status of physical facilities and high poverty levels made parents and guardians unable to meet responsibility of paying fees and other levies.

The data in table 4.14 also shows that, 21% of the sampled teachers felt that absenteeism among students was another major challenge to the proper implementation of FDSE. The findings match those from all principals' responses in the sampled schools whom the researcher interviewed and DEOs interview results which indicated that high dropout levels were due to pregnancies and poverty made students drop out of school to be employed. According to interview results from most principals in the sampled schools, dropouts and even continuous transfers by some students who accumulate fees and run away to other school without clearing was a great challenge to implementation of the day school program. This could mean that the syllabus coverage is interfered with as most students absented themselves from school due to reasons such as lack of uniform and other levies that the schools charged them.

According to Table 4.14, there were 12% of the teachers who felt that there was lack of sufficient teaching aids in the secondary schools to ensure proper implementation of FDSE in the two districts. These findings agree with Akankha and Takash (2010) which found out that, most rural secondary schools in Kenya lacked basic school facilities such as desks, blackboards, chairs, and drinking water and toilet facilities. Besides, another study by Kioko (2010) also revealed that inadequate text books impeded the implementation of FDSE. These findings also confirm the responses by students which revealed that in most schools a text book was shared among 5 students and above. This could be attributed to loss of books by most students and that school text books normally had a short lifespan due to continuous use.

From table 4.14, 12% of the teachers felt that delayed disbursement of funds by the MOE was a major impediment to the implementation of FDSE. The findings concurred with interview results from all Principals and responses from interviewed DEOs of the two districts that, late disbursement of funds was a serious challenge to schools. It was felt that by the time funds reach schools big debts have been incurred.

The findings are also similar to the findings from Wamichwe (2009) who established that the FSE had been seriously affected by delays in disbursements of funds which forced schools to procure goods and services on credit at hiked prices and at times made suppliers refuse to supply goods to schools causing strain. Wamichwe further argued that, the delay of government funds also caused delay in BOG workers' salaries which in turn, lowered their morale and productivity. These findings were the same as principals' responses obtained from interviews during the study in Kitui-West and Matinyani districts.

All interviewed principals gave their views from their own experience that the FDSE funds disbursed by the government were totally inadequate which posed great challenges towards implementation of FDSE program. This is because the money was inadequate to pay support staff required in the school and much of the operations accounts funds went into paying school workers and administration costs.

According to Table 4.14, overcrowding and high work load were cited by 9% of the teachers as a problem in the implementation of FDSE. This shows that with the introduction of the FDSE, the enrolment rates in the mixed day secondary schools must have shot up and as a result, the classrooms became overcrowded. This situation was confirmed through observation check lists which revealed that a few of the sampled schools were congested in their classrooms. Consequently, some schools expanded from single stream to multiple streams and teachers must have found themselves with increased work load at their hands in areas such as marking huge numbers of assignments and examinations and increased lessons to be taught in a week. These findings agree with UNESCO (2008) that teacher numbers have grown slightly less rapidly than the enrolments and these affects the quality of education.

According to Table 4.14, 9% of the teachers cited drug abuse among the students as a threat to the smooth implementation of the FDSE. All the principals concurred that their students were taking drugs such as “Miraa” and illicit brews. There are many dangers accrued to drug abuse. For example, it could lead to continued absenteeism and eventual dropout if not well addressed. These findings agree with Achoka (2007) that dropouts were a result of drug abuse among students.

Interview results from more than half of the principals indicated that negative attitude of parents and some students that day schools were too local and of low quality affected implementation of FDSE programme. “This was a contributing factor of indiscipline in many day schools because some students got admitted to the schools as the last resort,” said one of the principals.

The table 4.14, shows that 3% of the teachers found the low entry marks to the secondary schools as a main problem. According to 3 of the ten principals of the ten sampled schools and one DEO concurred that, low entry marks to these schools caused low performance. This study was conducted in day secondary schools only. The trend in Kenya has always been that the boarding schools admit the cream of the best performed candidates in the Kenya Certificate of Primary Education. As results, most day secondary schools, especially those in rural areas, are usually left with the option of admitting into forms one, students who performed below average.

Some of the responses solicited from most of the interviewed principals’ show that, inadequate facilities such as classrooms, toilet facilities, offices, stores, and laboratories were a serious challenge to implementation of FDSE program in their schools. All the interviewed principals cited teacher shortage as a major challenge towards implementation of the program. All the interviewed principals and both DEOs said that there was serious shortage of trained teachers in the day schools which posed serious challenge to the implementation of FDSE.

4.8 How to improve the implementation of free day secondary education in Kitui-West and Matinyani Districts

In order to determine possible ways of improving the implementation of FDSE in secondary schools in Kitui-West and Matinyani districts, the researcher asked the teacher respondents to make some recommendations. Their responses are presented in Table 4.15 and discussed in this section.

Table 4.15 Ways of improving the implementation of FDSE according to Teachers

Solution	Frequency	Percentage
Increase facilities	7	20.5
Parental supervision	5	14.7
Disburse funds in time	5	14.7
Offer sponsorship to subsidize	4	11.7
Proper management of resources	2	5.8

(n=34)

From Table 4.15, 20.5% of the teacher respondents felt that there was need for teaching and learning facilities to be increased to improve implementation of FDSE in Kitui-West and Matinyani districts. This could help to address the challenges such as poverty, overcrowding and high work load among others that the teachers had cited earlier Table (4.6). These findings are similar to those of Ogola (2012) which revealed that most head teachers experienced challenges such as shortage of instructional materials; which interfered with the quality of education since the introduction of FDSE.

According to Table 4.15, Parental supervision was cited by 14.7% as a way to improve the implementation of FDSE. Bearing in mind that it is these same teachers who handle students

directly as class teachers, subject teachers, club patrons and games masters among others, then it is imperative that they could have insight into how much parental supervision the students are being accorded. Therefore, through parental supervision, challenges such as absenteeism and drug abuse among students could be averted easily with the parents' input. The findings are similar to those by Mutwol (2009) that showed that poverty and lack of basic needs, indiscipline and lack of encouragement by parents influenced participation by students. The findings also agree with Achoka (2007) that students and parents should appreciate the need to be educated, ensure conducive climate to entice students to complete schooling and identify possible threats against retention rates such as drug pushing and consumption.

The interviewed principals in majority of the sampled schools felt that schools should strengthen Guidance and Counseling departments to help students improve on discipline. Community awareness should be held to change the attitude of the community in order for their members to change their perspective towards day secondary schools and to help students to value education. According to interview results, some of the principals in the sampled schools felt that provincial administration should be involved to help schools ensure discipline. At the same time, most of the interviewed principals and one DEO felt that parents should be involved in all matters concerning their children including discipline for implementation of FDSE programme to improve.

According to Table 4.15, 14.7% of the teachers suggested that timely disbursement of funds towards the FDSE by the government could be one of the possible ways to improve the implementation of the programme in secondary day schools in the district. All the principals in the ten sampled schools also concurred with teachers' responses that disbursement should be done in

time. They suggested that disbursement should be done during vacation of every term so that there is money by opening date of term. These findings agree with those of Njoroge and Kerei (2012) who asserted that the disbursement of government subsidies to schools should be done on vacation before schools open for the following term to improve the smooth implementation of the programme.

Responses solicited from all the interviewed principals show that, capitation of ksh10, 625 per child per year should be doubled to keep up with inflation; thus, the implementation process would be improved. The same sentiments were received from DEOs from the two districts who also felt that

> ‘‘the government should make free day schools fully free in order to boost retention rates’’.

To improve implementation, all the interviewed principals advised that the government fully funds FDSE to include lunch and development fund so that the education is fully free. Table 4.15 shows that 12% of the sampled teachers recommended that offering sponsorship to subsidize other costs could ensure the improved implementation of the FDSE. These subsidies could help students from poor backgrounds to access and benefit from the programme. Such students may be helped to have items such as school uniforms, shoes, pens and exercise books only through subsidies. These findings confirm findings by Mutwol (2009) that the government should promote more partnerships and collaboration with churches and NGOs to promote retention and completion rates.

According to responses on Table 4.15, 5.8%, of the teachers thought that the implementation of the FDSE programme would improve if the resources are well managed. This was echoed by one of the interviewed DEOs, who claimed that,

‘‘ better management of resources as well as ensuring proper monitoring and supervision of FDSE funds to ensure prudence would improve implementation process’’.

This could mean that there are limited supervisory activities towards the same; hence, the call for intensified management involvement. These findings confirm recommendation by Ogola (2012) that there should be intensification of supervision on the use of instructional materials and training in guidance and counseling. If properly done, this could ensure proper utilization of the available resources towards the implementation of FDSE in the two districts.

One of the DEOs and a few of the interviewed principals in the sampled schools felt that, low performing students should be admitted to polytechnics to avert low performance in day secondary schools. All principals and DEOs from Kitui-West and Matinyani suggested that, more trained teachers should be employed and send to schools.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS OF THE STUDY

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the study. It also makes suggestions for further studies based on the findings of this study.

5.2 Summary of findings

In this study, the researcher sought find out the factors affecting the implementation of FDSE in Kitui-West and Matinyani districts. In order to achieve this aim, the research was guided by the following questions;

1. What is the status of infrastructural facilities in day secondary schools of Kitui–West and Matinyani Districts?
2. To what extent are the teaching and learning resources provided in day secondary schools in Kitui -West and Matinyani districts?
3. What is the trend in enrolment levels in day secondary schools in Kitui-West and Matinyani districts?
4. What challenges face the implementation of FDSE in Kitui-West and Matinyani districts?
5. What can be done to improve the implementation of Free Day Secondary Education in Kitui-West district and Matinyani?

The researcher used survey design while 10 schools were sampled with a sample size of 292 participants comprising, 240 students, 40 teachers, 10 principals and 2 district education officers. Simple random sampling was used by the researcher in order to allow generalization of the data to a larger population. The research instruments used by the researcher include questionnaires for students and teachers while interview guide for the principals and DEOs of the two districts. The data obtained from the study were coded and analyzed into frequencies and percentages before the results were tabulated. From data presented and discussed in the previous chapter, the findings can be summarized as follows as per research questions that guided the study:

On the research question on the status of infrastructural facilities in day secondary schools of Kitui-West and Matinyani Districts, the study established that there are inadequate infrastructural facilities such as electricity, classrooms, desks and chairs, toilets and playing fields for all students in day secondary schools, which seriously affected implementation of FDSE. This was due to influx of students attracted by the disbursement of FDSE government funds which made education more affordable to the poor. The state of infrastructural facilities needs to be upgraded to an acceptable standard level, to accommodate increased numbers due to FDSE.

In regard to research question on extent of provision of teaching and learning resources in day secondary schools in Kitui-West and Matinyani Districts, it was noted that free day schools are experiencing serious teacher shortage which has made Boards of Management hire BOG teachers to cushion the shortage because the TSC has not sent enough trained teachers to the schools due to the current recruitment freeze. Secondly, a big number of teachers hired in most day schools are not fully qualified which is likely to water down the quality of education given to the students.

Thirdly, Text books are provided for teaching and learning but most books are lost by students or are too torn for use, raising student book ratio; hence, prudence of resource utilization and management was required. Finally, computers are not yet in use as teaching and learning resources in most schools due to lack of electricity which has not yet reached the areas.

According to the research question on trend in enrolment levels in day secondary schools in Kitui-West and Matinyani Districts, it was noted that, enrolment levels have steadily gone up in day secondary schools since the introduction of FDSE in 2008 due to disbursement of FDSE government funds which attracted children from poor backgrounds and even overgrown children. Despite the high enrolment levels, the retention rates are uncertain; thus, dropouts are also high. In regard to the research question on challenges facing the implementation of FDSE in Kitui-West and Matinyani Districts, the findings of the study revealed that all the implementation of FDSE in the sampled day schools is faced by several challenges. These threats range from poverty, high work load, and absenteeism, delayed disbursement of funds, drug abuse and less entry marks. However, poverty is the most popular challenge reported by the teachers as threatening the implementation of the FDSE.

Despite the advantages associated with the implementation of the FDSE, poverty has greatly affected the smooth implementation of the programme since very few parents are able to meet the other items required for the implementation of the programme. As a result, items such as uniforms, exercise books, pens, shoes and trip charges remained a big challenge to the students from poor socio-economic background.

On research question on strategies to improve the implementation of FDSE in Kitui-West and Matinyani Districts, the findings have revealed that there was need for the government to disburse funds in good time as a way of curbing delayed disbursement of funds towards the implementation of the FDSE in the day secondary schools. The FDSE funds capitation per student is found to be inadequate and therefore should be doubled from the current ksh10, 625/- to cater for BOG employed teachers and better running of the schools. Most of the sampled teachers in the study agreed with this and pointed out that, there was unnecessary time wastage as the schools waited to receive the delayed funds; a factor that they felt affected the implementation of the FDSE negatively

Suggestions that were given by the respondents on how to improve the implementation of the FDSE in Kitui -West and Matinyani districts included increased facility provision, parental supervision and proper management of available resources. These touched on areas like employment of more qualified teachers, equipping the schools with adequate facilities and available resources to ensure that all resources are utilized for their intended purpose to realize effectiveness and efficiency.

5.3 Conclusion

The aim of this study was to analyze the factors affecting the implementation of FDSE in Kitui-West and Matinyani Districts Kitui County. On the basis of the research findings as drawn from the research questions, it was concluded that all the respondents agree with the fact that provision of adequate teaching and learning facilities and timely disbursement of funds toward

FDSE as well as increment of the capitation per student are some of the outstanding ways of improving the implementation of the programme in day secondary schools. The implementation could also be improved if infrastructural facilities were provided to all public day schools.

The problem of drug abuse can lead to increased dropout rates among learners; thus, affecting the retention rates and this adversely affects the implementation of the FDSE besides affecting the overall student achievement and transition rates in the day secondary schools.

Parents should be actively involved in the education of their children through constant supervision. They should do this by ensuring that the students have all the items that they may require for their education and that they attend school as required. This will ensure that the implementation of the FDSE is made smoother and becomes more successful. Poverty levels are likely to reduce in families of poor students who have accessed education.

5.4 Recommendations

Unless the challenges cited in this research are corrected**,** the implementation of FDSE will continue to be affected by numerous factors which in the long run will affect the overall teaching-learning process in our public day secondary schools. Therefore, based on the findings of this study, the researcher makes the following recommendations to the Ministry of education, parents, school principals and teachers: The ministry of education (MOE), which is the official implementer of the FDSE in Kenya, should ensure that funds towards the programme are disbursed in time in order to avoid unnecessary delays and time wastage in the teaching learning processes at school level(s).

The Government through TSC should ensure adequate teaching force by appropriately employing enough teachers in day secondary schools so as to close the staffing gap that is too broad in the schools and greatly affect the effectiveness of the teaching-learning process and the overall implementation of the FDSE programme. This will in turn ensure that the heavy teaching work load is minimized. This could also ensure increased teacher commitment and lowered student to teacher ratio and eventually lead to improved student performance. This will in turn translate into a success story about the FDSE programme as a whole.

The Government should continue funding FDSE but increase capitation to benefit the poor more. To instill a sense of ownership and responsibility among all stake holders and especially parents, parental supervision should be encouraged both at home and at school. Parents as key stakeholders should strive to ensure that the students avoid unnecessary absenteeism by attending school regularly and carrying out all the designed tasks such as assignments. This will help the students to develop a liking for their work when they perform better and so be motivated to do well and appreciate the available FDSE funds being offered to them.

The school administrators should ensure that available resources are utilized prudently towards implementing the FDSE. The school administrators should also organize for seminars and workshops with parents and other stakeholders on the same. For effectiveness in the implementation of FDSE, there is need to expand the resources to include the local communities and parents in the overall acquisition and utilization of the necessary resources.

The free day education program should be continued because of its benefits to the

community. For instance, there is likely development in future because completion rates are high and those who have gone through secondary education will eventually cause development. Most poor are able to get basic education up to form four.

Absenteeism by students should be addressed for successful implementation of FDSE. These findings support Mutwol (2009) who asserted that uninteresting curriculum and school based policies such as repetition, indiscipline and lack of encouragement by parents affected student participation in schools. Therefore, to address absenteeism, all stakeholders should ensure that factors that contribute to the same are addressed accordingly.

Students should be sensitized on the various benefits of FDSE and the role they should play in the implementation for better success of the progamme.

5.5 Suggestions for further research

This research was concerned with the factors affecting implementation of free day secondary education in Kitui-West and Matinyani districts, Kitui County, Kenya. However during the study, the researcher found out that some students got admission to the secondary schools with very low marks. The researcher therefore, recommends that research be done on the relationship between student entry mark into day schools and the implementation of the FDSE in Kitui- West and Matinyani district.

There is need for a future study to be carried out on the impact of FDSE on poverty levels in Kenya so that the government could find out if the progamme has been a worthy while venture

and expand the progamme to university level.

Again, this study was conducted in Kitui-West and Matinyani districts, Kitui County which falls under the ASALs in Kenya. It would be interesting to find out how the findings of a similar study could look like if the study location was from another region altogether. Therefore, the researcher recommends that future researchers should try to carry out a similar study in any other part of the country.

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APPENDICES

APPENDIX I: Students' questionnaire

Dear Respondent,

I am Rose Mbathe Musewa, a student at the Catholic University of Eastern Africa (CUEA) pursuing masters degree in educational Administration and Planning. I am required to conduct a research on "Factors affecting the implementation of Free Day Secondary Education in Kitui – West and Matinyani Districts, Kitui County''. It will be in partial fulfillment for the award of Masters Degree in Education.

I kindly request you to fill this questionnaire as honestly as possible so that the research could be completed. The information given is for research purposes only. Confidentiality will be assured.

Thank you.

Instructions:

- Please tick (√) against the most appropriate response applicable to you or fill in the blank spaces.
- Do not write your name anywhere on this questionnaire.

Section A: Background information

1. Your gender:
   (a) Male [ ]
   (b) Female [ ]

2. Your age in years:
   (a) Below 15 years [ ]
   (b) 16-17years [ ]
   (c) 18-19 years [ ]
   (d) 20 years and above [ ]

3. Your school category:
   (a) Mixed day [ ]
   (b) Mixed day/boarding [ ]

4. Your class:
   (a) Form 1 [ ]
   (b) Form 2 [ ]
   (c) Form 3 [ ]
   (d) Form 4 [ ]

5. Who pays for your fees in school?
   (a) Parent [ ]
   (b) Guardian [ ]
   (c) Well wishers [ ]

6. What is the occupation of your parent/guardian? _____

Section B: Status of infrastructural facilities

7. Do you have a library in your school? Yes [ ] No [ ]

8. What do you sit on in class?

   Bench [ ] Chair [ ] Stool [ ] Other [ ]

9. Does your school have electricity? Yes [ ] No [ ]

10. What is your school's source of water?

11. Tap water [ ] Borehole [ ] None [ ] Others (specify) _____

Section C: Extent to which teaching and learning resources are provided

12. How many students share a book in your class?

(a) 1 book per student [ ]

(b) 1 book shared by 2 students [ ]

(c) 1book shared by 3 students [ ]

(d) 1 book shared by 4 students [ ]

(e) 1 book shared by more 5 and more students [ ]

13. Your school has how many science laboratories?

None [ ] One [ ] Two [ ] Three [ ]

14. Does your school have a computer laboratory? Yes [ ] No [ ]

15. Do your teachers teach using teaching aids such as charts, maps and microscopes?

Yes [ ] No [ ]

16. Do you have science laboratories for science lessons? Yes [ ] No [ ]

17. Are your teachers available for practical lessons? Yes [ ] No [ ]

Section D: Trend in enrolment levels

18. How many students are in your class? ……

19. How many streams does your class have?

(a) One [ ]

(b) Two [ ]

(c) Three [ ]

(d) Above three (specify) ……..

20. Have there been new students joining your class since last year?

(a) Yes [ ]

(b) No [ ]

21. Are there students who drop out from your class?

(a) Yes [ ]

(b) No [ ]

22. About how many students have dropped out from your class since last year?

(a) Between 1-5 [ ]

(b) 6-10 [ ]

(c) 11-1 5 [ ]

(d) Above 16 [ ]

Thank you for participating

APPENDIX II: Teachers' questionnaire

Dear respondent,

I am Rose Mbathe Musewa, a student at the Catholic University of Eastern Africa (CUEA) pursuing masters degree in educational Administration and Planning. I am required to conduct a research on "Factors affecting the implementation of Free Day Secondary Education in Kitui – West and Matinyani Districts, Kitui County'', in partial fulfillment for the award of Masters Degree in Education.

I kindly request you to fill this questionnaire as honestly as possible in so that the research could be completed. The information given is for research purposes only. Confidentiality will be ensured.

Thank you.

Instructions

- Please tick (√) against the most appropriate response applicable to you or fill in the blank spaces.
- Do not write your name anywhere on this questionnaire

Section A: Demographic information

1. Gender: (a) Male [ ]

(b) Female

[ ]

2. Your Age:

Under 25years [ ]

26 – 30 years [ ]

31 – 35years [ ]

36 – 40 years [ ]

Over 41years [ ]

3. Your highest training level:

P1 certificate [ ]

Diploma in education [ ]

B. Ed [ ]

M. Ed [ ]

Others [specify] …….

4. Your teaching experience:

Below 1 year [ ]

1 – 5 years [ ]

6 – 9 years [ ]

10 – 15 years [ ]

Over 16 years [ ]

5. How long have you been in your current station?

Below 1 year [ ]

1 – 5 years [ ]

6 – 9 years [ ]

10 – 15 years [ ]

Above 15 years [ ]

Section B: Status of infrastructural facilities

6. What is your teaching subject combination? ……

7. Are the classrooms spacious enough for all the students in your teaching subject(s)?

   Yes [ ] No [ ]

8. Briefly explain your response in 7 above

   ……

   ……

   ……

   ……

9. Do some students share chairs/desks during your lesson? Yes [ ] No [ ]

10. Briefly explain your answer in 9 above

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11. Does your school have a consistent supply of fresh drinking water?

    Yes [ ] No [ ]

12. Does your school use electricity? Yes [ ] No [ ]

13. Your school has playgrounds for which games?

Football [ ]

Netball [ ]

Rugby [ ]

Handball [ ]

Volleyball [ ]

Any other [specify] …….

14. What is the current overall state of infrastructural facilities that your school has?

Very good state [ ]

Good state [ ]

Fairly good state [ ]

Bad state and needs repair [ ]

15. How has the availability/state of infrastructural facilities in your school changed with the implementation of free day secondary education?

(a) Yes [ ]

(b) No [ ]

16. Explain your answer in 15 above briefly

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Section C: Extent to which teaching and learning resources are provided

17. State the text book/pupil ratio in your teaching subject.

1:1	[ ]
1:2	[ ]
1:3	[ ]
1:4	[ ]
1:5 and above	[ ]

18. What is the relationship between the ratio you have stated above and the implementation of the free day secondary education programme?

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19. Does the school have enough text books for students in your teaching subject(s)?

Yes [ ] No [ ]

20. Briefly comment on your answer in 19 above

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……....

21. Which of the following teaching aids do you have access to for your lessons?

Maps [ ]

Textbooks [ ]

Chalk [ ]

Microscopes [ ]

Test tubes and other apparatus [ ]

Charts [ ]

Chalkboard [ ]

Exercise books [ ]

Any other [specify] ……...

22. Are the aids mentioned in 21 above enough for your subject needs?

Yes [ ] No [ ]

23. Briefly explain your answer in 22 above

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24. What is your workload? ……

25. How many teachers do you have in your teaching subject(s)?.....

26. Do you think you have enough teachers in your teaching subject(s)?

Yes [ ] No [ ]

27. Explain your answer in 26 above

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28. Are there some untrained teachers in your teaching subject area?

Yes [ ] No [ ]

29. Briefly explain your answer above

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30. How do you cope with teacher shortages if any, in your teaching subject(s)?

(a) Combine classes [ ]

(b) Employ BOG teachers [ ]

(c) Leave some class levels untaught [ ]

(d) Team -teaching [ ]

(e) Others [specify] ……..

31. How has the number of teachers in your subject area changed since the implementation of free day secondary education?

……

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…….

Section D: Trend in enrolment levels in day schools

32. On average about how many students do you teach per lesson in your teaching subject(s)?

(a) Less than 15 [ ]

(b) 15-30 [ ]

(c) 40-50 [ ]

(d) Above 50 [ ]

33. What can you comment about the enrolment trend in your teaching subject(s) since the introduction of free day secondary education?

(a) Rising [ ]

(b) Constant [ ]

(c) Dropping [ ]

(d) Unstable [ ]

34. Does the level of enrolment in your subject(s) cause overcrowding during your lessons?

(a) Yes [ ]

(b) No [ ]

35. Briefly explain your response in 34 above

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36. Are there students who have dropped your teaching subjects since the year began?

(a) Yes [ ]

(b) No [ ]

37. What is your comment on dropout levels in your subject(s) since the introduction of the free day secondary education?

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38. What are the main causes of dropouts in your teaching subject(s)?

(a) Lack of fees [ ]

(b) Drug abuse [ ]

(c) Poverty [ ]

(d) Pregnancy [ ]

(e) Others [specify] _____

Section E: Challenges facing Free Day Secondary Education and strategies for improving implementation

39. What are some of the challenges that you face as a teacher following the implementation of the free day secondary education?

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40. Suggest strategies that can be used to address the challenges mentioned in 39 above

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Thank you for participating

APPENDIX III: Interview guide for principals

Date …….

Section A: Background information

1. Gender…….

2. Your age:

Below 30 years	[ ]
31 – 35 years	[ ]
36 – 40 years	[ ]
41-45years	[ ]
Over 46 years	[ ]

3. Your academic qualifications:

(a) M. Ed	[ ]
(b) B. Ed	[ ]
(c) Diploma	[ ]

(d) Other [Specify]……..

4. For how long have you been in the teaching profession?

……

5. How long have you been a head teacher in your current school?

……

Section B: Questions related to Free Day Secondary Education

6. How many teachers do you have in your school?

……

7. Does your school have enough teachers for all the subjects?

……

Briefly explain your response.

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8. What is your school student population?

……

9. Has there been any change in the student population in your school following the introduction of the Free Day Secondary Education (FDSE)?

……
Comment on your response.

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10. How many of your students benefit from the FDSE Programme?

…….....

11. How does the government disburse funds for the FDSE to your school?

……

Describe briefly

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12. From your experience, does your school receive enough allocation of funds from the government towards the Free Day Secondary Education (FDSE)?

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Comment briefly.

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13. What, in your view, are some of the outstanding benefits of Free Day Secondary Education (FDSE) in your school since its introduction?

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Comment briefly.

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14. What is the set- backs to FDSE in your school and district?

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Comment on your answer.

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5. What measures has your school and district put in place to address the challenges mentioned?

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Thank you for your co-operation

APPENDIX IV: District Education Officers' interview schedule

Date ……

Section A: Background information

1. Gender …….
2. Your age:

   Below 30 years [ ]

   31 – 35 years [ ]

   36 – 40 years [ ]

   40-45years [ ]

   Over 46 years [ ]
3. Your academic qualifications:

   (a) M. Ed [ ]

   (b) B. Ed [ ]

   (c) Diploma [ ]

   (d) Other [Specify]……..

Section B: Questions related to Free Day Secondary Education (FDSE)

4. How many public secondary schools do you have in the district?

   ……
5. How many of these public secondary schools offer free day secondary education?

   …….
6. What is the total population of secondary school students in public schools in the district?

   ……..

7. Out of the student population in the district, how many are beneficiaries of FDSE?

   .....

8. What has been the trend in student enrolment in public secondary schools in this district since the introduction of free day secondary education?

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   Comment briefly on this trend.

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9. How is the free day secondary education programme implemented in secondary schools within your district?

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10. Does the district have a policy on the implementation of the free day secondary schools?

    ……

11. How many secondary school teachers do you have in the district?

    ……

12. In your view, are the teachers enough?

    ……

    Comment briefly on your answer.

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13. Do you think the funds being disbursed by the government to schools are enough to facilitate the achievements of the objectives of FSDE policy in your district?

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    mment on your answer.

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14. What, in your view, are some of the outstanding benefits of FDSE in your district since its implementation?

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Comment briefly.

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15. What are some of the set- backs to Free Day Secondary Education (FDSE) in your district?

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Comment on your answer.

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16. What measures has your district put in place to address the challenges mentioned earlier (above)?

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17. In your view, what other measure(s) should the government put in place to improve the FDSE programme?

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End of interview-Thank you

APPENDIX V: Check list

Date _____

Name of School _____

Section A: Status of infrastructural facilities

Facility	**Total Number**	**Functional**	**Non-functional**	**Comment**
Classrooms • Size • Streams				
Desks • Chairs • Benches • Lockers				
Laboratories • Chemistry lab • Physics lab • Biology lab • Computer lab				
Library • Size • Capacity				

Toilets • Girls' toilets • Boys' toilets				
Playing fields • Football • Netball • Basketball • Rugby • Handball • Hockey				
Water • Borehole • Tap				
Electricity				

Section B: Availability of teaching and learning materials

Resources	**Total Number**	**Functional**	**Non-functional**	**Comment**
Text books • English • Mathematics • Chemistry • Biology • Physics • Kiswahili				

• Geography • History • C.R.E • Home-science • Agriculture • French • Arts • Commerce				
Science materials • Burettes • Test tubes • Bunsen burners • Microscopes • Petri dishes • Sinks • Tripod stands				
Computers				
Charts • Periodic table • Human anatomy • Circulatory system • Digestive system • Others				
Maps • Kenya • East Africa • Africa • World				
Models				

APPENDIX VII: Time frame

This time frame presents a summary of this research project report activities from preliminary gathering of literature materials and proposal writing period by June, 2012 up to, August 2013 when the final research project report printing, hard cover binding and submission were done through the various stages involved in conducting research.

	Period				
Activities	**June-December 2012**	**Feb- 2013**	**March-2013**	**April-May 2013**	**June-August 2013**
Proposal Writing					
Data collection					
Data analysis					
Report Writing					
Typing final Report					