INFLUENCE OF FREE SECONDARY EDUCATION POLICY ON ACCESS, TRANSITION AND STUDENT ACADEMIC PERFORMANCE IN MBITA AND SUBA SUB -COUNTIES, KENYA

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DECLARATION

DECLARATION BY THE CANDIDATE

This Thesis is my original work and has not been presented to any other university or institution of learning for the award of any diploma or degree.

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DEDICATION

I dedicate this study to our three children, Obonyo Fredrick Ndolo, Gift Aggrey Otieno and Ndolo Junior Christopher. All the three sons are still pursuing their education and this work will be a form of inspiration in their academic endearment. Above all, I dedicate this study to God, for the Lord gives wisdom; from His mouth comes knowledge and understanding (Proverbs 2:6).

ABSTRACT

Free Secondary Education (FSE) policy was introduced in Kenya in 2008 with an aim of making secondary education affordable to enhance access, transition and student academic performance. The influence seem to have been low in Mbita and Suba Sub-Counties, where Gross Enrolment Rates (GER) were low at 4948 (33%) and 3546 (25%) respectively for 2014 against national GER of 47.8%. The transition rates from 2010 to 2014 were 39.4%, 41.2%, 40.4%, 54.5%, 59.2% for Mbita, 56.2%, 54.4%, 61.1% and 59.2% for Suba which were lower than the national transition rates of 68.9%, 69.4%, 68.4%, 76.8% and 80.4% for the same period. The academic performance mean scores in Kenya Certificate of Secondary Education (KCSE) for the period 2011 to 2014 were low at 5.0 and 5.1 for Mbita and Suba Sub counties respectively. The influence of FSE policy in the discrepancies noted in access, transition and academic performance in Mbita and Suba Sub- Counties were unknown. The purpose of this study was to determine the influence of FSE policy on access, transition and student academic performance in Mbita and Suba Sub- Counties. Objectives of the study were to determine the influence of FSE policy on access, determine influence of FSE policy on transition and determine the influence of FSE policy on student academic performance in Mbita and Suba Sub-Counties. A conceptual framework based on the Psacharopoulous and Woodhall (1985) concept of investment choices was adopted to determine the influence of FSE policy on access, transition and academic performance. The study adopted ex-post facto and correlational research designs. The study population consisted of 37 principals, 2775 form four students of 2014, 1 Sub-County Schools Auditor (SCSA) and 2 Sub –County Quality Assurance and Standards Officers (SCQASOs). The study sample consisted of 34 principals, 1 SCSAs, 2 SCQASOs who were selected using saturated sampling technique and 34 Focused Group Discussions (FGDs) of 6-12 participants from 34 schools. Questionnaire, Interview Schedule and FGDs were used to collect data. Face and content validity were established by supervisors whose input was included. Reliability coefficient of principal's questionnaire was established using test re –test method and correlated using pearson's r. The outcome was that the reliability coefficient was 0.8 at the set p-value of .05 meaning that it was reliable. The study findings revealed that FSE policy accounted for 74.1% of the variation in access, 70.1% of variation transition and 31.2% of variation in student academic performance as signified by coefficients of 0.741, 0.701 and 0.312 respectively. This means that increase in FSE funding of Kshs. 10,265 resulted in increase in access, transition and academic performance as indicated by the coefficients. The study concluded that FSE policy influenced positively access, transition and student academic performance. The study recommended that, the government should therefore increase capitation fees for each student to increase access and transition and student academic performance. The findings of the study are significant to the Ministry of Education, planners, educators, parents and policy makers by informing them on the need to develop strategies to improve or redesign FSE policy so as enhance further access, transition and student academic performance.

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LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
BOM	Board of Management
EFA	Education for All
FDSE	Free Day Secondary Education
FPE	Free Primary Education
FSE	Free Secondary Education
GER	Gross Enrolment Rate
GNP	Gross National Product
GOK	Government of Kenya
HIV	Human Immune Deficiency Virus
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
LDCs	Least Developed Countries
MDGs	Millennium Development Goals
MOE	Ministry of Education
NGOs	Non- Governmental Organisations
SCQASO	Sub- County Quality Assurance and Standards Officer
SCSA	Sub- County Schools Auditor
SDGs	Sustainable Development Goals
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisations
UNICEF	United Nations Children's Emergency Funds

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Free Secondary Education (FSE) policy was introduced in Kenya in 2008 with the aim of making secondary education affordable (Ministry of Education, 2007). The social pillar in the Vision 2030 also singles out education as an important vehicle that will propel Kenya into becoming a middle-income economy. In addition, the Constitution, 2010 has provided for free and compulsory Basic Education as a human right to every Kenyan child (MOE, 2012). FSE policy was expected to provide an equal opportunity to all children of secondary school going age entry to secondary education regardless of their social class, gender, and ethnic background, physical and mental disability (Ngeno, 2015). FSE policy as adopted and implemented by the government was as follows:

The government subsidy (FSE funding) to schools was based on capitation. That is, Free Secondary Education policy put in place funding of Ksh. 10,265.00 per child per year. The breakdown of the cost was as shown in Table 1.1.

Table 1.1: Vote heads

Vote head	Amount (Kshs)
Tuition	3,600.00
Repair, maintenance and improvement	400.00
Local travel and transport	400.00
Administration cost	500.00
Electricity, water and conservancy	500.00
Activity fees	600.00
Personal emoluments	3,965.00
Medical	300.00
Total school fees	10,265.00

Source: Republic of Kenya (2009), Guidelines for Implementation of Free Secondary Education

From Table 1.1 it was observed that Tuition and Personal Emoluments (PE) received more funding. The aim was to improve access, transition and student academic performance. The Tuition vote head was meant to ensure that teaching resources are available and PE vote head cushioned against staff shortfalls.

The parental obligations were stipulated as follows; boarding costs, lunch for day scholars and school levies approved by District Education Boards in consultation with Boards of Governors and Parents Teachers Associations. The recommendation for employment of non –teaching staff was as shown in Table 1.2.

Table 1.2: Employment of Non –teaching Staff

Stream	Enrolment	Day Schools. No. of workers	Boarding Schools. No. of workers
1	180	6	10
2	360	8	15
3	540	9	20
4	720	13	28
5	900	15	30
6	1080	18	36

Source: Republic of Kenya (2009), Guidelines for Implementation of FSE

This Free Secondary Education package was meant to make secondary school education affordable and this would enable eligible students to transit from primary school to secondary schools with ease.

The objectives of FSE were to enhance access to secondary education, improve quality, equity, relevance and gender parity in the provision of secondary school education (MOE, 2007). In order to achieve these objectives, the Task Force recommended for the introduction of FSE policy which was expected to improve access, transition and student academic performance.

Many other countries have embraced the goal of extending and expanding the idea of basic education to include much of what used to be restricted access, elitist secondary education. In Japan the government fiscal policy provided for free education to secondary school level. Those of school going age have no option other than attend school to acquire education that is fully funded by the government (Nyaegah, 2005). In the USA, the federal government supports public education. The government is empowered by the

constitution welfare clause article 1 section 8 to levy and collect revenues for the support of education. The situation in Kenya is not different from that of Japan and USA. In Canada, school fees are an integral part of an education system. Parents were to contribute to their children's education through payment of fees (Nyaegah, 2005). The government recognizes that some parents are sincerely not in a position to pay so the government makes provision to ensure that a child is not denied access to education because of inability to pay fees. The department of education in Canada works with school boards, parents, teachers and other partners to ensure that policies governing school fees are implemented consistently in all provinces. What is not clear is whether Kenyan situation is similar to Canada.

Zambia established in 1996 education production units which enrol students who fail to find regular places in fee- paying afternoon sessions run by teachers who participate on voluntary basis to supplement their income in school premises. In Rwanda 80% of students are enrolled in private schools, almost 40% of which receive no public subsidy had to rely on fee income (Verspoor, 2008). The initiative of FSE was to ensure that every child can access secondary education by reducing the financial burden on parents. Unlike Zambia and Rwanda the situation in Kenya is quite different because education should be free and compulsory up to secondary level according Basic Education Act, 2012 (Republic of Kenya, 2013).

As a result of increased financial support it was expected that access and the number of students transiting from primary to secondary would increase. FSE funding was expected to provide adequate resources to students especially candidates and it was hoped this would increase academic performance (MOE, 2007).

According to Ohba (2009), the situation in Sub Saharan Africa (SSA) is different. The wide gap in secondary enrolment in SSA and the rest of the world is raising concern. Many governments in the SSA are considering abolishing secondary school fees in order to meet the targets of Education for All (EFA) and the Millennium Development Goals (MDGS). Fees charged in secondary education are the major obstacles for some children to access secondary education. Evidence indicates that secondary enrolment in SSA continues to be the lowest in the world (Ohba, 2009).

In consideration of the constraints facing secondary education like low transition caused by rising cost of financing secondary education by many households, Sessional Paper No. 1 (Republic of Kenya, 2005) proposed Free Secondary Education (FSE) policy which was implemented in 2008. The aim was to make secondary education affordable and available to all children regardless of their social classes. It was hoped that with the introduction of FSE access to secondary education was going to expand, that is, 90%-100% completion rate by 2015. Consortium for Research on Education Access, Transition and Equity (CREATE) carried out a study in rural Kenya to establish whether FSE has enabled the poor to gain access to secondary education. The report indicated that FSE cannot solve the problem of access. Some parents interviewed said that while lowering school fees has enabled some to take their children to school, this does not mean all children from poor households are assisted to gain access to secondary education.

Household income for many families has not changed while most prices of food and other commodities have soared thus reducing their ability to pay fees even in a day school (Ohba, 2009).

At the same time, the Government of Kenya (GOK) through the Ministry of Education (MOE) aimed at providing globally competitive quality education and achieve transition rate of 70% in 2008 and 80% in 2012 (Wanja, 2014).

In Kenya, a task force on the realignment of the education sector to the constitution of Kenya 2010 (MOE, 2012) points to a gloomy picture. The report indicates that the issues and challenges of secondary level are similar to those of the primary sector. The introduction of Free Primary Education in 2003 and FSE in 2008 notwithstanding, there is no total access as not all children who should be in school are in school due to high cost of secondary education especially boarding militates against access (MOE, 2012). According to Republic of Kenya economic survey (2015), total enrolment nationally rose by 9.5% from 2.1 million in 2013 to 2.3 million in 2014. GER increased from 54.3% in 2013 to 58.2% in 2014. This significant improvement is partly attributed to the implementation of FSE. However, the situation in Mbita and Suba Sub- Counties does not reflect this achievement.

Results of 2009 population data (Republic of Kenya, 2010) showed that 207 million (76%) of children who should be in school are out of school in Kenya. Consequently, in Mbita and Suba Sub-Counties which were one district in 2009 had only 26,606 students at secondary out of 188,976 of the age group of those who should be at school. Further,

comparing Homa-Bay and Rachuonyo, Suba had the highest percentage of children who had left school 71,652(41.7%) compared to Homa-Bay which had 126,340 (38.8%) and Rachuonyo 134,785 (39%).

A number of studies have been carried out in this area for example; Gogo (2003) examined the impact of cost sharing strategy on access, equity and quality of secondary education in Kenya. The research design used was correlational. Stratified random sampling technique was used to get the sample of the study. The respondents included head teachers and 12 students selected from each of the 32 out of 46 schools (69.6%) sampled in addition to the DEO Rachuonyo District. A total of 417 respondents were used. Questionnaire was used as the major instrument for data collection. In addition, documents from schools, DEO's Office and libraries were read for further information. Data analysis incorporated descriptive statistics, time trends and multiple linear regression methods. The independent variables were tested for significance at 0.05 level of confidence in a two tailed test. The study showed that enrolment in the district remained low because the parents had found it difficult to raise the required fees. However, after the introduction of FSE the situation was not the same hence the need to find out the current situation of access after the implementation of FSE.

Ndolo (2011) examined the effects of school-based investments on access and financing of secondary education in Homa-Bay District, Kenya. Cross sectional survey design was used. The study population consisted of 297 students, 33 principals and 1 DEO. Questionnaire was used to collect data which was analyzed using descriptive statistics, frequencies and cross tabulation. The study established that profits from Income

Generating Activities (IGAs) lowered the cost of education in Homa-Bay District and subsequently increased access. This necessitated a study to find out if access increased after lowering the parents' burden through implementation of FSE policy which Ndolo (2011) did not tackle.

Chabari (2010) carried out a study on the challenges of implementation of FSE in public secondary schools in Kangundo District in Kenya. The findings of the study revealed that the number of students in secondary schools increased steadily. Further, the study reported that the challenges experienced included late disbursement of funds by the government. However, information on the influence of FSE policy on access, transition and student academic performance was unknown.

Accessibility to quality and affordable secondary education has remained elusive for many Kenyans (MOE, 2007). According to the report of the task force on affordable secondary education, the cost of secondary education was the major factor to non-attendance of school. The taskforce recommended, Free Day Secondary Education (FDSE) that would cost the government Ksh. 10,265 per child per year. For Boarding Schools, the government would give Subsidy of Ksh. 10,265 while the parents pay the rest per year (MOE, 2007). However, while this was indeed a welcome relief to parents, Nyaega observed that FPE and FSE are in serious trouble following cases of massive fraud in the Ministry of Education (Nyaega, 2011).

In spite of the Government commitment, the Task Force on the Re-Alignment of the education sector to the constitution of Kenya (MOE, 2012) cautioned that the

introduction of FSE is facing stiff challenge relating to access and quality. It is reported that there is no total access as not all children who should be in school aged (13-17 years) are in school. There is no equity in accessing quality which has been complicated by severe shortage of teachers and inadequate learning materials leading to poor quality (MOE, 2012). A pertinent question one has to ask at this point; what influence does FSE policy have on secondary school education Sub- sector with regard to access?

According to MOE (2012) Mbita and Suba Sub- Counties, now separate Sub- Counties were once one district until the year 2010 when they were separated. Data available from the two Sub- Counties indicate that in 2010, Suba had a total enrolment of 3, 595 (2151-boys and 1395-girls) while Mbita had a total enrolment of 4948(3376-boys and 1572-girls). Suba reflected only 25% out of 3546 students while Mbita 33% out of 4948 students access. From this statistical evidence, there is mismatch between the current trends in enrolment rates in Suba and Mbita Sub- Counties vis- a-vis the national government achievement of 47.8% in the entire Country. Similarly, the reviewed studies did not address the effect of FSE policy on access, transition rates and student academic performances in Mbita and Suba Sub- Counties, the gap in knowledge this study sought to fill.

Table 1.3 shows enrolment per Sub-County in Homa-Bay County in 2013. The record indicates that Mbita Sub-County had 5,272(8%), while Suba Sub-County had 6,034(9%) and Ndhiwa 9,581(15%). The three Sub- Counties had the lowest enrolment record compared to other Sub- Counties in Homa-Bay County. Although Ndhiwa Sub-County had low enrolment, it was not selected because the study on it is ongoing. The reviewed

studies did not address access, student academic performances and transition in Mbita and Suba Sub- Counties.

Table 1.3: Enrolment per Sub-County in 2013

Sub-County	Total Enrolment	Percent
Homa-Bay	15,478	24
Mbita	**5,272**	**8**
Ndhiwa	9,581	15
Rachuonyo North	10,110	16
Rachuonyo South	17,963	28
Suba	**6,034**	**9**
Total	**64,438**	**100**

Source: Homa-Bay County Education Office, 2015

Transition is a key indicator of the degree of access to education (Kimitei, 2010). Subsequently on transition, studies indicate that most African countries are largely modeled on educational systems of England and France. A study of the two countries' education system indicates that in England most pupils move from primary school to secondary between ages 11 to 16 or 18. No charges are made for admitting pupils to public funded secondary schools. Most secondary schools accept pupils without regard to academic ability. Secondary education like primary education is compulsory up to 16 years of age in France (Karugu, Oanda, Chege & Sifuna, 2006). In both countries primary education is free and compulsory thus promoting transition.

In 2002, the Gross Enrolment Ratio (GER) in secondary school for both boys and girls was 26% in Sub- Saharan Africa. The low transition rates from primary to secondary education for both boys and girls means that secondary education in Africa is not accessible to the majority of the relevant age groups (Karugu et al., 2006). The concern is why has attainment of Universal Basic Education (UBE) been elusive in many African countries?

Ngware, Oketch, Ezeh and Mudege (2009) examined whether household characteristics matter in schooling decision in urban Kenya. They reported that the whole transition rate across all the study sites was about 75%. There was no noticeable difference by gender except in Nakuru where the rates were slightly higher than the national level transition rate estimated to be 73% in 2010 (MOE, 2012). Both sexes combined, the lowest rate of transition is observed in Mombasa (66%) while highest in Kisumu (83%). There was strong association between the household heads level of education and transition rate as well as household wealth index and probability of the transition. This is consistent with findings in previous studies examining the association between household socio-economic and schooling outcomes (Ngware, 2009). At the same time, the Government of Kenya (GOK) through the Ministry of Education (MOE) aimed at providing globally competitive quality education and achieve transition rate of 70% in 2008 and 80% in 2012 (Wanja, 2014).

Ministry of Education while assessing the progress towards access, transition and quality since 2000 reported that, over the years, enrolment has been steadily rising partly due to strategies of FPE and FSE policies. A positive trend to transition has also been recorded

with transition rates increasing from 43.3% (boys 43.8%, girls 42.6%) in 2000 to 56% (boys 57.2%, girls 54.7%) in 2005 surpassing the set target of 70% by 2010 and reached 72% in 2012 (Republic of Kenya, 2012).

Similarly, according to Republic of Kenya Economic Survey (2015), the rate of transition from primary to secondary rose to 80.4% nationally in 2014 from 76.8% in 2013. This was attributed to the implementation of FSE and expansion of education facilities. However, when national data are disaggregated to the Sub- Counties and school levels, major differences in response to FSE policy become apparent. In Suba Sub- County for example, the transition rate is estimated at 59.2% (boys and girls) in the year 2010. The girls' transition rate is far much below hence generating a lot of pertinent questions. The reviewed studies did not address transition in Mbita and Suba Sub- Counties, the gap in knowledge this study sought to fill.

Republic of Kenya (2005) identify low transition from primary to secondary, low access, gender parity and poor academic achievement as mainly caused by rising cost of financing secondary education by many households (Wanja, 2014). MOEST suggested an initiative and key priority including implementation of FSE in all public secondary schools with effect from January 2008. The implementation of the affordable secondary education (FSE) has been done by providing Kenya Shillings 10,265 per year per student in all public secondary schools but the much higher boarding charges were retained (Oketch & Somerset, 2010).

It was therefore necessary to establish whether the same scenario affected Mbita and Suba Sub- Counties. The two Sub-Counties are located in Homa-Bay County which neighbour Kisumu which had the highest transition rate. Further, many parts of Homa-Bay County especially Mbita and Suba experience high poverty levels, low income and HIV/AIDs pandemic which might affect transition in those regions (Ndolo, 2011). Consequently FSE policy was introduced to enhance transition of pupils from primary schools to secondary schools, improve on quality of secondary education and reduce wastage.

Ngeno and Simatwa (2015) examined influence of FSE policy on dropout rates in Kenya: A case study of Kericho County. The study population was 4,457 consisting of principals, Sub-County Quality Assurance and Standard Officers, Directors of Studies and form IV students of 2011. Questionnaire, interview schedules, Focus Group Discussion (FGD) guide and document analysis guide were used to collect data. Quantitative data was analyzed using cohort analysis, descriptive and inferential statistics. Qualitative data was transcribed and analyzed in emergent themes and Sub themes. The study showed that form to form transition of the three cohorts (form I, II, III and IV from 2004 to 2007) were as follows; 9103; 9333; 9217 and 9281, the 2005 cohort transited as follows: 9434; 9434; 9434; 9329 and 9237 and the 2006 cohort transited as follows: 10516 and 10637. The fluctuations could be attributed to repetitions and dropout because on the whole a general decline could be observed as students transited from form one to form four for the 2004 cohort. This trend was of concern because with introduction of FSE policy the participation rates were expected to increase and be sustained (Ngeno & Simatwa, 2015).

It is therefore plausible to examine if the same trend applied to other areas in Kenya apart from Kericho hence the need to examine Mbita and Suba Sub- Counties in order to establish whether the objective of FSE policy to enhance transition of pupils from primary to secondary had been achieved. Further, Ngeno and Simatwa (2015) examined form to form transition rates contrary to the objectives of the Ministry of Education of transition from primary to secondary. Subsequently, this study assessed whether the objectives of FSE policy to enhance quality of secondary education had been achieved.

Prior to implementation of FSE policy, the transition rates were as shown in Table 1.4.

Table 1.4: Primary to Secondary Transition rates by Province, 1995-2004

Province	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
Coast	35.3	40.7	40.5	35.6	32.6	31.0	33.4	30.4	31.0	52.1
Central	52.8	51.2	51.9	52.2	46.3	48.6	46.9	57.3	58.5	59.6
Eastern	43.1	40.2	42.2	41.9	38.7	36.3	38.2	47.5	48.9	51.2
Nairobi	59.6	38.6	37.0	38.3	29.0	29.6	27.0	32.5	33.5	34.5
Rift Valley	40.4	43.2	42.9	39.3	32.9	34.2	37.2	21.1	21.6	41.7
Western	45.1	48.8	48.2	54.9	53.2	49.4	51.0	52.6	53.7	55.8
Nyanza	43.5	46.6	43.7	46.4	39.4	42.4	50.0	35.4	36.1	47.3
N. Eastern	39.4	67.4	47.9	48.5	43.2	46.4	52.8	42.9	43.8	44.9
Total	**50.4**	**45.2**	**44.9**	**45.0**	**39.9**	**40.1**	**40.9**	**41.7**	**42.6**	**50.6**

Source: Report of the Task force on Affordable Secondary Education (Republic of Kenya, 2007).

From Table 1.4 it can be noted that access and transition to secondary school education were major concerns. In this regard, the Task Force (Republic of Kenya, 2007) noted:

> Although there was a high admission rate of 60% in 2007, the real transition rate (that is Form 1 enrolment in 2007 as a percentage of Standard 8 enrolment in previous year) was 46% having risen from 41% in 2005. This figure indicates that despite the fact that 60% are admitted a number do not take up their places or drop out due to high costs among other reasons. In 2004 Central Province recorded the highest transition rate of 59.6% and Nairobi the lowest rate of 34.5%. This implies that on average about 54% of pupils who completed Standard 8 in the year 2006 could not actually access secondary education, resulting into high wastage between primary and secondary education. p.29.

With regard to Mbita and Suba Sub counties, the Mbita Education Officer (2014) noted that Mbita and Suba Sub counties were lagging behind in access and transition from primary to secondary education. Table 1.5 shows transition rates for Mbita and Suba sub counties compared with national transitional rates for the years 2010 to 2014.

Table 1.5: Transition Rates

	2010	**2011**	**2012**	**2013**	**2014**
National	68.9	69.4	68.4	76.8	80.4
Mbita	**56.2**	**54.4**	**61.1**	**59.2**	**68.1**
Suba	**39.4**	**41.2**	**40.4**	**54.5**	**59.2**

Source: Mbita Sub-County Office, 2014

From Table 1.5, it can be observed that transition rates in Mbita and Suba sub counties were far below those of national level. This raised the concern to the influence of FSE policy, since it was expected that the transition rate would rise with the implementation of the FSE policy. It was against this backdrop that the two sub counties were chosen as

the site for the study on influence of FSE policy on access and transition at secondary school level.

The general performance of KCSE examination explains the level of quality of secondary education (Gogo, Ayodo & Othuon, 2010). Coombs (1968) defined quality of education as that education being offered that fits the real needs and values currently and prospectively of a given country. Therefore quality education is the degree of achievement in education as evidenced in national examinations, transition from one level to the next and access. The first cycle of students who benefited from FSE policy graduated in 2011(Ngeno & Simatwa, 2015).

On student academic performances UNESCO (2011) comparing education statistics across the world noted that both national and cross-national studies have shown that low levels of learning achievement in school Subject exists in school system in both developing and developed countries. However, they are much more widespread in developing countries. The quality of education as measured by student performances in national examinations is considered as below average standards (Ongiri & Abdi, 2004 cited in Rono, Onderi & Awino, 2013). Ongiri and Abdi further reported that many of the Kenya's 4000 secondary schools had bad examination results and that there are about 600 schools that excel and if a student is not in any of these schools he or she is not expected to get a credible grade. Majority of the schools fell short of providing for the learning needs of their students leading to poor performance.

According to Republic of Kenya Economic Survey (2015), the number of candidates who scored a minimum university entry score of C+ and above increased nationally by 21.4% from 123,374 in 2013 to 149,717 in 2014. The number of candidates who scored "A" increased by 12.9% from 2,722 in 2013 to 3,073 in 2014. However, this was not reflected in Mbita and Suba Sub- Counties.

Munda (2010) analyzed the relationship between selected educational facilities and student academic performance in secondary schools in Bungoma District, Kenya. They established that classrooms and laboratories made critical contributions to performance. Therefore facilities in addition to teachers contributed positively to students' academic performance. However, this study did not focus on the influence of FSE on student academic performance hence the need for this study.

Oseno, Nyakundi, Nyakundi and Nyakundi (2013) examined factors influencing performance of pupils on transition from lower primary to upper primary in Ekerenyo Division, Nyamira County, Kenya. Research design was survey. The study targeted all teachers and education officers in the division from which a sample size of 109 respondents were obtained. Quantitative data from questionnaires were analyzed using simple statistics. Qualitative data from interview and observation schedule were analyzed thematically. The findings established that performance was intertwined with transition of pupils from a lower level to a higher level. Pupils who did well in learning became more motivated and interested in proceeding to the next level of learning (Oseno et al; 2013). Although this was a different level but the findings might reflect the situation at

secondary schools hence the need for this study to focus on the influence of FSE policy on student academic performance.

A paper presented by Rono and Onderi (2013) examined perceptions of the causes of poor academic performance amongst selected secondary schools in Kericho Sub County; implications for school management. A descriptive cross sectional research design was used. A stratified random sampling was used to select public secondary school and teachers who included a principal and four teachers. At the same time, 8 students and 2 parents from each sampled schools were involved. The study embraced both qualitative and quantitative methods of data collection and analysis. Data was collected from 21 secondary schools and a total of 38 respondents were contacted. Data was analysed using SPSS with use of frequencies and mean deviations.

Rono and Onderi (2013), examined the relationship between Socio Economic Status (SES) and student's academic performance. The study reported that the majority of the respondents rated at 36.8% agreed that the level of income of parents influenced a child's academic performance. 26.4% strongly disagreed, 18.4% strongly agreed and 18.4% disagreed. This implied that socio-economic status might determine student's academic achievement. This is what FSE was supposed to tone down and create a level field for all the students. This necessitates a study to find out if the same status is still maintained or not.

Ngeno (2015) established that the influence of FSE policy on students' academic achievement was moderate and positive with a coefficient of 0.69, that is, an increase in

FSE funding accounted for an increase in student academic performance but with moderate effect. However, it is unknown the extent to which FSE policy has influenced transition in Mbita and Suba Sub-counties.

All over Mbita and Suba Sub- Counties, there was a consensus of opinion about poor performance in academics. Performances in almost all Subjects in KCSE were wanting. In KCSE 2013 in Mbita only 14% while Suba 10.1% of the total candidates that year scored B grade and above which is a direct university entry requirement. This calls for an evaluation of the influence of FSE policy on student academic achievement in the area of study. However, according to Sifuna and Oanda (2014), the progress towards EFA goals is insufficient: the world is not on track to achieve EFA by 2015. Majority of the countries in Sub Saharan Africa, India and Pakistan are at the serious risk of not achieving EFA without drastic changes in their present trajectories. In a large measure, this could be attributed to low funding (Sifuna, 2014).

Table 1.6 shows KCSE performance between 2011-2014 in Homa-Bay County.

Table 1.6: Homa-Bay County KCSE 2011-2014 Mean Standard Score Analysis

Sub-County	2011	2012	2013	2014	Overall MSS
Homa Bay	6.3	6.17	6.3368	6.8045	6.4
Rachuonyo South	6.1	5.44	5.5993	6.0236	5.8
Ndhiwa	4.9	5.25	4.4209	4.4794	4.7
Mbita	**5.6**	**5.12**	**4.6055**	**4.7766**	**5.0**
Rachuonyo North	5.4	4.91	5.45	5T.806	5.3
Suba	**5.2**	**4.73**	**5.2400**	**5.3181**	**5.1**

Source: Homa-Bay County Education Office, 2014

From Table 1.6, overall assessment of Homa-Bay County indicates that both Rachuonyo North and South Sub-counties and Homa-Bay Sub-county are doing better than Mbita, Suba and Ndhiwa Sub-counties. Although Ndhiwa showed the least student academic performance, the Sub-county was not selected because a study on it is on-going. Abagi and Ogachi (2014) observed that the disparities in access, transition and performance at secondary school have persisted despite a series of policy interventions like FSE. One of the reasons for the persisting inequalities is noted in government funding policy in education sector. However, it is unknown the extent to which FSE policy has influenced access, transition and student academic performance in Mbita and Suba Sub-counties.

1.2 Statement of the Problem

Education for All (EFA) and Sustainable Development Goals (SDGs) emphasize efforts to increase access, transition rates and quality education. Free secondary education was introduced in Kenya in 2008 and was expected to provide equal opportunity to all secondary school going age entry to secondary education regardless of their social class, gender, ethnic background, physical and mental disability. However, compared to national level, statistics in Suba and Mbita Sub- Counties show a decline over the last few years. The Gross Enrolment Rate (GER) for Suba was 25% while Mbita was 33% as compared to national figure of 48% in 2010. In the same year transition rate for Suba was estimated at 59.2% while Mbita was 68.1% compared to national figure of 80.4% in 2014.

KCSE results in 2011 compared to 2012 showed that Mbita had a decline in mean standard score (MSS) of 5.6 down to 5.12 while Suba Sub-County had 5.2 down to 4.73

respectively. Overall, in Homa-Bay County, both Rachuonyo North and South did better than Mbita, Suba and Ndhiwa Sub-counties in terms of student academic performances in the last four years. Further, data from the Homa-Bay County education office in 2013 revealed that Suba and Mbita Sub- Counties had the least enrolment rates (9% and 8%, respectively) compared to other Sub- Counties and national level which stood at 58.2%. Despite the introduction of FSE policy, data from studies and government reports still showed low trends of access, transition rates and student academic performance in Suba and Mbita compared to other Sub- Counties and national figures. The problem of the study was to determine the extent to which FSE policy influenced secondary school student access, transition and academic performance in Mbita and Suba Sub-Counties in Homa-Bay County, Kenya.

1.3 Purpose of the Study

The purpose of the study is to establish the influence of FSE policy on access, transition and student academic performance in Mbita and Suba Sub- Counties in Homa- Bay County.

1.4 Objectives of the Study

The objectives of the study relating to Mbita and Suba Sub- Counties were to:

i. Determine the influence of free secondary education policy on access to secondary education.
ii. Determine the influence of free secondary education policy on transition from primary school to secondary school education.

iii. Determine the influence of free secondary education policy on student academic performance.

1.5 Hypotheses

The null hypotheses that guided the study were:

$H0_1$ There is no statistically significant relationship between free secondary education policy and access to secondary school education in Mbita and Suba Sub- Counties.

$H0_2$ There is no statistically significant relationship between free secondary education policy and transition from primary to secondary school education in Mbita and Suba Sub- Counties.

$H0_3$ There is no statistically significant relationship between free secondary education policy and student academic performances in Mbita and Suba Sub- Counties.

1.6 Scope of the Study

This study was confined to Mbita and Suba Sub- Counties. The study focused on influence of FSE policy on access, transition and student academic performance for the years 2008 to 2014.

1.7 Limitation of the Study

One (2.94%) of the principals did not fill the questionnaire fully as was required. The principal left blank spaces in the open ended items of the questionnaire. This was considered not significant as it had little effect in the results.

1.8 Assumption of the Study

Students who joined Form 1 between 2008 and 2014 transited from primary. Secondly, the students who were in school between 2008 and 2014 constituted school enrolment.

1.9 Significance of the Study

The study findings on the influence of FSE funds on access, transition rates and academic performance are helpful to the Ministry of Education, school, teachers, policy makers, parents and development partners in planning and revising the FSE policy to further increase access, transition rates and school performances as they continue to address challenges facing effective implementation of FSE in Homa-Bay County, Kenya. In practice, the findings of this study may help education officials to implement strategies to improve access, transition and academic performance relying on best practices. For theory and future research it will provide gaps in establishing impact of FSE on access, transition and student academic performances using other study designs such as longitudinal approach or cohort designs for specific outcomes.

1.10 Conceptual Framework

This study was based on Psacharopoulous and Woodhall (1985) concept of investment choices. The concept was relevant because the government made a choice to invest in education in order to improve access, transition and student academic performance. The conceptual framework (Figure 1) postulates that provision of FSE funds to secondary schools directly affects access, transition rates and quality of education. Availability of FSE funds was expected to increase demand for secondary education with more students expected to enrol in schools hence increase access. As a result of increased access and

financial support, it was expected that there would be increase in students transitioning from primary to secondary. FSE funding enabled schools to provide resources to students especially candidates and this was expected to improve academic performances However, academic performance may be confounded by experience of the principals, number and motivation of teachers in schools and student home environment such as social economic status of the households and distance to schools. To measure effect of FSE on access, enrolment and academic performance intervening variables, principals' years of experience and number of teachers are controlled through assumption that most Principals were experienced in matters of school administration. Indeed 21(61.8%) had experience of 6-11 years. Most Principals 32(94.1%) had first (Undergraduate) and Masters Degrees. That is, they were qualified and mastered the administration of students.

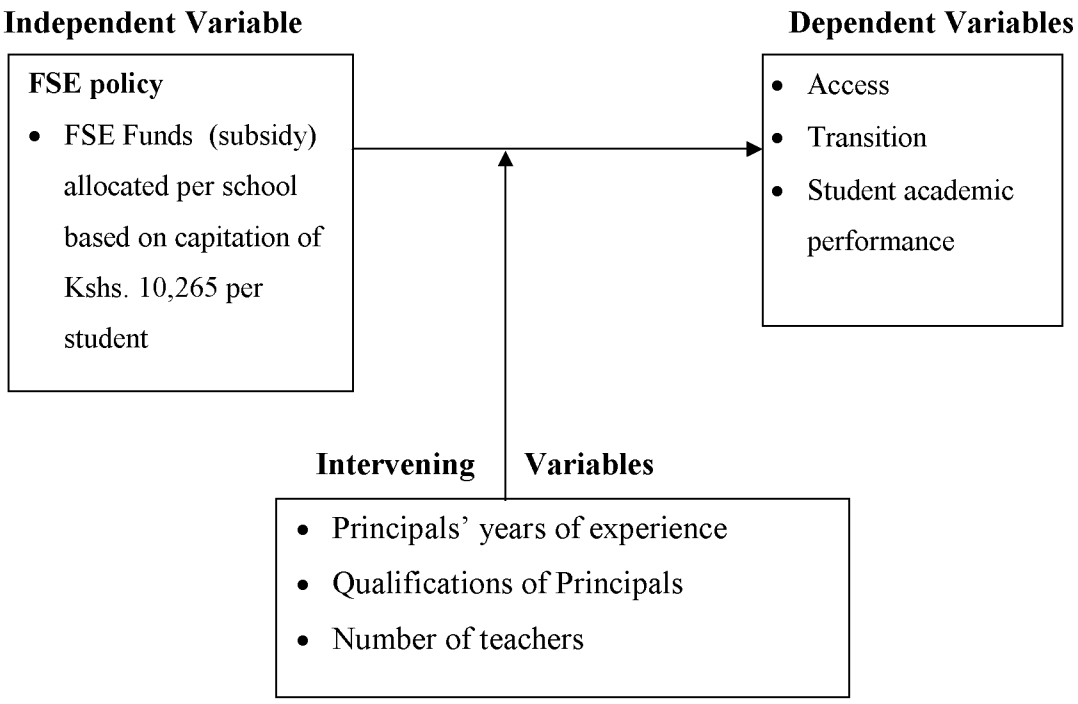

Figure 1: Conceptual Framework showing the influence of FSE policy on access, transition and student academic performance

Source: Adapted from Psacharopoulous and Woodhall (1985) model

The model was adapted by using FSE policy as the independent variable, dependent variable as access, transition and student academic performance. Influence of FSE funding was moderated by principals' year of experience, qualifications of Principals and number of teachers as intervening variables. That is, these intervening variables when favourable had positive effect on the influence of FSE on access, transition and students academic performance and vice versa. These variables were controlled by assumptions that through random sampling some had favourable and some had unfavourable

moderating effects on FSE funding influence on access, transition and students academic performance in equal measures.

1.11 Operational Definition of Terms

Access –is enrolment in schools, that is, student population in schools.

Curriculum Based Establishment (CBE) –the ratio of teachers against the number of Subjects offered in a school and also in relation to the number of streams. In our study CBE will refer to the ratio of teachers against curriculum establishment and streams in the school.

Disbursement of funds –means release of funds to schools in instalments and as allocated in various vote heads.

Drop out –a student who withdraws from school before the completion of the four year secondary cycle. In our study a drop out will be a student who had never reached or completed form four.

Enrolment –the number of students attending secondary education at various levels from forms one to four. In this study enrolment means both male and female students attending school from form one to form four.

Equity – equal opportunity to all, fairness and social justice in the way education opportunities and resources are allocated. In our study equity will be a ratio of girls to boys and ratio of teachers to students as well as ratio of regions.

Form - a grade or class at secondary school level. In our study form will refer to grade one to four at secondary school.

FSE Policy –the government subsidy allocated per school based on capitation of Kshs. 10,265 per student in all public secondary schools in Kenya later increased to Ksh. 12,870 in 2015.

Home factors –poverty level, financial endowment and parental factors that influence student ability and access to school.

Infrastructure –facilities like classrooms, electricity, laboratories and libraries established in a school. In our study infrastructure will refer to those facilities used for learning purposes.

Large Schools –in this study these are schools whose enrolment ranges 480 and above, that is 3 streams and above.

Learning and teaching materials (L/T) –books, stationary and equipment used in curriculum delivery. In our study, learning and teaching materials will refer to those learning and teaching materials.

Medium Schools – school with enrolments of 320 to 479 students, that is, two streamed secondary schools.

Performance –Mean Standard Score (M.S.S) attained by a school or a student in an examination. In our study it will refer to a grade between A to E attained by student in a Subject and overall grade.

Personal Emoluments –salaries paid to support staff and PTA teachers to cushion the schools against understaffing. In our study it will refer to money paid for both support and teaching staff.

Quality –outcome of learning contents expressed in grades, emotive and attitudinal outcomes. It implies standard of agreed criteria of assessment. In our study we

shall use school performance index (MSS) and school grades as a measure of quality.

School factors –management ability, budgeting sourcing and control of funds to finance education at secondary school level. In our study school factors will refer to management or mismanagement of FSE funds.

Secondary Education –the second stage of education which caters for 14- 18 years within the school system.

Small Schools –enrolment of 40 to 319 that is one streamed secondary schools

Student Academic performance- this will be defined as the student mean standard scores in Kenya Certificate of Secondary Education Examinations.

Transition –the number of students who continue from primary to secondary.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter presents a summary of literature review related to the study. The chapter covers literature on influence of free secondary education policy on access student academic performances and transition as per the objectives of the study.

2.2 Influence of Free Secondary Education Policy on Access to Secondary School Education

The wide gap in secondary enrolment rates between Sub-Saharan Africa (SSA) and the rest of the world is raising concern (Oketch, 2010). In the 20th Century both the US and the Soviet education policies led to secondary education models aimed at the creation of massive systems that emphasize open access and universal coverage (Karugu, 2006). After 1945, what were later called comprehensive secondary schools began to spread from northern to southern Europe. Extension of compulsory education had entirely changed the concept as well as the duration of basic education to the point that the basic education usually included lower secondary schooling. Rising average schooling was as important as study objective and as a measure of success of education reforms (Chabari, 2010).

Many other countries have embraced the goal of extending and expanding the idea of basic education to include much of what used to be restricted access, elitist secondary education. In Japan the government fiscal policy provided for free education to secondary school level. Those of school going age have no option other than attend school to

acquire education that is fully funded by the government (Nyaegah, 2005). In the USA, the federal government supports public education. The government is empowered by the constitution welfare clause article 1 section 8 to levy and collect revenues for the support of education. The situation in Kenya is not different from that of Japan and USA. In Canada, school fees are an integral part of an education system. Parents were to contribute to their children's education through payment of fees (Nyaegah, 2005). The government recognizes that some parents are sincerely not in a position to pay so the government makes provision to ensure that a child is not denied access to education because of inability to pay fees. The department of education in Canada works with school boards, parents, teachers and other partners to ensure that policies governing school fees are implemented consistently in all provinces. What is not clear is whether Kenyan situation is similar to Canada.

The international community pledged to meet the targets of Education For All (EFA) and the Millennium Development Goals (MDGs) by 2015 and as a result many governments particularly in the Sub- Saharan Africa (SSA) are considering abolishing school fees for secondary school education (Ohba, 2009). This is particularly due to domestic and international demand to achieve EFA and MDGs. Fees charged in secondary schools were indeed the major obstacle for some children to access secondary education, resulting in low transition rates from primary to secondary. Thus many governments in SSA have planned to abolish secondary education school fees (Ohba, 2009). Many governments in SSA are under severe budget constraints, especially after the global recession. Thus while the government are intending to extend free education , they often allow public schools to levy fees for limited items such as school buildings are for non-

tuition costs, sports fees, school meals, uniforms and textbooks. Even though officially most school fees are not sanctioned by the government, the fees are often used to make up for lost revenue due to delay in government subsidies. Questions are bound to arise as to whether access to secondary education should really be free and what the real cost of such education is. This is the concern of the study.

While asking many questions about access, evidence indicates that secondary enrolment rates in SSA continue to be the lowest in the world (Ohba, 2009). Approximately 104 million secondary school-age children in the region, only one in four (25%) were enrolled in secondary in 2006 (UNESCO, 2008). Of these, the ratio of girls to boys was 83 girls for every 100 boys. This figure is critical challenge as compared to other regions. One of the challenges of gaining access to secondary education in SSA is user fees which are mentioned as a barrier in terms of affordability (Ohba, 2009). In SSA, user fees are identified as a barrier to education (Veriava, 2002). The school budgets are funded by allocations from state revenue, school fees are required to supplement these budgets so that schools are able to run smoothly.

The SSA School act (SASA) provides that a majority of parents at a public school may determine whether or not school fees are charged and the amount paid. There was however exemption from paying school fees for parents who could afford to meet the cost (Veriava, 2002). In Kenya the government has a uniform allocation criterion for secondary tuition meaning that education is accessible to every qualifying student graduating from primary school.

Even in countries where public education has traditionally been free, private contributions to the financing of government schools are important. Lewin (2008) observed that in public schools in Uganda Tanzania and Zambia more than half of total costs per student are financed through fees and other parental contributions. In Kenya, the Board of Governors (BOGs) hire additional teachers paid from the income to fill teaching positions for which no government teachers have been assigned and virtually all physical facilities for the government secondary schools have been funded by parents (Republic of Kenya, 2005).

Zambia established in 1996 education production units which enrol students who fail to find regular places in fee- paying afternoon sessions run by teachers who participate on voluntary basis to supplement their income in school premises. In Rwanda 80% of students are enrolled in private schools, almost 40% of which receive no public subsidy had to rely on fee income (Verspoor, 2008). The initiative of FSE was to ensure that every child can access secondary education by reducing the financial burden on parents. Unlike Zambia and Rwanda the situation in Kenya is quite different because education should be free and compulsory up to secondary level according Basic Education Act, 2012 (Republic of Kenya, 2013).

Lack of access was said to be due to inadequate number of schools in both rural, urban and especially ASAL areas. Within the school also, the places available are not adequate to match demand. These inadequacies are more pressing at the secondary school level (Republic of Kenya, 1999). Koech commission recommended a mechanism for the provision of Basic Education for all and the strengthening of co- ordination in mobilising

and encouraging education providers. At the same time necessary changes be instituted for making education affordable for the average Kenyan parent. The government should take necessary steps to plan and implement strategies for increasing access at the secondary school level to accommodate all primary school learners (Republic of Kenya, 1999). Gogo (2003) carried out a study in secondary schools in Rachuonyo district and concluded that enrolment in the district remained low because parents had found it difficult to raise the required fees with ease making it difficult for the poor and the needy to afford secondary education. However, this study was carried out before the implementation of Free Day Secondary Education (FDSE) in 2008 thus the scenario today is different.

The commission of enquiry into the education system in Kenya pointed out that as Kenya moves towards the 21st Century, the greatest challenge facing the nation is that of ensuring access to Basic Education For All (BEFA), achieving equity by eliminating all existing disparities with particular reference to education of girls , women , children with special needs, children in disadvantaged regions such as Arid and Semi Arid Lands (ASAL) and education of Children in Especially Difficult Circumstances (CEDC) both in urban and rural areas (Republic of Kenya, 1999). This finding calls for a different approach to the provision of, education. Further, the convention of rights of children of which Kenya is a party provides the basis for all-inclusive education system where no child is excluded or marginalized in special programs. Therefore, the obligation to ensure all children's rights to education lies with the government of Kenya. However, the research will find out whether with the introduction of FSE, access to secondary education has improved.

Saitoti (2004) reported that education takes one of the largest shares of resources in public expenditures. In 2002/2003 Kenya's financial year education accounted for 20% share of public expenditure. It was only second to Defence and Public administration 29% while debt service 17%, Economic services 13% and Health 6%. The minister further highlighted that in spite of this high expenditure, the following factors militates against access to education; About 57% of the population live in poverty, HIV/AIDS prevalence is 9.4%, malaria is costly and reduces productivity. There is limited access to development which includes good health, education, clean water and poor infrastructure. This study sought to find out whether similar situation existed after the introduction of FSE.

Despite various initiatives by the government, providing support to poor and disadvantaged students through secondary school bursaries, providing targeted support for the development of infrastructure in areas where parents are not able to provide such support, working in partnership with parents, communities, private sector and other stakeholders in providing secondary education, the secondary Sub-sector continues to face challenges particularly the low participation rates (Republic of Kenya, 2005).

A report of the Task Force on Affordable Secondary Education (MOE, 2012) observed that despite the growth in number of schools and enrolment, the increase in the supply of secondary school places has been insufficient to improve participation rates. In 2006 gross and net enrolment rates, were recorded to be only 32% and 23% respectively having increased from the academic year 2002 level of 27% and 17% respectively. This implies that for every 100 secondary school age youth about 77 are not enrolled in any secondary school (MOE, 2007).

Some of the challenges facing secondary education includes; high dropout rates (21% do not complete school), poor infrastructure, limited spaces, cost of education, student/ teacher ratio is high, inadequate textbooks and other compliments, regional and gender disparities , limited opportunities for the handicapped population. Further, based on 1999 census data, a total of 2.8 million boys and girls aged 14 and 17 years who should have been in school were not enrolled; it was thought that policy measures were necessary ingredients to address the poor access to secondary education as a way of supporting the County's overall development goals (Republic of Kenya, 2010). There is need to get more information whether FSE influenced access hence the purpose of the study.

Chabari (2010) carried out a study on the challenges of implementation of FSE in public secondary schools in Kangundo district in Kenya. He applauded the initiative of FDSE as a worthy cause because it enhanced access to education despite many challenges. The introduction of FDSE in 2008 had an immediate impact on enrolment at secondary school level. The number of secondary schools increased from a total 6566 secondary schools in 2008 to 7308 in 2009. Enrolment grew from 1.18 million students in 2007 (639, 393 boys and 540, 874 girls) to 1328, 964 (735,680 boys and 593, 284 girls) in 2008 and further 1,500, 015 (804, 119 boys and 695, 896 girls) in 2009 (MOE, 2012).

However, it was disturbing to note that despite the introduction of FDSE some areas were doing quite poorly in enrolment. A newspaper, Education News, reported that enrolment of pupils in public primary schools in Central province in Kenya was declining at an alarming rate. Some schools with well-established infrastructure had been left with empty classrooms and the number of pupils declined. In Maragua primary the number reduced

from 1500 to 542 within a decade (Njoroge, 2011). The scenario calls for an evaluation of FDSE programmes to assess their impact on access.

Nyaegah (2011) carried out a study on education and millennium development goal challenges facing the management of FPE in Nyamira County in Kenya. He underscored the fact that the government policy of FPE would substantially contribute to meeting MDGs goals of universal access to primary education by the year 2015. Equally it was the aim of the government to improve access to secondary level with the introduction of FDSE. However, Nyaegah reported that education sector faced with many challenges including finances, lack of adequate teacher and insufficient learning facilities which hinder the government from achieving this goal hence the need to evaluate the impact of FDSE on access, equity and quality of education in Kenya.

The task force on the re-alignment of the education sector to the constitution of Kenya expresses a similar fact. That is, access, equity, quality and relevance of education are fundamental characteristics that define and drive systems of education and training. They reported that governments worldwide pay special attention to the four characteristics (MOE, 2012). There are however, many challenges which threaten the sustainability of a robust education regime in Kenya. The key challenges include low enrolment and retention rates, constricted access and equity at the higher levels, establishment and maintenance of quality and relevance, and myriad in-efficiencies in managing the limited resources allocated to the education sector (Republic of Kenya, 2005). However, our main concerns in the study are access and quality at secondary school level. As cited elsewhere this level is important in any Education system because students are prepared

for various fields of work at this level. Hence for sound planning the government should pay attention to access and quality at secondary school level.

Economic survey (Republic of Kenya, 2012b) reported that the continued implementation of Free Tuition Secondary Education (FTSE) together with other government initiatives such as Constituency Development Fund (CDF) have increased access to secondary education. Enrolment in secondary schools by class and sex from 2007 to 2011 rose by 5.9% from 1.7 million in 2010 to 1.8 million in 2011. Girls enrolment increased by 4.1% from 767,847 in 2010 to 819,014 in 2011 while boys enrolment rose by 3.7% to 948,706 in 2011(Republic of Kenya, 2012 b). However, a number of challenges reports still indicate that gender parity still exists and a number of challenges undermine government policy on FSE as reflected in the subsequent statement.

Consortium for Research on Education Access, Transition and Equity (Create) carried out a study in rural Kenya to establish whether FSE has enabled the poor to gain access to secondary education. The report indicated that FSE cannot solve the problem of access. Some parents interviewed said that while lowering school fees has enabled some to take their children to school, this does not mean all children from poor households are assisted to gain access to secondary education. Household income for many families has not changed while most prices of food and other commodities have soared thus reducing their ability to pay fees even in a day school (Ohba, 2009). It was expected that the County records 90% access for both primary and secondary schools. However, this was not the case. Poverty, low income and HIV/ AIDS scourge has orphaned many children, leaving them destitute and unable to meet their housing, educational, health, food and clothing

needs (Ndolo, Simatwa & Ayodo, 2011). The reviewed studies did not address access in Mbita and Suba Sub- Counties, the gap in knowledge this study sought to fill.

2.3 Influence of Free Secondary Education Policy on Transition

Transition is the number of children who continue from one level of education to another. It is the key indicator of the degree of access to education. Transition therefore reflects the efficiency of education system (Kimitei, 2010).

Globally, the secondary Gross Enrolment Rate (GER) rose from 43% to 68% between 1970 and 2009. This means that enrolment in secondary schools represents 68% of the targeted school age population. However, the situation varies considerably across and within regions (UNESCO, 2011). During the period 1970- 2009, enrolment growth in secondary education was modest in North America and Western Europe. This is not surprising given the combination of high participation in secondary education and the declining school- age population in this region. Total enrolment at the secondary level increased from 53 million to 62 million while the school- age population declined from 66 million during the same time. As a result, the GER grew from 80% in 1970 to 100% in 2009, the highest participation rate among all regions. Evidence available indicates that the region had maintained gender parity in secondary education (UNESCO, 2011).

Karigu (2006) reported that most African countries are largely modelled on educational systems of England and France. A study of the two countries' education system indicates that in England most pupils move from primary school to secondary between ages 11 and 16 or 18. No charges are made for admitting pupils to publicly funded secondary schools.

Most secondary schools are comprehensive, accepting pupils without regard to academic ability. Secondary education like primary Education is compulsory up to 16 years of age in France (Karigu, 2006). In both countries primary education is free and compulsory thus promoting transition rate.

In 2002, the Gross Enrolment Ratio (GER) in secondary school for both boys and girls was 26% in Sub- Saharan Africa. The low transition rates from primary to secondary education for both boys and girls means that secondary education in Africa is not accessible to the majority of the relevant age groups (Karagu, 2006). The concern is why attainment of UBE have been elusive in many African countries. MOE while assessing the progress towards access, retention, equity, transition and quality since 2000 reported that over the years enrolment has been steadily rising partly due to strategies of FPE and FSE policies. A positive trend to transition has also been recorded with transition rates increasing from 43.3% (boys 43.8%, girls 42.6%) in 2000 to 56% (boys 57.2%, girls 54.7%) in 2005 surpassing the set target of 70% by 2010 stand at 72% (MOE, 2012).

The MOE reported that the transition rate from primary to secondary increased from 45.8% in 2003 to 59.9% in 2008 and estimated at 64.1% in 2009 and this was attributed to Free Secondary Tuition. The target remained 70% transition to secondary education (MOE, 2009). School of Education, Nairobi University examined factors influencing transition rates from public primary schools to secondary school level in Murang'a East District. The study found that all the respondents that is, principals, parents and standard seven pupils perceived secondary school education as expensive and beyond the reach of

many. They were driven by the fact that many parents were unable to pay fees for secondary education. The study recommended that greater budgetary allocation should be made to the education sector and it should place a greater emphasis in the financing of secondary school education to cater not only for tuition but also other accompanying costs (UoN, 2012).

Saitoti (2004) while presenting a paper at the council on foreign relations reported that transition rate from primary to secondary schools was low, with only less than 50% of primary graduates entering secondary school. He attributed this to low quality of some of the existing secondary schools, high cost of secondary education and lack of perceived incentives to continue education. During this period, the FSE policy had not yet been introduced hence many secondary schools lacked textbooks and other necessities. Students' to teachers' ratio was high and rigid academic programmes led to low quality education hence poor performance. This impacted negatively on transition. However, the question asked is what is the situation now after the introduction of FSE?

Ngware, Oketch, Ezeh and Mudege (2009) examined whether household characteristics matter in schooling decision in urban Kenya. They reported that, the whole transition rate across all the study sites was about 75%. There was no noticeable difference by gender except in Nakuru where the rates were slightly higher than the national level transition rate estimated to be 73% in 2010 (MOE, 2012). Both sexes combined, the lowest rate of transition is observed in Mombasa (66%) while highest in Kisumu (83%).

There was strong association between the level of education of household head and transition rate as well as household wealth index and probability of the transition. This is

consistent with findings in previous studies examining the association between household socio-economic and schooling outcomes by Ngware in 2009.

Ngware (2009) presented the following arguments. One, that; Students from high socio-economic households get academic support from educated parents and are more likely to score high in primary school leaving examination. Secondly, In addition, better- off-households have more economic resources to let children continue their secondary education than children from low socio-economic background. However, when national data are disaggregated to the Sub- Counties and school levels, major differences in response to FSE policy become apparent. In Suba Sub- County for example the transition rate stood at 69% (72% boys and 62% girls) in the year 2010. The girls' transition rate is far much below hence generating a lot of pertinent question on gender parity and regional disparities remain key issues to address. This necessitated the study to examine the influence of FSE policy on transition from primary to secondary schools in Mbita and Suba Sub- Counties, Kenya. In 2013 transition rates for Mbita was 46% and Suba 69% respectively compared to national transitional rate of 72% (Republic of Kenya, 2015). The reviewed studies did not address transition in Mbita and Suba Sub- Counties, the gap in knowledge this study sought to fill.

2.4 Influence of Free Secondary Education Policy on Student Academic Performance

The general performance of KCSE examination is an indicator of the output of secondary education as it explains the level of quality of secondary education (Gogo, Ayodo & Othuon, 2010). The researchers viewed quality in terms of performance in examination but the author of Global Education Digest has contrary view. The author said that quality of education can be examined in several ways: first, does education produce individuals who are competent and skilled?

UNESCO (2011) comparing education statistics across the world noted that both national and cross- national studies have shown that low levels of learning achievement in school Subjects exist in school system in both developing and developed countries, although they are much more widespread in developing countries (UNESCO, 2011). Low levels of academic achievement tend to be much prevalent among students from relatively disadvantaged family background. This confirms Todaro's argument that poor performance merely reflect the economic background of the child hence the need to examine if FSE has any effect on quality (Todaro, 1994).

High performing students regardless of their family background, tend to have common characteristics. For instance studies have pointed out that successful students tend to be more motivated and confident learners, have the necessary support in their home environment, spend adequate amount of time on challenging tasks and attend school with positive disciplinary climate and sufficient resources (UNICEF, 2011).

Intended instruction time is an important educational resource. This indicator measures the quantity of education a student receives and provides an insight to educational quality. Scholars argue that intended instruction time accounts for a large part of public spending on student learning; as such increasing instruction time may entail an increase in financial costs by hiring more teachers or by compensating existing teachers to teach longer hours, (UNICEF, 2011). While this policy may be intended to improve education for students it could also lead to decrease in the quality of teaching if teachers have less time to prepare lessons (UNICEF, 2011).

Conversely, although there are official school requirements regarding hours of instruction, schools may fail to meet these standards for different reasons, such as insufficient numbers of trained teachers, teacher absenteeism and strikes, natural disasters and a number of other factors (UNESCO, 2011). Moreover, in many countries instruction time varies substantially between regions and types of schools. Instruction time is relatively low in Poland, Indonesia, Sweden and Slovenia while it is relatively high in Mexico, Jordan, Malaysia and the Philippines (UNESCO, 2011). There are also important variations across countries regarding the share of compulsory instruction time devoted to reading and writing, and science. For reading and writing this share ranges from 11% in Japan and Portugal to 28% in Ireland; and for science it varies from 5% in Luxemburg to 24% in the Russia Federation which coincides with a relatively low focus on teachers' salaries. There are significant constraints to hiring additional teachers, particularly in many developing countries. Globally, the quality of education is related to time allocation in learning, number of teachers and their remuneration and learning resources.

In relation to input, a number of factors continue to hinder the provision of quality education for the majority of Kenya students (Keriga, 2009). However, poverty and inequality remain the major contributing factor in ensuring access to relevant information and content within the Kenyan education system. Inequalities continue to be apparent features of the provision of quality education. On the other hand, more affluent institution of learning often has well equipped laboratories, classrooms and instructional materials. On the other hand however, low income, private, public and district schools are often characterized by lack of infrastructure, learning equipment and facilities. Ironically, the introduction of FPE has been cited as exacerbating the aforementioned problems (Keriga, 2009).

The continued poor public school performance in the KCPE could also act as a barrier to secondary education access. Data from the 2004 KCPE examination shows that 77% of private school candidates qualified for secondary school by scoring over 250 points, while only 45% of students in public schools qualified (Glennerster, Kremer, Mbiti et al, 2011). There is need to address the root causes of private- public performance gaps which is also transferred at secondary school level.

This disparity in the performance between private and public primary schools has led to a continued overrepresentation of private school graduates in the elite National secondary schools (Glennerster *et al*, 2011) overall, student performance in the KCSE was poor. In 2008, only 25% of the students scored at least a C+ on the KCSE, with girls being less likely than boys to score a C+. The performance was weakest in District schools, where only 11% of students scored at least a C+ compared to 43% in provincial schools and

90% in national schools. The differences in performance across these types of schools partly reflects differences in facilities, teachers and other resources but also reflects the different levels of academic preparation of the students admitted to these schools. (Glennerster et al, 2011). It is becoming increasingly important to implement programs that address quality of education.

Bold (2010) examined whether abolishing fees reduced school quality in Kenya. They observed that the introduction of FPE at primary school level led to a decrease in public school quality. Within the context of supply- and – demand model there was shift in demand for public schooling and an increase in demand for private schooling due to search for quality education. They went ahead to examine the mechanism linking the abolition of fees to school quality and observed that: one, the total level of funding available in the education sector or as per pupil basis might change. The lost revenue to local schools due to the ban on raising fees from parents weighed against an increase in public finance for education. Two, FPE might have led to a change in the pool of students in public primary schools: As fees are abolished, many more children could access education. The children who accessed education after 2003 could have been different from existing students in terms of socio- economic background, age and ability (Bold, Kimenyi, Mwabu & Sandefur, 2010).

Wango (2009) reiterated that development in Kenyan education system had been attracting interest over the past few years including a politically motivated policy debate on free primary and secondary education. But more importantly and increasingly in an educational value context are issues to do with quality and system of education.

Questions about the educational process and its impact and the cost of undertaking such intensive programmes such as resources placed in education including its relevance are being asked even louder. In future schools will be expected to produce even better results and the quality of education in each stage will be expected to improve.

Gogo (2010) studied the impact of cost sharing on access, equity and quality of secondary education in Kenya. He concluded that the student teacher ratio was high and inadequate physical facilities affected teaching and hence performance. Gogo (2010) further established that cost sharing strategy was associated with an increase in dropout rate and this was attributed to lack of school fees. However the situation now is quite different in that the government is providing free secondary education but there are a number of unanswered questions. The question is whether there was any relationship between FSE funds and improved performance. This is what this study sought to answer.

Amunga (2010) examined the influence of school's performance index on enrolment in Kakamega south district secondary schools. He established that schools are ranked in national examinations in Kenya according to performance index. This implies that the higher the mean score, the better the rank. This in turn influences the demand for places in certain schools while at the same time reducing the demand in others. However, a number of questions have been asked of reasons leading to different quality. MOE (2012) in its findings established that there is severe shortage of teachers or understaffing, which combined with inadequate learning materials, lead to poor quality. At the same time there is inadequate Quality Assurance Services due to a combination of factors (MOE, 2012) among them;

(a) Shortage of Quality Assurance and Standard Officers (QASO),

(b) Shortage of resources such as vehicles and budgetary allocations to carry out work,

(c) Inadequate relevant training on quality assurance.

The upsurge in pupil enrolment at primary schools had a negative effect as had been cited earlier. The drop in quality of education is due to understaffing, inadequate learning materials and crowded classrooms. As these factors persist, the quality of education continues to suffer with the consequences.

Comparing student performances in Mbita and Suba Sub- Counties with Homa-Bay Sub-Counties, it was clear the two sub- counties mean scores were lower despite the fact that they are located in the same County. The reviewed studies did not address the influence of FSE on student academic performance in Mbita and Suba Sub- Counties, the gap in knowledge this study sought to fill.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents a description of the study area, target population, sample size and sampling procedure, data collection method, research procedure, data analysis, piloting instrument, and validity and reliability and ethical considerations.

3.2 Research Designs

This study adopted an ex-post facto, descriptive and correlation design where analytic methods of data analysis will be used. Both Primary and secondary data were collected using both quantitative and qualitative methods of data collection.

According to Simon and Goes (2013) ex-post facto research design is ideal for social sciences and can be used to investigate factors that already occurred in the past and tries to understand the possible causes. Despite studying facts that hiave already occurred, ex post facto research shares with experimental research designs some of its basic logic of inquiry. For example: to explain a consequence based on antecedent conditions; determine the influence of a variable on another variable, and test a claim using statistical hypothesis testing techniques. Kerlinger and Rint (1986) explained that in the context of social science, ex-post facto investigation seeks to reveal possible relationships by observing an existing conditions or state of affairs and searching back in time for plausible contributing factors. Some of the major advantages of this design is that it uses partly, data that is already collected, permission to obtain such existing data is less involving than creating a new data. Since it is not a pure experimental study, some of the limitations are that there is no random assignment to treatment terms, the sample may not

be random hence limiting generalizability (Simon & Goes, 2013). Cohen, Manion and Morison (2000) noted that instead of taking groups that are equivalent and subjecting them to different treatments to determine the differences in the dependent variables, and ex post facto experiment begins with groups that are already different in some respect and searches in retrospect the factors that brought about the differences.

Correlational design on the other hand enables the researcher to assess the degree of relationship that exists between two or more variables (Mugenda & Mugenda, 2003). According to Oso and Onen (2011) the design provides rigorous and replicable procedure for understanding relationships. It helps to determine whether, and to what degree, a relationship exist between quantifiable variables. Mugenda (2003) noted that this method permits one to analyse inter-relationships among a large number of variables in a single study. She added that correlational method also allows one to analyse how several variables either singly or in combination might affect a particular phenomenon being studied.

3.3 Study Area

The study was conducted in Mbita and Suba Sub- Counties. The two study areas were selected based on low rates of transition, access and academic performances compared to other Sub- Counties in Homa-Bay County. The two Sub- Counties are located in Homa-Bay County which is located in the south western Kenya along Lake Victoria where it borders Kisumu and Siaya Counties to the north, Kisii and Nyamira Counties to the east, Migori to the south and Lake Victoria and the Republic of Uganda to the west.

It lies between latitude $0^0$15' South and $0^0$52' South, and between longitudes 34^0 East and 35^0 East. It covers an area of 4, 267.1 km^2 including water surface which on its own covers an area of 1, 227km^2. Administratively, it is divided into Sub-Counties namely; Homa-Bay, Mbita, Suba, Ndhiwa, Rachuonyo South and Rachuonyo North. Number of secondary schools were 334 with an enrolment of 76, 466 students. With a population of 958,791, density (people per km^2) 371, poverty rate 44.7%, urban population Homa-Bay-58,936, Mbita-11,989 and Sindo-6,362. It has 16 Islands and these include Mfangano, Rusinga, Ngodhe, Kiwa, Kibuogi, Takawiri, Ringiti and Remba. The projected sub counties population stand at 97,544 (46294 male and 51250 female) and 105,938 (51737 male and 54201 female) for Mbita and Suba sub-counties respectively. The two Sub-Counties administrative units are three divisions (Mfangano, Mbita and Lambwe) in Mbita Sub- County and two divisions (Gwassi and Central) in Suba Sub- County. Their main economic activity is fishing. The population with secondary education is 11.8% while those with primary education are 65.6%. (Kenya: County Facts Sheet, 2009) (Appendix VIII).

3.4 Target Population

The target population were all the 37 principals in 37 public secondary schools (Mbita 16 and Suba 21 schools), 2 Sub-County Quality Assurance Officers and 1 Sub-County Auditor. The form four student population was estimated at 2775 for the two Sub-Counties. This study targeted public secondary schools that admitted form one under FSE in 2008. All the 37 secondary school principals in public secondary schools were targeted because they are custodians of data on enrolment, transition, academic performance and FSE funds received. Quality assurance provided data on school

performance in their respective Sub- Counties and also was a key informant on issues of quality of education and challenges of FSE implementation. There was only one auditor for the two Sub- Counties who provided information on FSE funds received by schools and issues on transition rates at the County level.

3.5 Sample Size and Sampling Procedures

3.5.1 Sample Size

The sample size was 34 principals, 337 form four students, 2 SCQASOs and 1 Sub county schools auditor. Fisher's formula was used to determine sample size of form four students.

Fishers' formula, $nf = \dfrac{n}{1+\dfrac{n}{N}}$

Where;

nf = desired sample size

n = desired sample size when population is less than 10,000 that is, (384)

N = target population

That is: $nf = \dfrac{384}{1+\dfrac{384}{2775}}$

$= \dfrac{384}{1+0.1383783}$

$=337$

The sample frame was as shown in Table 3.1.

Table 3.1: Sample Frame

Category of Respondents	Target Population	Sample Size
Principals	37	34
Form IV Students 2014	2775	337
Sub-County schools Auditor	1	1
SCQASO	2	2

Form four students were used to constitute 34 Focus Group Discussion (FGD).

In small schools there were 2 FGDs consisting of 6 members each totaling to 12. There was 1 FGD consisting of 7 members totaling to 7.

14 FGDs consisting of 9 members totaling to 126.

In medium schools there were 12 FGDs consisting of 11 members totaling to 132.

In large schools there were 5 FGDs consisting of 12 members totaling to 60.

A total of 34 schools were used with a total sample size of 337 students.

3.5.2 Sampling Procedures

Three principals were randomly selected for the pilot study. They did not participate in the main study. Saturated sampling technique was used to select 34 principals, 1 Sub County Schools Auditor, and 2 Sub County Quality and Assurance Standards Officers while simple random sampling technique was used to select form IV students of 2014.

3.6 Data Collection Instruments

The instruments used to collect data included: questionnaire, interview schedules, focus group discussion and document analysis guide.

3.6.1 Principal's Questionnaire

Questionnaire with both closed and open ended questions was administered to principals to collect quantitative data on enrolment, transition and student academic achievement. The questionnaire included background information of schools, history of school enrolment 2008-2014, history of school performance in KCSE from 2008 to 2014, amount of FSE funds received per year from 2008 to 2014b (Appendix 1).

3.6.2 SCQASO Interview Schedule

An interview schedule was administered to Sub County Quality Assurance and Standard Officer. The open ended questions included questions on influence of FSE policy on enrolment, quality of education, mean KCSE standard scores per school, staffing levels, learning resources and challenges of implementing FSE policy in their Sub- Counties. (Appendix II).

3.6.3 SCSA Interview Schedule

This consisted of both open-ended questions to the SCSA. The questions sought to establish the extent to which FSE policy influence access, transition and student academic performance (Appendix II).

3.6.4 Document Analysis Guide: DAG

Document analysis guide was a structured tool used to capture data from existing records relevant to the objectives of the study like data on enrolment in class 8 in Mbita and Suba Sub- Counties and the number of pupils who joined Form 1, access, transition and information on student academic performance during the period of study. (Appendix III).

3.6.5 Student Focus Group Discussion guide

Qualitative data was collected using students Focus Group Discussion Guide and open ended questions which sought views and opinions of students on influence of FSE policy on access, transition and student academic performance. Each FGD consisted of between 6 to 12 participants, a moderator and a note taker. (Appendix V).

3.7 Pilot Study

The study tools were pre-tested in three schools; two schools in Mbita Sub-County and one from Suba Sub-County. During the piloting the questions were posed to the respondents to assess consistency and ease of understanding. Experiences gained during the piloting helped to improve the tools' reliability and validity of data collected.

3.8 Validity of Instruments

Face and content validity was ensured through the use of experts mainly the two supervisors who independently reviewed the questions to ensure they are able to measure correctly what they are expected to achieve. During the pilot testing the tools were also reviewed based on responses received and this improved validity.

3.9 Reliability of Instrument

The researcher administered the instrument twice at an interval of two weeks to the same principals in the three schools and data from the two pilot tests were analysed using Pearson's product moment correlation coefficient (Pearson's r). Variables relating to access, transition and academic performance were compared and the aim was to achieve a strong and significant correlation.

According to Oso and Onen (2009) a correlation coefficient in an indicator of reliability and an index of at least 0.70 at p value < 0.05 indicates that the tools are reliable. In this case, principals' questionnaire had a pearson's r co-efficient of 0.8. The instrument was therefore reliable.

3.10 Data Collection Procedure

One day training was conducted for the research team on research objectives and procedures. Before the actual data collection, the research team made contacts with the leadership of County education and sought permissions to conduct the study and also dropped copies of the questionnaires and introduction letters. Accompanied by permission letters from the School of Graduate Studies (SGS) Maseno University, County education office the research team visited each school to introduce the study and make appointments. The questionnaires for principals were administered directly to the respondents. The principals of 34 schools were requested to provide permission for a Focus Group discussions with students within the school compound. The teachers in those three schools assisted in randomly selecting between 6-12 form four students of 2014 to participate in discussions. The FGDs lasted for about 30-45 minutes. The SCA

and SCQASO were interviewed to get information on access, transition and student academic performance.

3.11 Data Analysis

3.11.1 Quantitative Data

For the quantitative data analysis, the dependent variables were access, transition and student academic performance. The quantitative data analysis was done following the study objectives. Analysis was done using SPSS version 20. The expected results included descriptive statistics, which included mean and standard deviation of the study outcomes for overall schools, small, medium and large schools. Pearson (r) was used to establish the strength and direction of relationship and to respond to hypothesis.

The correlation analysis showed the strength and magnitude of correlation between FSE funds and access, transition and academic performance. A positive correlation Coefficient (r) indicated positive influence of FSE while a negative correlation coefficient denoted negative influence of FSE. The level of significance of the correlations was measured at p value <0.05. In the regression equation, the coefficient of the FSE factor denoted the rate of unit increase in access, transition and academic performance with changes in FSE funds per school. Analysis of variance (ANOVA) was used to establish if the regression model predict the dependent variable well or establish how well the regression model is able to predict the dependent variable.

Linear regression analysis was used to confirm the influence of FSE has on access, transition and student academic performance. It tells the degree to which FSE policy influences the dependent variables. A p-value <0.05 for the FSE factor indicated

statistically significant influence of FSE on the study outcomes. The study sought to establish the extent of change on access, transition and student performance due to a unit change in FSE funding.

Table 3.2: Data Analysis Matrix

Objectives		Independent Variable	Dependent Variable	Statistical Method
I.	Determine the influence of FSE policy on access to secondary education.	FSE funds	Access	Descriptive Statistics; Frequency counts, percentages and means Pearson's (r), Coefficient of determination, ANOVA and Regression analysis
II.	Determine the influence on FSE policy on transition from primary school to secondary education.	FSE funds	Transition rates	Descriptive Statistics; Frequency counts, percentages and means Pearson's (r), Coefficient of determination, ANOVA and Regression analysis
III.	Determine the influence of FSE policy on student academic performances.	FSE funds	KCSE Mean score	Descriptive Statistics; Frequency counts, percentages and means Pearson's (r), Coefficient of determination, ANOVA and Regression analysis

3.11.2 Qualitative Data Analysis

Qualitative data included opinions of principal's students, quality assurance and auditors collected though in-depth interview approach. Results from the students focused discussion was analysed using content analysis. Qualitative data was analysed by recording statements from the respondents and transcribing them into themes and sub-themes.

Table 3.3: Qualitative Data Analysis Matrix

Objectives	Independent Variable	Dependent Variable	Transcripts	Themes	Sub-themes
Determine the influence of FSE policy on access to secondary education	FSE policy	Access in small schools	Access in schools improved with advent of FSE ($SQASO_1$)	**AC**	- Enrolment in small, medium and large schools
Determine the influence on FSE policy on transition from primary school to secondary education.	FSE policy	Transition	FSE has enhanced transition in all schools (FGD_2)	**TR**	- Transition in small, medium and large schools
Determine the influence of FSE policy on student academic performances.	FSE policy	Student Academic Performance	FSE has helped to improve performance more so in large schools ($SQASO_2$)	**SAP**	-Student Academic Performance in small, medium and Large schools

Key: AC= Access, **TR**= Transition, **SAP** = Student Academic Performance

3.12 Ethical Considerations

The permission was sought from Maseno University to proceed to the field and collect data. The researcher sought permission from the Sub-County District Education Officers in charge of secondary schools in Homa-Bay County to collect data on influence of FSE on access, transition and students academic performance. Thereafter, the researcher sought permission from the principals of all the secondary schools in the Sub-County to collect data from their respective schools. Informed consent was obtained from respondents and they were assured of confidentiality of data provided. Participation was voluntary and no risk was expected in the study. No names were used in any of the reports resulting from this study. The respondents were also assured of their access to the final report.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussions of the findings of the study. The findings are presented and discussed thematically based on the objectives of the study. The objectives of the study were:

i. Determine the influence of free secondary education policy on access to secondary education.

ii. Determine the influence of free secondary education policy on transition from primary school to secondary school education.

iii. Determine the influence of free secondary education policy on student academic performances.

The return rate of questionnaires was as shown in Table 4.1.

Table 4.1: Return Rate of Questionnaires

Respondent	Number issued	Number returned	Percentage
Principals	34	34	100

From Table 4.1, it can be observed that 34 (100%) of principals, 2 (100%) of SCA and 2(100%) of SCQASO returned forms.

4.2 Demographic Characteristics of Principals

The demographic characteristics of principals were as shown in Table 4.2.

Table 4.2: Demographic Characteristics of Principals

Demographic Characteristics	Frequency (f)	Percentage (%)
Gender of Principals		
Male	26	76.5
Female	8	23.5
Total	**34**	**100.0**
Highest Education Level		
Diploma	2	5.9
Graduate	20	58.8
Masters	12	35.3
Total	**34**	**100.0**
Year of Experience		
1-5 years	13	38.2
6-10	12	35.3
11 and above	9	26.5
Total	**34**	**100.0**

Out of 34 principals who participated in the study, 26(76.5%) were male while the rest 8(23.5%) were female. Both male and female respondents were represented. Majority of the principals 20(58.8%) were graduates followed by masters graduates 12(35.3%) and only 2(5.9%) were diploma holders. This is a reflection of a generally high level of education among principals. Majority of the principals 38.2% (n=13) had 1-5 years of experience while 12(35.3%) and the rest 9(26.5%) had more than 10 years' experience.

According to Wahlstron (2008) leadership of the principal is known to be a key factor in supporting student achievement. Educational leadership can have strong, positive though indirect, effect on student learning and teacher performance (Seashore, 2010). This information is relevant to the study as principals have knowledge of the FSE policy and trends in enrolment and student academic performance.

4.2.1 School Data

The school data was as shown in Table 4.3.

Table 4.3: School Data

Size	n	%
Small (Single stream)	17	50.0
Medium (Double stream)	12	35.3
Large (Triple stream and above)	5	14.7
Total	**34**	**100.0**

A total of 34 public secondary schools participated in the study. Out of which 19 were from Mbita and 15 from Suba Sub-County. The schools were classified as small, medium and large based on number of enrolments from 2008 to 2014 cumulatively. Small schools were schools with enrolment that ranged cumulatively between 128-933 students; medium schools had between 1115-1697 and large schools had 2085 to 5650 students. From Table 4.3 it can be observed that out of 34 schools, 17(50%) were classified as small, 12 (35.3%) were medium and 5 (14.7%) were classified as large.

According to Leithwood (2009) there is differential effect of school sizes on educational outcomes. The author argued that the weight of evidence from their study favours smaller

schools. They argued that students who traditionally struggle at school and students from disadvantaged social and economic backgrounds are the major beneficiaries of smaller schools. Secondary schools serving exclusively or large diverse and/or disadvantaged students should be limited in size to about 600 students or fewer, while secondary schools serving economically and socially heterogeneous or relatively advantaged students should be limited in size to about 1000 students (Leithwood & Jantzi, 2009).

The relevance of this information to the study is that the size of the school is considered to have influence on the total FSE funds received, transition rates and academic performance. The analysis of this study was stratified by school size to reflect possible effect of school size on the study outcomes.

4.3 Influence of FSE Policy on Access to Secondary Education

The research objective was to determine the influence of FSE policy on access to secondary education. To address this objective the null hypothesis: There is no statistically significant relationship between FSE policy and access to secondary education in Mbita and Suba Sub- Counties was generated. To respond to this hypothesis data on enrolment and FSE funds were collected and computed and the results were as shown in Table 4.4.

Table 4.4: Cumulative FSE funds and Enrolment 2008 to 2014

S/N	Small Schools FSE funding in Kenya shillings	Small school Enrolment	S/N	Medium Schools FSE funding in Kenya shillings	Medium school Enrolment	S/N	Large School FSE funding in Kenya shillings	Large Schools Enrolment
1	2,309,625	316	1	11,240,175	1,220	1	21,145,900	2,261
2	4,157,325	438	2	14,268,350	1,461	2	22,736,975	2,362
3	6,559,335	717	3	14,217,025	1,412	3	27,150,925	2,903
4	8,427,565	910	4	11,014,345	1,115	4	53,993,900	5,650
5	8,509,685	915	5	11,332,560	1,171	5	21,032,985	2,085
6	3,366,920	382	6	11,270,970	1,170			
7	1,806,640	202	7	13,447,150	1,427			
8	5,840,785	625	8	11,270,970	1,137			
9	4,054,675	412	9	11,732,895	1,246			
10	3,182,150	348	10	14,699,480	1,697			
11	8,509,685	933	11	13,149,465	1,355			
12	3,233,475	421	12	14,011,725	1,647			
13	5,399,390	572						
14	1,847,700	249						
15	5,748,400	737						
16	1,324,185	147						
17	1,231,800	128						
	75,509,340	**8,452**		**151,655,110**	**16,058**		**146,060,685**	**15,261**

Source: Field Data, 2015

NB: Enrolment in this study was based on 4 cohorts because capitation is done annually based on all students enrolled until they graduate. The categorization of schools' into small, medium and large is based on government policy of "streams" in school systems (Table 1.2). This was based on circular No. MOE/G1/9/44 of January 2008 and circular No. MOE.CONF/G5 of November 2014. The whole idea is about money which was given according to the school's total population. The 34 schools were classified into three categories namely; small (n=17), medium (n=12) and large schools (n=5) based on

amount of free secondary education funds received based on total enrolment. Small schools received below Kshs. 10 Million, medium sized schools received (Kshs. 10-20 million) and large schools received at least Kshs. 20 million as shown. Overall the free secondary education fund received by the schools was Kshs. 373,225,135. Small secondary schools received Kshs. 75,509,340; medium secondary schools received Kshs. 151, 655,110 while the large secondary schools received Kshs.146, 060,685.

Pearson's Correlation coefficients (r) were therefore interpreted to determine the contribution of the influence of free secondary education funds on access using Pearson's r was used to determine the direction and strength of the relationship. Elifson, Runyon and Haber (1990); Leedy and Ormrod (2005) interpretation guidelines were used as shown in Table 4.5.

Table 4.5: Interpretation of Pearson's Correlation Coefficients (r)

Negative (-)	Positive (+)	Strength of the relationship
0.01 – 0.30	0.01 – 0.30	Weak/low/small
0.40 – 0.60	0.40 – 0.60	Moderate/ medium
0.70 – 0.99	0.70 – 0.99	Strong/high
1.00	1.00	Perfect relationship
0.00	0.00	No relationship

Source: Adapted from Elifson, Runyon and Haber (1990); Leedy and Ormrod (2005)

Pearson's r was used to establish the relationship between Free Secondary Education policy and access to secondary school education. The results were as shown in Table 4.6.

Table 4.6: Correlation between FSE funds and access overall

		Access
FSE policy	Pearson Correlation	.865
	Sig. (2-tailed)	.000
	N	34

The results in Table 4.6 indicated that there was a positive and strong relationship between Free Secondary Education policy and access. The relationship was significant as signified by the calculated p-value of .000 which was less than the set p – value of 0.05. The null hypothesis was therefore rejected. This means that an increase in Free Secondary Education funds increased students' enrolment.

Scatter gram was generated to illustrate graphically the relationship between FSE funding and access. The results were as shown in Figure 4.1. The scatter gram indicates a high positive correlation between FSE funding and access in secondary schools. It is clear that the coordinate points slopes from lower left to upper right, indicating positive correlation. A line drawn through coordinate points, known as best fit reveals further the correlation between variables. This is because the coordinate points fell near the line of best fit and a visible pattern implying the two variables had a real relationship and not by chance.

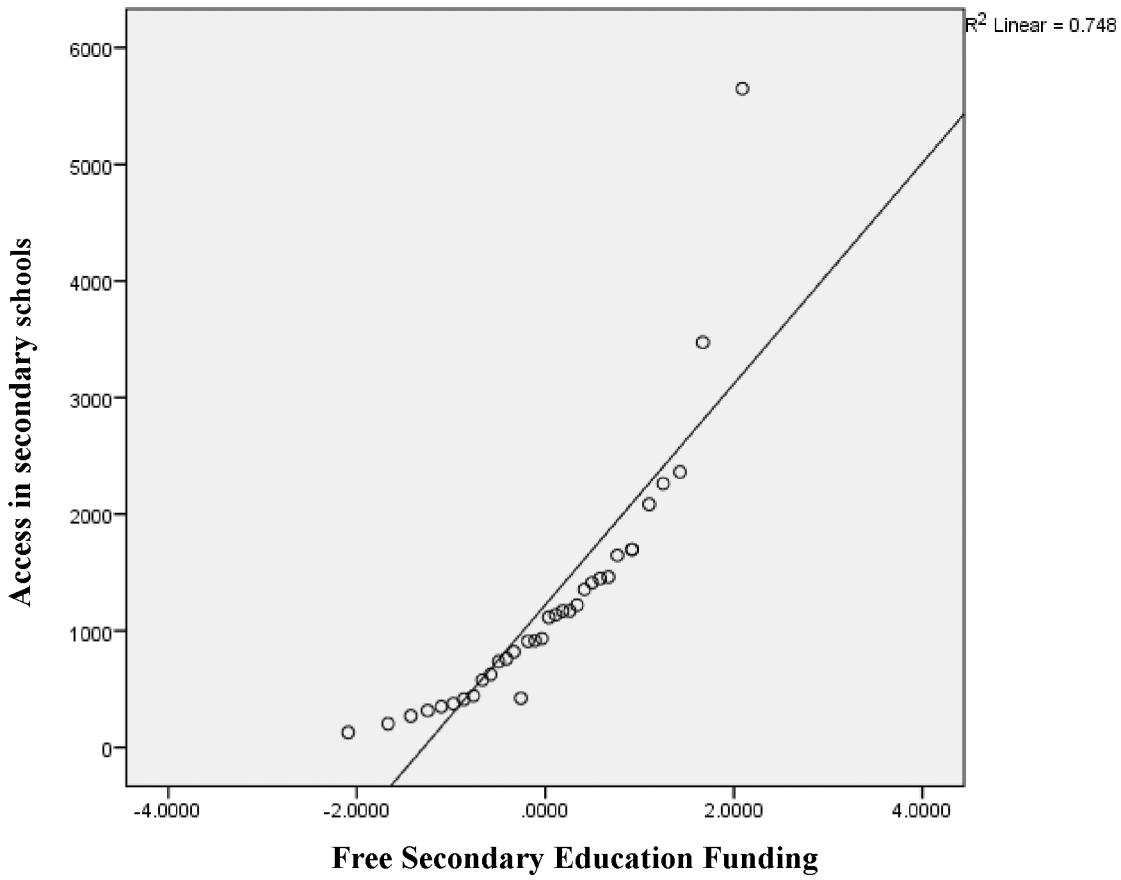

Figure 4.1: Scatter gram showing the relationship between FSE funding and access for six years (2008-2014)

From Figure 4.1 it can be noted that one unit increase in FSE funding increased access by .748 units for a period of six years. The increase in FSE funding by Ksh.10, 265 led to increase in access by one student. This meant that one extra child accessed secondary school education with additional funding.

To estimate the influence of Free Secondary Education funds, coefficient of determination was computed. The results were as shown in Table 4.7.

Table 4.7: Regression analysis of the influence of FSE funds on Access

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.865[a]	.748	.741	543.926

Predictors: (Constant), FSE

From Table 4.7 it can be noted that the impact of the Free Secondary Education accounted for 74.1% of the variation on access as signified by the adjusted R^2 coefficient of 0.741. The other 25.9% could be explained by other factors. This finding was supported by interview findings. All Focus Group Discussion were of the view that without FSE policy most students would not have enrolled in secondary education. In all the Focus Group Discussion the students asserted:

> Free secondary education has relieved our parents of the heavy burden. This fee had barred most of us from secondary education. This is particularly in small schools, which are day schools' which are generally single streamed. In fact CDF schools have really thrived on the FSE policy. The government should even increase the FSE funding to enable a few who are yet to join as they still find it impossible, particularly boarding schools.

Document analysis revealed that most schools were day schools and had one stream. The principals of these schools were in fact yearning for increased enrolment so as to take advantage of FSE funding as it was based on capitation. In medium, that is two streamed and larger that is, three streamed secondary schools, enrolment had also increased markedly (Tables 4.10, 4.14 and 4.18). This was because generally boarding schools had become too expensive for most parents. In this respect one of the SQASO's remarked:

> Before introduction of FSE policy in 2008 the dropout rates in boarding schools was high. The students who dropped out from boarding schools hated pursuing their education in day schools. This is because in Kenya most parents and children prefer boarding schools, such that by making them affordable there was a scramble. The principals of boarding schools

also preferred high enrolment because of advantage of economies of scale. This meant that it lowered the cost of managing them. That is increase in enrolment had admonishing effect on the cost of running them.

These views concurred with those of the Task report (Republic of Kenya, 2007) which indicated most students were out of school because it was unaffordable. CDF bursaries of Kshs, 5,000, 7,000/=, 2,000/= were in fact not making a difference. But now when coupled with FSE funding the impact is being felt, particularly in more or less marginalised areas like most parts of Mbita and Suba Sub-counties.

To determine whether Free Secondary Education Policy was a significant predictor of access, ANOVA was computed. The results were as shown in Table 4.8.

Table 4.8: Analysis of Variance of the influence of Free Secondary Education policy on Access to Secondary School Education

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28,164,500.560	1	28,164,500.560	95.197	.000[b]
	Residual	9,467,364.176	32	295,855.130		
	Total	37,631,864.735	33			

Dependent Variable: Enrolment

Predictors: (Constant), FSE policy

From Table 4.8 it can be observed that Free Secondary Education policy was a significant predictor of access as the calculated p-value was .000<0.05. This means that free secondary education funds can be relied on as a predictor of access to secondary school education.

To determine the actual influence linear regression analysis was done. The results were as shown in Table 4.9.

Table 4.9: Linear Regression Analysis of the influence of Free Secondary Education policy on Access to Secondary School Education

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,222.168	93.282		13.102	.000
	FSE	947.489	97.110	.865	9.757	.000

a. Dependent Variable: Access. Regression equation: Y= a+ bx

From Table 4.9 it can be revealed that one unit increase in free secondary education funds can lead to increase in access to secondary school education by 947.489 units as indicated by the coefficient 947.489. The regression equation is Access = 1,222.168 +947.489X. This means that free secondary education policy had significant influence on access to secondary school education. The study rigorously interrogated the influence of free secondary policy on access by categorizing schools into small, medium and large. The study sought to establish the relationship between Free Secondary Education policy and access according to school size. This was necessary because the three categories of schools do exist and it was of interest to unravel the difference in impact of free secondary education policy on access in the three categories of secondary schools so as to advise policy makers on where to spend more Free Secondary Education funds and get the desired results.

Influence of Free Secondary Education Policy on Access to Secondary School Education in Small Schools

To establish the influence of Free Secondary Education policy in small secondary schools inferential statistics were used, that is Pearson product- moment correlation and regression analysis.

Table 4.10: Relationship between Free Secondary Education funds and Access in Small Schools

		Enrolment
FSE	Pearson Correlation	.900
	Sig. (2-tailed)	.000
	N	17

Results shown in Table 4.10 indicate that there was a positive and strong relationship between Free Secondary Education policy and access. The relationship was significant as signified by the calculated p-value of .000 which was less than the set p – value of 0.05. This means that an increase in Free Secondary Education funds would increase access.

To estimate the impact of Free Secondary Education funds, coefficient of determination was computed. The results were as shown in Table 4.11.

Table 4.11: Regression analysis of influence of Free Secondary Education funds on access in small secondary schools

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.900[a]	.809	.797	119.220

Predictors (constant) Free Secondary Education policy

From Table 4.11 it can be noted that the contribution of the Free Secondary Education Policy accounted for 80.9% of the variation on access as signified by the coefficient of .809. The other 19.1% could be explained by other factors.

To determine whether Free Secondary Education Policy was a significant predictor of access, ANOVA was computed. The results were as shown in Table 4.12.

Table 4.12: Analysis of Variance for the influence of FSE on Access in small schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	905,217.335	1	905,217.335	63.687	.000[b]
	Residual	213,202.782	15	14,213.519		
	Total	1,118,420.118	16			

a. Dependent Variable: Access

b. Predictors: (Constant), Free Secondary Education policy

From Table 4.12 it can be observed that Free Secondary Education policy was a significant predictor of access as the calculated p-value was .000< 0.05. This means that Free Secondary Education funds can be relied on as a predictor of access to secondary school education.

To determine the actual contribution linear regression analysis was done. The results were as shown in Table 4.13.

Table 4.13: Regression model of Influence of FSE policy on access in small schools

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	859.354	49.311		17.427	.000
	FSE	409.592	51.325	.900	7.980	.000

Dependent Variable: Access. Regression equation Y=a+bx

From Table 4.13 it was be revealed that one unit increase in Free Secondary Education funds could lead to increase to access by 409.592 units as indicated by the coefficient 409.592. The regression equation is Access = 859.354 +409.592X. This means that free secondary education policy has significant influence on access to secondary school education.

Influence of Free Secondary Education policy on Access to Secondary School Education in Medium secondary schools

To establish the influence of Free secondary education policy in medium secondary schools inferential statistics were used, that is person product- moment correlation and regression analysis.

Table 4.14: Relationship between Free Secondary Education funds and Access in medium secondary schools

		Access
Free Secondary Education policy	Pearson Correlation	.984
	Sig. (2-tailed)	.000
	N	12

From Table 4.14 it can be observed that there was a positive and strong relationship between Free Secondary Education policy and access. The relationship was significant as signified by the calculated p-value of .000 which was less than the set p – value of 0.05. The null hypothesis was therefore rejected. This means that an increase in Free Secondary Education funds would increase students' enrolment. To estimate the contribution of Free Secondary Education funds, coefficient of determination was computed. The results were as shown in Table 4.15.

Table 4.15: Regression Analysis of the influence of Free Secondary Education policy on access in medium secondary schools

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.984[a]	.968	.965	41.192

a. Predictors: (Constant), Free Secondary Education policy

From Table 4.15, it was noted that the influence of Free Secondary Education accounted for 96.8% of the variation on access as signified by the coefficient of 0.968. The other 3.2% could be explained by other factors.

To determine whether Free Secondary Education was a significant predictor on students' enrolment, ANOVA was computed. The results were as shown in Table 4.16.

Table 4.16: Analysis of Variance of influence of Free Secondary Education policy on access in medium secondary Schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	510,572.871	1	510,572.871	300.903	.000[b]
	Residual	16,968.046	10	1,696.805		
	Total	527,540.917	11			

a. Dependent Variable: Access

b. Predictors: Free Secondary Education policy

From Table 4.16 it can be observed that Free Secondary Education policy was a significant predictor of access as the calculated p-value was .000< 0.05. This means that Free Secondary Education funds can be relied on as a predictor of access to secondary school education.

To determine the actual contribution linear regression analysis was done. The results were as shown in Table 4.17.

Table 4.17: Linear Regression Analysis of the influence of Free Secondary Education policy on access in medium secondary schools

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,040.141	22.791		45.637	.000
	FSE policy	711.803	41.034	.984	17.347	.000

a. Dependent Variable: Access in medium schools. Regression equation Y= a+ bx

From Table 4.17 it can be revealed that one unit increase in Free Secondary Education funds can lead to increase to access by 711.803 units as indicated by the coefficient 711.803. The regression equation is Access = 1,040.141 +711.803X. This means that Free Secondary Education policy has a significant influence on access to secondary school education.

Influence of Free Secondary Education Policy on Access to Secondary School Education in Large Secondary Schools

To establish the influence of Free secondary education policy in large secondary schools inferential statistics were used, that is Pearson product- moment correlation and regression analysis.

Table 4.18: Relationship between Free Secondary Education policy and access in large secondary schools

		Access
Free Secondary Education policy	Pearson Correlation	.964
	Sig. (2-tailed)	.008
	N	5

From Table 4.18 it can be observed that there was a positive and strong relationship between Free Secondary Education policy and access. The relationship was significant as signified by the calculated p-value of .008 which was less than the set p – value of 0.05. The null hypothesis was therefore rejected. This means that an increase in Free Secondary Education funds would increase student enrolment.

Since N- value was less than ten times the independent variable regression analysis was not computed (Brace, Kemp & Snelgar, 2006).

The Kenya government made a commitment to provide free basic education, which includes secondary education through the Sessional Paper No. 1 of 2005, to increase the transition to 70% (Republic of Kenya, 2009). This was against the backdrop that one of the challenges that had faced the secondary school education sub-sector had been that of low transition from primary schools. This had been occasioned mostly by the fact that secondary school education was a fee paying sub-sector.

The first step in the implementation of free secondary education policy started with a stakeholders' forum which led to the formation of the Task force on Affordable Secondary School Education. The key mandate of this team was to examine the cost as tabulated in secondary schools' joining instructions as well as identifying modalities for the implementation of Free Day Secondary Education. The guidelines were generated from the recommendations of the Taskforce as had been discussed and agreed by all the stakeholders in the sub-sector (Republic of Kenya, 2007). At that time many schools were grossly under enrolled, with several schools having fewer than 100 students in the entire school (Republic of Kenya, 2009). This phenomenon had serious implication on teacher utilization as most teachers would not be optimally utilized due to understaffing. The findings of this study confirmed this scenario, as most small schools had low enrolments. The large schools on the other hand were understaffed and over utilized. This phenomenon also affected enrolments as small schools were most likely to attract low enrolment while large schools would attract high enrolments; furthermore, the staffing

policy which is based on Curriculum Based Establishment and enrolment. Schools with classes less than 40 students do not qualify for Teachers Service Commission teachers, the consequences as confirmed by this study are that most schools had as few as 3 to 6 Teachers Service Commission teachers.

The government subsidy (FSE funding) to schools was based on capitation. That is, Free Secondary Education policy put in place funding of Ksh. 10,265.00 per child per year. The breakdown of the cost was as shown in Table 4.19.

Table 4.19: Voteheads

Vote head	Amount (Kshs)
Tuition	3,600.00
Repair, maintenance and improvement	400.00
Local travel and transport	400.00
Administration cost	500.00
Electricity, water and conservancy	500.00
Activity fees	600.00
Personal emoluments	3,965.00
Medical	300.00
Total school fees	10,265.00

Source: Republic of Kenya (2009), Guidelines for Implementation of FSE

The parental obligations were stipulated as follows; boarding costs, lunch for day scholars and school levies approved by District Education Boards in consultation with Boards of Governors and Parents Teachers Associations. The recommendation for employment of non –teaching staff was as shown in Table 4.20.

Table 4.20: Employment of Non –teaching staff

Stream	Enrolment	Day Schools. No. of workers	Boarding Schools. No. of workers
1	180	6	10
2	360	8	15
3	540	9	20
4	720	13	28
5	900	15	30
6	1080	18	36

Source: Republic of Kenya (2009), Guidelines for Implementation of Free Secondary Education

This Free Secondary Education package was meant to make secondary school education affordable and this would enable eligible students to transit from primary school to secondary schools with ease.

The relationship between Free secondary Education funding and access was positive and strong for the four cohorts, 2008, 2009, 2010 and 2011. In this respect Free Secondary Education funding accounted for 74.8% of the variation in access. This means that there was high demand for secondary school education and the high demand was motivated by the Free Secondary Education policy. In small secondary schools enrolment ranged from 128 to 933, and the total enrolment in the 17 secondary schools was 8,452 for the 2008 to

2014 period. The total Free Secondary Education funding was 75,509,340.00 Kenya shillings. The 12 medium secondary schools had a total enrolment of 16,058 and the total Free Secondary Education funding was Ksh. 151,655,110.00 while the 5 large secondary schools had a total enrolment of 15,261 and the total Free Secondary Education funding of Kshs. 146,060,685.00. These findings compare favourably with those of economic survey, 2015 (Republic of Kenya, 2015) at National level. The economic survey, 2015 (Republic of Kenya, 2015) indicates that National transition rate trend from 2010 to 2014 was 68.9%, 69.4%, 68.4%, 76.8% and 80.4% respectively. The Economic survey, 2015 attributes the improvement from primary to secondary transition rate partly to implementation of Free Secondary Education policy and expansion of physical facilities. It is also important to note that for more or less the same period, nationally enrolment rose (Republic of Kenya, 2015). From 2010 to 2014 enrolment in secondary schools was as shown in Table 21, as cited in Economic Survey 2015 (Republic of Kenya, 2015).

Table 4.21: Enrolment in Secondary Schools by Class and Sex, 2010 to 2014

Class	2010		2011		2012		2013		2014*	
	Boys	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**
Form I	266,707	232,226	276,965	244,636	282,555	249,573	327,775	289,753	339,134	328,017
Form 2	232,145	211,799	240,552	219,469	274,195	239,743	288,238	253,739	324,143	304,455
Form 3	216,786	181,823	224,637	188,408	239,149	218,278	267,221	228,869	291,440	261,088
Form 4	169,899	141,999	206,552	166,501	223,132	188,198	244,463	204,204	247,537	214,060
Total	**885,537**	**767,847**	**948,706**	**819,014**	**1,019,031**	**895,792**	**1,127,697**	**976,565**	**1,202,254**	**1,107,620**
G. Total	**1,653,384**		**1,767,720**		**1,914,823**		**2,104,262**		**2,309,874**	

Source: Ministry of Education Science and Technology, 2014

***Provisional**

The total enrolment in both public and private secondary schools rose by 9.5% from 2.1million in 2013 to 2.3 million in 2014. Total enrolment of girls increased by 10% from 1.0 million in 2013 to 1.1 million in 2014. While that of boys grew by 6.6%. The survival rate at secondary school level from form one to form four declined from 90% in 2013 to 88.4% in 2014. Survival Rate (SR) by grade is the percentage of a cohort of pupils (or students) enrolled in the first grade of a given level or cycle of education in a given school year who expected to reach successive grades. The purpose is to measure the retention capacity and internal efficiency of an education system. The retention rate for girls was lower at 87.5% compared to that of boys at 89.3% for the same cohort. In terms of Gross Enrolment Rate (GER) and Net Enrolment Rate (NER), Figure 4.2 suffices.

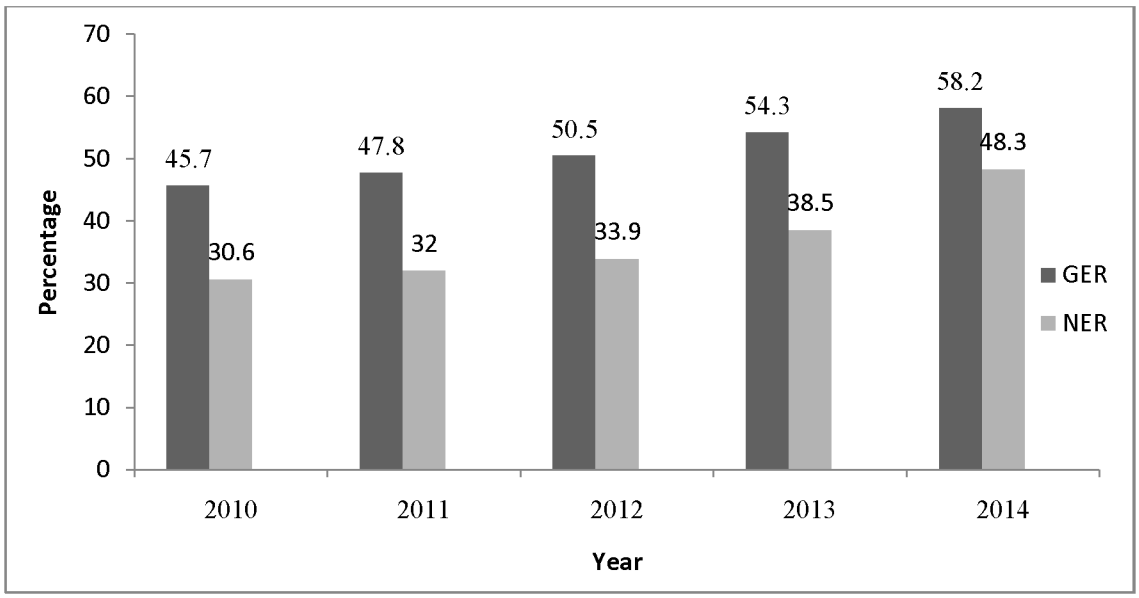

Figure 4.2: Secondary School Gross Enrolment Rate (GER) and Net Enrolment Rate (NER) 2010 to 2014

Figure 4.2 presents trend in secondary school GER and NER from 2010 to 2014. The GER increased from 54.3% in 2013 to 58.2% in 2014. Significant improvement was also registered in the NER that increased from 38.5% in 2013 to 48.3% in 2014. The upward

trend in NER can partly attributed to implementation of Free Day Secondary Education and infrastructure development in schools.

The findings of this study concur with that of Economic Survey 2015 (Republic of Kenya, 2015), but goes further to rigorously interrogate the impact of Free Secondary Education policy on access by determining the actual impacts on access in small secondary schools, medium secondary schools and large secondary schools. The impact of Free Secondary Education policy on access was very high in medium and large secondary schools, where Free Secondary Education policy accounted for 96.8% and 93% variations in access respectively. This means that Free Secondary Education funding produced desired results to a large extent in medium and large secondary school. In small secondary school the impact was good but very lower than that in medium and large secondary schools. Thus the impact in small secondary schools' was .809 (Table 10). This means that Free Secondary Education policy accounted for 80.9% of variation in access.

4.4 Influence of Free Secondary Education Policy on Transition

The research objective was to determine the influence of FSE policy on transition from primary to secondary**.** To address this objective the null hypothesis; There is no statistically significant relationship between FSE policy and transition from primary to secondary in Mbita and Suba Sub- Counties was generated. To respond to this hypothesis data on number of student transitioning from primary to secondary and FSE funds were collected and computed and the results are shown in Table 4.22.

4.4.1 Descriptive Statistics for influence of FSE Policy on Transition

In order determine the influence of FSE policy on transition the 34 schools were classified into three categories namely; small schools (n=17), medium (n=12) and large schools (n=5) based on school enrolments. The total FSE funds for the number of students moving from primary to secondary were calculated. Table 4.22 is a summary of the descriptive statistics.

Table 4.22: Descriptive statistics for influence of FSE Policy on cumulative Transition 2008-2014

S/N	FSE funds in Small schools	Small schools-Transition	S/N	FSE funds in medium schools	Medium schools-Transition	S/N	FSE funds in large schools	Large schools-Transition
1	810,935	122	1	3,130,825	345	1	4,229,180	545
2	1,129,150	188	2	3,756,990	457	2	6,066,615	664
3	1,837,435	258	3	3,623,545	362	3	7,452,390	932
4	2,340,420	250	4	2,863,935	329	4	14,504,445	1474
5	2,350,685	311	5	3,007,645	310	5	5,340,065	511
6	985,440	138	6	3,007,645	393			
7	523,515	86	7	3,664,605	412			
8	1,601,340	253	8	2,915,260	356			
9	1,057,295	115	9	3,202,680	381			
10	893,055	155	10	4,362,625	444			
11	1,077,825	159	11	3,479,835	383			
12	1,467,895	123	12	2,391,745	325			
13	636,430	120						
14	1,888,760	149						
15	379,805	48						
16	328,480	39						
17	5,799,725	313						
Total	**25,108,190**	**2,827**		**39,407,335**	**4,497**		**37,592,695**	**4126**

Source: Field Data, 2015

Table 4.22 shows the population of students who transited from primary school education to secondary school education for a period 2008 to 2014 and the amount of money in form of FSE received per school for the same period. It can also be observed from the same Table 4.22, that overall Free Secondary Education funds received by the schools for students who transited from primary schools to secondary schools was Kshs. 25,108,190 in small schools. Free Secondary Education funds received by medium secondary schools was Kshs. 39,407,335 while the Free Secondary Education Funds received by large secondary schools was Kshs. 37,592,695.

Pearson product- moment correlation coefficients (r) were therefore interpreted to determine the contribution the influence of free secondary education funds on transition. Pearson's r was used to determine the direction and strength of the relationship. Elifson, Runyon and Haber (1990); Leedy and Ormrod (2005) interpretation guidelines were used as shown in Table 4.23.

Table 4.23: Interpretation of Pearson's Correlation Coefficients (r)

Negative (-)	Positive (+)	Strength of the relationship
0.01 – 0.30	0.01 – 0.30	Weak/low/small
0.40 – 0.60	0.40 – 0.60	Moderate/ medium
0.70 – 0.99	0.70 – 0.99	Strong/high
1.00	1.00	Perfect relationship
0.00	0.00	No relationship

Source: Adapted from Elifson, Runyon and Haber (1990); Leedy and Ormrod (2005)

Relationship between Free Secondary Education policy and transition to Secondary School Education

Pearson's r was used to establish the relationship between Free Secondary Education policy and transition to secondary school education. The results were as shown in Table 4.24.

Table 4.24: Correlation between overall FSE policy and Transition

		Transition
FSE policy	Pearson Correlation	.842
	Sig. (2-tailed)	.000
	N	34

From Table 4.24 it can be observed that there was a positive and strong relationship between Free Secondary Education policy and transition. The relationship was significant as signified by the calculated p-value of .000 which was less than the set p- value of 0.05. The null hypothesis was therefore rejected. This means that an increase in Free Secondary Education funds would increase students' transition from primary schools to secondary schools.

Scatter gram was generated to illustrate the relationship between FSE funding and pupils' transition from primary school education to secondary school education. The results were as shown in Figure 4.3. The scatter gram indicates a positive correlation. A regression line, best fit reveals further the correlation between variables. The coordinates points are scattered around the line of best fit forming a visible pattern implying that the relationship between the two variables was real and not by chance.

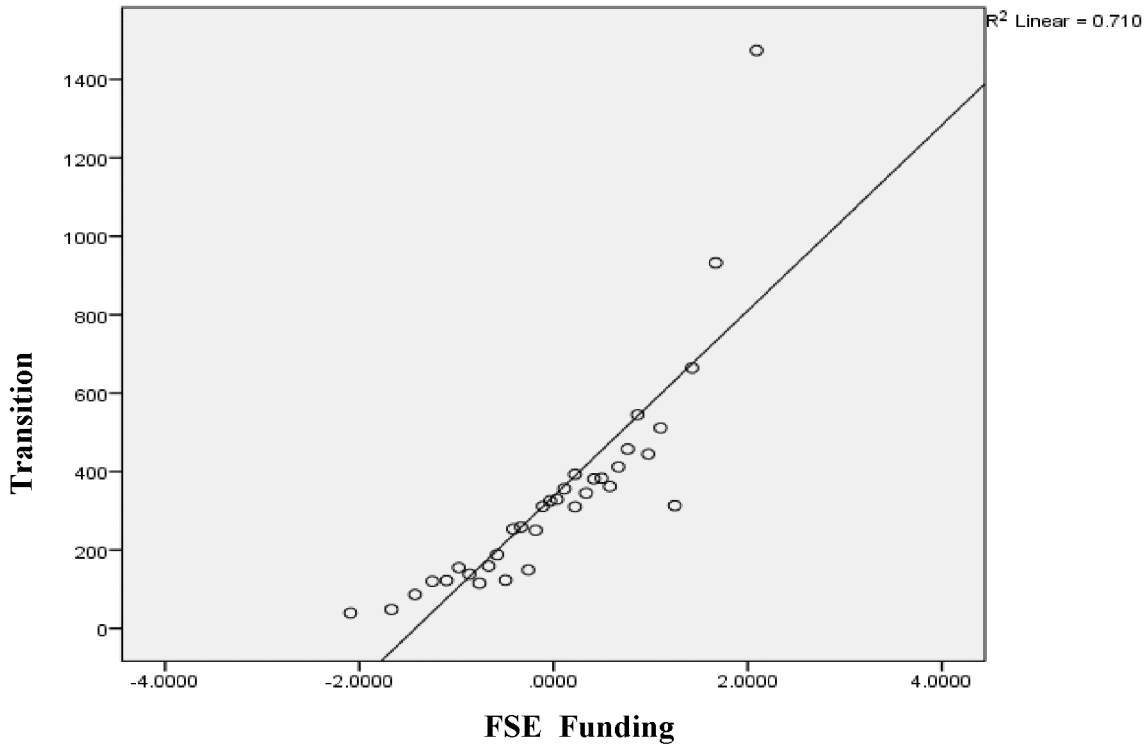

Figure 4.3: A Scatter gram showing the relationship between FSE funding and transition from primary school education and secondary school education

From Figure 4.3 it can be observed that one unit increase in FSE funding would increase transition by .710 units. That is, increase in FSE funding by Ksh.10, 265 led to transition by at least one student. This means that, one extra child transited with additional funding.

To estimate the impact of Free Secondary Education on transition, coefficient of determination was computed. The results were as shown in Table 4.25.

Table 4.25: Regression analysis for the influence of Free Secondary Education policy on transition to secondary school education

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.842[a]	.710	.701	149.842

a. Predictors: (Constant), Free Secondary Education policy

From Table 4.25 it can be noted that the impact of the Free Secondary Education policy accounted for 70.1% of the variation on transition as signified by the adjusted R^2 coefficient of 0.701. The other 29.9% could be explained by other factors.

Interview findings were in agreement with these findings. The SQASOs were of the view that transmitting from primary school education to secondary school education had become almost automatic with the introduction of FSE policy. Thus one of the SQASO asserted:

> For a long time the transition rates from primary to secondary schools was quite low in Mbita and Suba Sub-counties due to high poverty rates. Most parents and children were engaging in child labour more than participating in secondary education. Today the trend is different because parents are now finding secondary school education more affordable than ever. Infact both parents and students are keen on transmitting to secondary education as it is also viewed as the passport to good life and the best investment choice a parent can give for his children.

All focus group discussion echoed these assertions. They argued that the government had made correct investment choice for the Kenyan society. This is quite true as globally education is held in high esteem as a human right. Therefore any measures undertaken by any country to enhance it earns credit for it. Today primary and secondary education in Kenya are classified as basic education. This means that by introducing Free Primary Education in 2003 and FSE in 2008 was actually meant to enhance transition between these two levels of education. This also means that without secondary school education, basic education for any child is incomplete. Therefore failing to transit to secondary education is actually dropping out. This was the strongest or basic argument for introducing FSE as the Task force on affordable secondary school education (Republic of Kenya, 2007) indicated that transition rate was low and required major attention to

increase it to above 70%. In this respect the Sub-county schools Auditor noted; "The government was spending a lot of money through FPE and FSE policy to enhance transition rate." It is indeed the level of education that enables the state to identify, classify and channel its human resource to the correct sectors of training and acquisition of the desired knowledge and skills.

To determine whether Free Secondary Education was a significant predictor on transition, ANOVA was computed. The results were as shown in Table 4.26.

Table 4.26: Analysis of Variance of the influence of Free Secondary Education policy on transition to secondary school education

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,757,214.545	1	1,757,214.545	78.263	.000[b]
	Residual	718,487.573	32	22,452.737		
	Total	2,475,702.118	33			

a. Dependent Variable: Transition

b. Predictors: (Constant) Free Secondary Education policy

From Table 4.26 it can be observed that Free Secondary Education policy was a significant predictor on transition as the calculated p-value was .000<.05. This means that Free Secondary Education policy can be relied on as a predictor of transition to secondary school education.

Regression Analysis for influence of Free Secondary Education Policy on Transition

In order to establish the actual influence of Free Secondary Education policy and overall transition in all schools, a linear regression analysis was performed. The result was as shown in Table 4.27.

Table 4.27: Linear Regression Analysis of the influence of Free Secondary Education policy on transition to secondary school education

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	336.767	25.698		13.105	.000
FSE	236.633	26.748	.842	8.847	.000

a. Dependent Variable: Transition rate Regression Equation Y = a + bx

From Table 4.27 it can be revealed that one unit increase in free secondary education funding can lead to increase in transition to secondary school education by 236.633 units as indicated by the coefficient of 236.633. The regression equation is Transition = 336.767 +236.633X. This means that free secondary education policy has a high impact on transition to secondary school education.

The study rigorously interrogated the influence of free secondary policy on transition by categorizing schools into small, medium and large based on student population from 2008 -2014 where small school student population range was 128-933 medium 1115-1697 and large 2085-5650. The study sought to establish the relationship between Free Secondary Education policy and transition according to school size. This was necessary because the three categories of schools do exist and it was of interest to unravel the

difference on influence of free secondary education policy on transition in the three categories of secondary schools so as to advise policy makers on where to spend more Free Secondary Education funds and get the desired results.

Influence of Free Secondary Education Policy on Transition to Secondary School Education in Small secondary Schools

To establish the impact of Free secondary education policy in small secondary schools inferential statistics were used, that is Pearson product- moment correlation (r) and regression analysis.

Table 4.28: Correlation between Free Secondary Education policy and Transition in small schools

		Transition
FSE policy	Pearson Correlation	.864
	Sig. (2-tailed)	.000
	N	17

From Table 4.28 it can be observed that there was a positive and strong relationship between Free Secondary Education policy and transition. The relationship was significant as signified by the calculated p-value of .000 which was less than the set p – value of .05. This means that an increase in Free Secondary Education funding would increase transition.

To estimate the influence of Free Secondary Education funds, coefficient of determination was computed. The results were as shown in Table 4.29.

Table 4.29: Regression analysis of influence of Free Secondary Education funds on transition in small secondary schools

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.864[a]	.746	.729	44.322

From Table 4.29, it can be noted that the contribution of the Free Secondary Education accounted for 74.6% of the variation on transition as signified by the coefficient of .746. The other 25.4% could be explained by other factors.

To determine whether Free Secondary Education was a significant predictor on transition, ANOVA was computed. The results were as shown in Table 4.30.

Table 4.30: Analysis of Variance of Influence of Free Secondary Education on Transition in Small Secondary Schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	86,593.811	1	86,593.811	44.081	.000[b]
	Residual	29,466.189	15	1,964.413		
	Total	116,060.000	16			

a. Dependent Variable: Transition

b. Predictors: (Constant), Free Secondary Education policy

From Table 4.30 it can be observed that Free Secondary Education policy was a significant predictor on transition as the calculated p-value was .000<.05. This means that Free Secondary Education funds can be relied on as a predictor on transition to secondary school education.

To determine the actual contribution linear regression analysis was done. The results were as shown in Table 4.31.

Table 4.31: Linear Regression Analysis of Influence of Free Secondary Education policy on Transition in small secondary schools

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	265.591	18.332		14.488	.000
	FSE	126.683	19.081	.864	6.639	.000

a. Dependent Variable: Transition rate in small secondary schools

Regression Equation Y = a +bx

From Table 4.31 it can be revealed that one unit increase in Free Secondary Education funds can lead to increase in transition rate by 126.683 units as indicated by the coefficient 126.683. The regression equation is Transition = 265.591 +126.683X. This means that free secondary education policy has a high impact on transition to secondary school education.

Influence of Free Secondary Education policy on Transition to Secondary School Education in Medium secondary schools

To establish the influence of Free Secondary Education policy in medium secondary schools inferential statistics were used, that is person product- moment correlation (r) and regression analysis.

Table 4.32: Relationship between Free Secondary Education funds and transition in Medium Secondary Schools

		Free Secondary Education	Transition
Free Secondary Education policy	Pearson Correlation	1	.804
	Sig. (2-tailed)		.002
	N	12	12

From Table 4.32 it can be observed that there was a positive and strong relationship between Free Secondary Education policy and transition. The relationship was significant as signified by the calculated p-value of .002 which was less than the set p – value of 0.05. The null hypothesis was therefore rejected. This means that an increase in Free Secondary Education funding would increase student's transition to secondary school education.

To estimate the contribution of Free Secondary Education funds, coefficient of determination was computed. The results were as shown in Table 4.33.

Table 4.33: Regression Analysis of the influence of Free Secondary Education policy on transition in medium secondary schools

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804[a]	.646	.611	40.345

a. Predictors: (Constant), Free Secondary Education

From Table 4.33 it was noted that the influence of Free Secondary Education accounted for 64.6% of the variation on transition as signified by the coefficient of 0.646. The other 35.4% could be explained by other factors.

To determine whether Free Secondary Education was a significant predictor on students transition ANOVA was computed. The results were as shown in Table 4.34.

Table 4.34: Analysis of Variance of Influence of Free Secondary Education policy on Transition in Medium Secondary Schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29,747.378	1	29,747.378	18.275	.002[b]
	Residual	16,277.539	10	1,627.754		
	Total	46,024.917	11			

a. Dependent Variable: Form one

b. Predictors: (Constant), Free Secondary Education policy

From Table 4.34 it can be observed that Free Secondary Education policy was a significant predictor of transition as the calculated p-value was .002< .05. This meant that Free Secondary Education funds can be relied on as a predictor on transition of secondary school education.

To determine the actual contribution linear regression analysis was done. The results were as shown in Table 4.35.

Table 4.35: Linear Regression Analysis of the influence of Free Secondary Education policy on transition in medium secondary schools

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	311.884	22.281		13.998	.000
	FSE policy	171.289	40.068	.804	4.275	.002

a. Dependent Variable: Transition: Regression Equation Y = a+bx

From Table 4.35 it can be revealed that one unit increase in Free Secondary Education funds can lead to increase on transition rate by 171.289 units as indicated by the coefficient 171.289. The regression equation is Transition = 311.884 +171.289X. This means that Free Secondary Education policy has a significant influence on transition to secondary school education.

Influence of Free Secondary Education Policy on Transition Rate to Secondary School Education in Large Secondary Schools

To establish the influence of Free Secondary Education policy in large secondary schools inferential statistics were used, that is person product- moment correlation and regression analysis.

Table 4.36: Relationship between Free Secondary Education policy and transition in large secondary schools

		Form ones
Free Secondary Education policy	Pearson Correlation	.957
	Sig. (2-tailed)	.011
	N	5

From Table 4.36 it can be observed that there was a positive and strong relationship between Free Secondary Education policy and transition. The relationship was significant as signified by the calculated p-value of .011 which was less than the set p – value of .05. The null hypothesis was therefore rejected. This means that an increase in Free Secondary Education funds would increase student enrolment.

Since N- value was less than ten times the independent variable regression analysis was not computed (Brace, Kemp & Snelgar, 2006).

Transition rate is the number of pupils or students admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of pupils or students enrolled in the final grade of the lower level of education in the previous year. It conveys information on the degree of access or transition from cycle or level of education to a higher one. In Kenya the transition rate from primary schools to secondary schools is of great concern. It was so low that the Kenya government took a bold step to deal with it. Thus the Ministry of Education in 2008 (Ministry of Education, 2008) noted that one of the challenges that had faced the secondary school education – sub sector had been that of low transition rate from primary schools. It emphasized that the low transition rate had been occasioned, mostly, by the fact that it was fee paying.

With the recognition of this reality, the government made a commitment through the Sessional Paper No. 1 of 2005, to increase the transition to 70% by providing free basic education. The first step in the implementation of this policy started with a stakeholders' forum which led to the formation of the Taskforce on Affordable secondary Education. The key mandate of this team was to examine the costs as tabulated in schools' joining instructions as well as identifying modalities for the implementation of Free Secondary Education. Based on the task force report recommendations as had been discussed and agreed by all stakeholders in the sector guidelines were formulated for implementation with effect from 2008/2009 Financial year.

The Free Secondary Education policy also known as Free Day Secondary Education policy is government subsidy to schools based on capitation. The Free Secondary Education initially costed the government Kshs. 10,265.00 per child per year. The breakdown of the cost was as shown in Table 4.37.

Table 4.37: Free Secondary Education Funding

Votehead	Amount (Kenya shillings)
Tuition	3,600.00
Repairs, maintenance and improvement	400.00
Local Travel and Transport	400.00
Administration costs	500.00
Electricity, water and conservancy	500.00
Activity fees	600.00
Personal emoluments	3,965.00
Medical	300.00
Total	**10,265.00**

Source: Ministry of Education, Guidelines for Free Secondary Education, 2008

The Free Secondary Education funds were given to ensure equity as many children in Kenya were disadvantaged mainly due to high poverty levels. With Free Secondary Education policy fully operationalized, every Kenyan child was entitled to Free Secondary Education funded by the government. Free Secondary Education funds are disbursed directly to schools in three tranches. The first disbursement is normally in January and subsequently in April and August of every year, though variations do occur.

The Free Secondary Education funds are disbursed to public schools under the following conditions:

i) The school must be duly registered
ii) The school must submit accurate and up to date enrolment data
iii) The school must submit the relevant bank accounts to Ministry of Education
iv) Capitation is based on fully enrolled classes with a minimum of 40 and maximum 45 of students for each eligible class.

For boarding school charge boarding fees that reflect the cost of their living in respective areas provided they do not exceed the maximum amount set by the government.

To ensure accountability and smooth implementation of the Free Secondary Education funds, all schools operate the following accounts;

i) **A Tuition Account**: Only tuition funds are deposited in this bank account all payments are strictly by cheque. The funds are utilised for the procurement of teaching and learning materials only.
ii) **Operational Account**: This account is used for the disbursement of government subsidies except the tuition.
iii) **Boarding Account**: This account holds funds paid in by parents for boarding related expenses.

The parental obligations in this programme are;

i) School uniforms
ii) Boarding related costs as reflected in the boarding school fees and structure
iii) Lunch for day scholars
iv) Other approved projects by DEB in consultation with Board of Governor and Parents Teachers Association.

In addition the Ministry of Education disburses funds to support non-teaching staff. The Ministry of Education caters for non-teaching staff as shown in Table 4.38.

Table 4.38: Guidelines for Non-Teaching Staff Employment

Number of streams	Enrolment	Day schools Number of workers	Boarding schools Number of workers
1	180	6	10
2	360	8	15
3	540	9	20
4	720	13	28
5	900	15	30
6	1080	18	36

NB: Schools with more than six streams must consult with the Ministry of Education for further guidelines.

Source: Ministry of Education, Guidelines for implementation of Free Secondary Education, 2008.

This study revealed that the Free Secondary Education policy had significant influence on transition from primary schools to secondary schools from the time of its inception in 2008. The Pearson product-moment correlation (r) revealed that Free Secondary Education policy correlated positively with transition rates, and the relationship was strong with a coefficient of .842 at the critical value of .05. This means that increase in Free Secondary Education funding can lead to increase in transition rate. This funding concurs with the finding of the Economic Survey 2015 (Republic of Kenya, 2015) which indicated that transition rate from primary schools to secondary schools in Kenya from 2010 to 2014 increased (Figure 4.4).

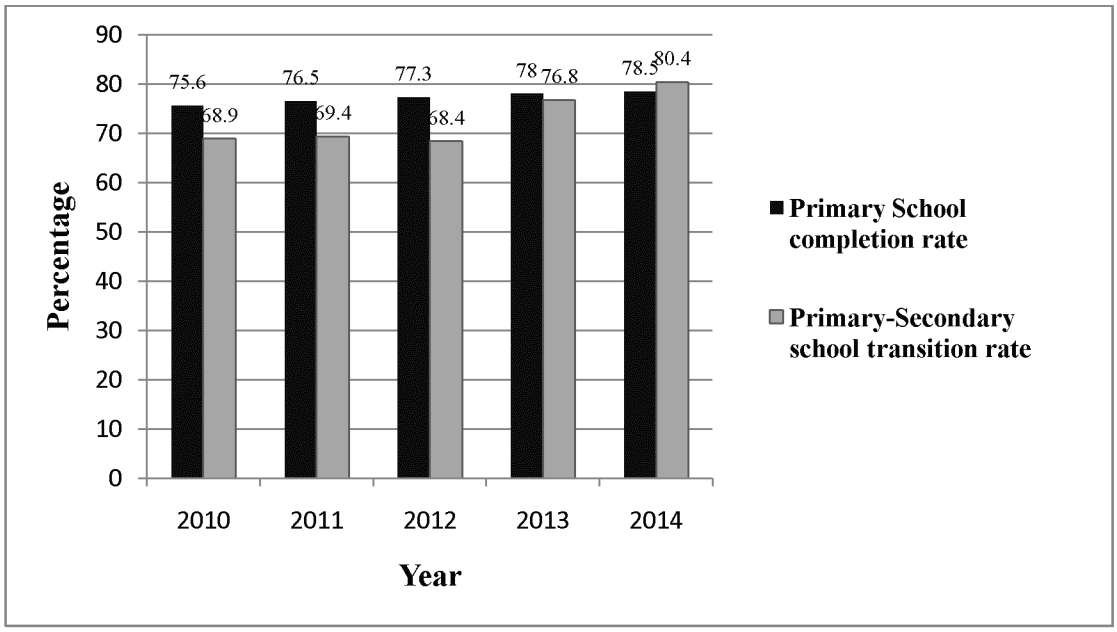

Figure 4.4: Pupil Completion Rate and Primary to secondary Transition Rate in Kenya

Source: Economic Survey, 2015

Figure 4.4 shows pupil completion rate and primary to secondary transition rate from 2010 to 2014. The primary completion rate increased from 75.6% in 2010 to 78.5% in 2014 while the primary to secondary transition rate rose to 80.4% in 2014 from 68.9% in 2010. The improvement in primary to secondary transition rate can be partly be attributed to implementation of Free Secondary Education (FDSE) and expansion of education facilities. This is supported by the regression analysis that revealed that in small secondary schools free secondary education policy accounted for 74.6% of the variation in transition rate; in medium secondary schools, 64.6% of the variation in transition rate and in large secondary schools 91.5% of the variation in transition rate. Overally, Free Secondary Education policy accounted for 71% of the variation in transition rate in Mbita and Suba sub-counties. These transition rates compare favourably with the national ones. This means that the impact of free secondary education policy on transition rates is high

as envisioned by the stakeholders in education as had been established by the Taskforce Report 2007.

The transition rate is very high and notion in large secondary schools which because of cost-effectiveness due to economies of scale. Because they are large, the cost of operations decreases and therefore it is easier to expand facilities to accommodate more students and hence high transition rates in these schools. The economies of scale also enables large secondary schools to meet the demands of students easily and attract more students hardly dropout. Small secondary schools are sub county schools and attract more students too because parents do not pay any fees at all, other than meeting parental obligations and most children from very low income earners easily access them. The medium secondary schools are county schools, most of which are boarding schools whose catchment area is large. Since they are also endowed with economies of scale transition rates are high. They attract more students because of better facilities that are maintained cost effectively.

The Constitution of Kenya (2010) Children Act, 200, The Basic Education Act, 2013 and the Technical Vocational Education and Training Act 2013 have also impacted on the transition rates with emphasis on education as a basic human right that should be enjoyed by all as it is the ultimate provision for empowerment.

Essentially free secondary policy caters for the basic needs for schooling at secondary school level in the manner that learners or student are empowered to learn with minimal disturbances. For an education system to succeed the school must be friendly and provide

the pre-requisites for schooling in terms of curricular, co-curricular and welfare services. This is in fact what free secondary education has endeavoured to provide, and to large extent it is providing as evidenced in the voteheads herein highlighted with all these basic requirements met many if not primary school children have to develop educational zeal to continue with schooling. Children from disadvantaged backgrounds view education as the passport to good life and therefore do not hesitate to grab the opportunity in the secondary education sub sector, motivated by the Free Secondary Education policy.

4.5 Influence of Free Secondary Education Policy on Student Academic Performance

The research objective was to determine the influence of FSE policy on student academic performance in KCSE examinations**.** To address this objective the null hypothesis: There is no statistically significant relationship between FSE policy and student academic performance in Mbita and Suba Sub- Counties was generated. To respond to this hypothesis data on enrolment and FSE funds were collected and computed and the results were shown in Table 4.39.

Table 4.39: Descriptive Statistics for FSE and Academic performance 2008-2014

	All schools		Small Schools			Medium Schools			Large Schools		
S/N	FSE	MSS	Size	FSE	MSS	Size	FSE	MSS	size	FSE	MSS
101	1036765	3.992	36	369540	4.56	144	1478160	4.274	342	3510630	6.513
63	646695	4.317	22	225830	4.27	148	1519220	5.4562	311	3192415	4.441
123	1262595	4.531	153	1570545	3.648	191	1960615	4.311	501	5142765	7.179
98	1005970	4.605	165	1693725	5.395	101	1036765	4.785	762	7821930	8.872
101	1036765	3.992				132	1354980	5.903	298	3058970	5.221
197	2022205	4.164	46	472190	3.47	79	810935	5.837			
26	266890	3.907	25	256625	3.7	242	2484130	5.0			
187	1919555	4.615	63	646695	4.317	187	1919555	4.615			
342	3510630	6.513	30	307950	3.648	197	2022205	4.164			
69	708285	4.02	22	225830	5.27	242	2484130	5.114			
242	2484130	5	125	1283125	7.43	123	1262595	4.531			
60	615900	3.14	60	615900	3.14	157	1611605	4.487			
311	3192415	4.441	69	708285	4.02						
125	1283125	7.43	26	266890	3.907						
22	225830	5.27	101	1036765	3.992						
30	307950	3.648	98	1005970	4.605						
63	646695	4.317	62	636430	3.4						
501	5142765	7.179									
79	810935	5.837									
132	1354980	5.903									
25	256625	3.7									
46	472190	3.47									
101	1036765	4.785									
165	1693725	5.395									
191	1960615	4.311									
153	1570545	3.648									
762	7821930	8.872									
22	225830	4.27									
148	1519220	5.4562									
144	1478160	4.274									
298	3058970	5.221									
36	369540	4.56									
157	1611605	4.487									
5120	**52,556,800**	**4.82637***	**1103**	**11,322,295**	**4.2983**	**1,943**	**19,944,895**	**4.8731***	**2,214**	**22,726,710**	**6.445***

Key: *mean score **FSE** –Free Secondary Education **MSS**- Mean Standard Score

Source: Field Data, 2015

The 34 schools were classified into three categories namely; small (n=17), medium (n=12) and large schools (n=5). Small schools were those schools which received below Kshs 10 Million, medium schools received (Kshs. 10-20 million) and large referred to schools which received at least Kshs 20 million cumulatively.

Overall FSE funds received by all schools for form four candidates were Kshs, 52,556,800.Small secondary schools received KShs11, 322,295 while large secondary schools received a total of Kshs. 22,726,710. Medium schools received Kshs. 19,944,895 for KCSE candidates. The KCSE overall mean performance score for all the 34 schools was 4.8263. In small schools, the mean index was 4.2983, while for medium schools, the mean was 4.8731 and for large schools the mean 6.445.

In order to establish the relationship between FSE policy and academic performance, a Pearson correlation analysis was performed between FSE policy on student academic performance. The results were as shown in Table 4.40.

Table 4.40: Correlation between overall FSE policy and academic performance

		Performance
FSE	Pearson Correlation	.577
	Sig. (2-tailed)	.000
	N	33

Table 4.40 shows that there was a moderate, positive and significant correlation between FSE policy and academic performance ($r=.577$, $n=33$ $p<.05$). The null hypothesis was therefore rejected. This means that FSE policy influenced positively students academic

performance in Mbita and Suba Sub-Counties. This level of correlation showed that increase in FSE policy was associated with moderate academic performance in secondary schools. Availability of FSE ensures that students in public schools do not pay KCSE exams, which would imply that the overall costs are lowered. As opposed to private schools who have to meet those costs, in public schools the government provided FSE funds to purchase and buy text books and other requirements of the public schools as outlined in the guides given in schools for the implementation(Osero, 2013). This finding confirmed results by Ngeno (2015) who established that the influence of FSE policy on students' performance was moderate but positive with a coefficient of 0.69, that is, an increase of FSE funding accounting for an increase in student academic performance but with moderate effect.

Rono and Onderi (2013) had demonstrated that parents' socio-economic status had influence on students' academic performance. About 36.8% of the respondents agreed that level of income of parents had influence on student academic performance and only 18.4% disagreed. FSE funds have relived parents and children from poor households of the fee burden and they can now concentrate on studies hence this may have positive influence of academic performance.

Scatter gram was generated to illustrate graphically the relationship between FSE funding and student academic performance (Figure 4.5). The scatter gram indicates a positive correlation. A regression line, best fit reveals further the correlation between variables. The coordinate points are scattered around the line of best fit indicating that the relationship between the two variables was real and not by chance.

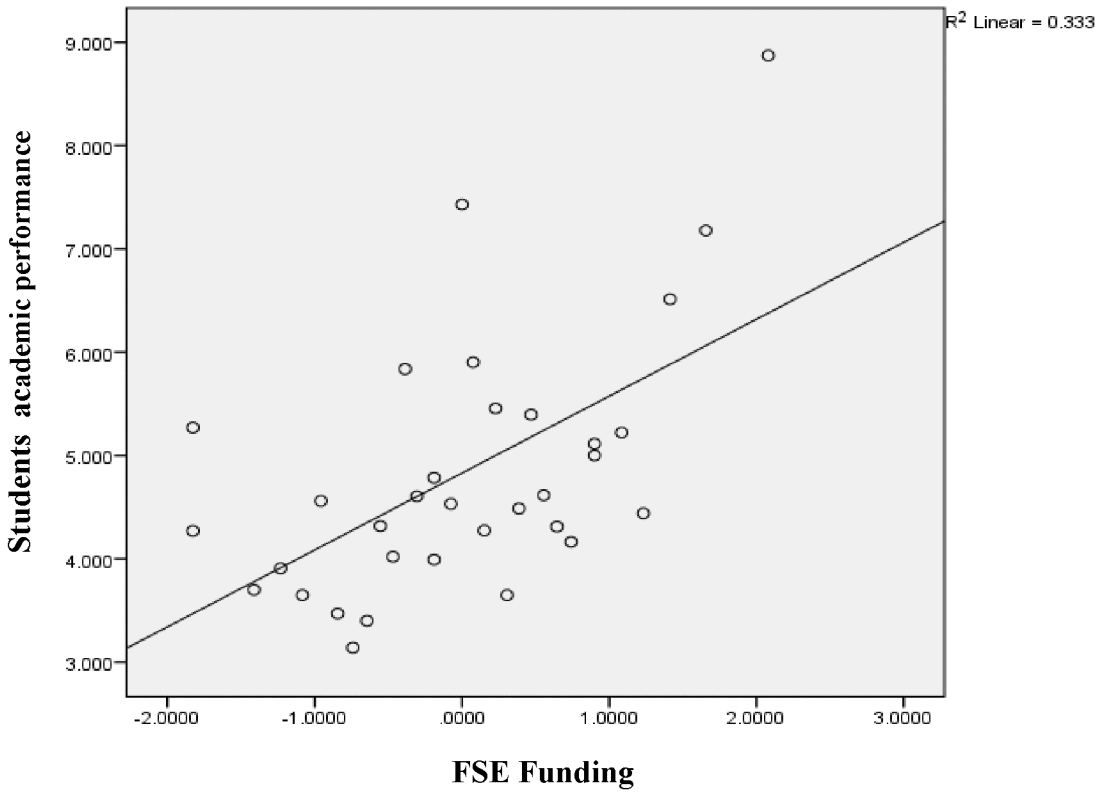

Figure 4.5: A Scatter gram showing the relationship between FSE funding and student academic performance

From Figure 4.5 it can be observed that one unit increase in FSE funding will increase student mean score by .333 units. The increase in FSE funding by Ksh.10,265 improved student academic performance by at least 1.0 mean score. This means that with additional FSE funding the KCSE mean standard score improved by 1.0 mean score.

To estimate the influence of FSE policy on student academic performance coefficient of determination was computed and the results were as shown in Table 4.41.

Table 4.41: Regression analysis of FSE policy and student academic performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.577a	.333	.312	1.0365779

a. Predictors: FSE

From Table 4.41 it can be noted that Free Secondary Education funding accounted for 31.2% of the variation in student academic performance as signified by the adjusted R^2 of .312. The other 68.8% could be explained by other factors.

These findings did not concur with those of Ngeno (2015) who established that the influence of FSE on student academic performance was moderate and positive with a coefficient of 0.69 in Kericho County and interview findings that FSE moderately influenced academic performance. For instance the school auditor said;

> "The government should ensure that all schools should have equal distribution of the available school resources. There has been success stories after the introduction of FSE, however there as still challenge to ensure quality education in the County. Besides FSE, other contributing factors include teacher motivation and availability of infrastructure "

According to SQASO's, influence of FSE policy impacted positively in established schools. He further suggested that "the students should be merged to spread the distribution of resources to a larger group". According to one of the school principals FSE has had a positive influence on academic performance. The SQASOs said, "FSE has helped improve on performance since students who are bright and poor can now stay in school besides the tuition materials can be brought thus improving performance". Another had this to say;

> "To a large extent the F.S.E funds have improved the performance of students who know what brought them to school since it has minimized frequency of being sent home for fee" Others were negative on the

possible influence and one had this to say "It has reduced the performance due to high student teacher ratio in so many schools"

Chugh (2016) argued that waiving of school fees does not enable a child to read, learn and become educated. There are other factors which influence student academic performance.

To establish whether FSE policy was a significant predictor of student academic performance, ANOVA was computed and the results were as shown in Table 4.42.

Table 4.42: Analysis of Variance of FSE policy and Student Academic Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.632	1	16.632	15.479	.000[b]
	Residual	33.309	31	1.074		
	Total	49.942	32			

a. Dependent Variable: Performance

b. Predictors: (Constant), Normal Score of FSE

The result of ANOVA analysis showed that FSE was significant of student academic performance ($F(1, 31) = 15.479$, $p < .05$).

To establish the actual influence of FSE policy on student academic performance simple regression analysis was computed. The result was as shown in Table 4.43.

Table 4.43: Simple Linear Regression of FSE policy and student academic performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.831	.180		26.772	.000
	FSE	0.745	.189	.577	3.934	.000

a. Dependent Variable: Student academic performance. Regression equation: Y= a+ bx

The result shown in Table 4.43 indicates that one unit increase in FSE funding increased students performance by .745 units. The regression equation was students' performance =4.831 +.745X.

The result concurred with principals' views. For instance one SQASO had this to say;

> "FSE has helped improve on performance since students who are bright and poor can now stay in school. Besides the tuition materials can be bought thus improving performance"

Another SQASO said;

> "To a large extent the F.S.E funds have improved the performance of students who know what brought them to school since it has minimized frequency of being sent home for fee"

There were mixed responses by some of the principals who indicated that student academic performance had not improved much in Mbita and Suba Sub- Counties despite the introduction of FSE policy because of the low student-teacher ratio in medium and low level schools. Teachers are a major input to performance and therefore few numbers of teachers coupled with lack of infrastructure is a big burden to these levels of schools. This is reflected in the opinion of some respondents. They said that the introduction of FSE policy has enabled the bright but poor students to access education and complete

their studies without frequent journey at home for fees. Absenteeism was reduced and learning materials are available in large schools in Mbita and Suba Sub- Counties.

The study showed that the influence of FSE policy on student academic performance is varied in different regions and different categories of schools in Mbita and Suba Sub-Counties. The influence is greater in large schools. Consequently, these are the established schools that probably enjoy superior infrastructure, capable of assigning additional number of BOM teachers to cushion against teachers shortages and attract bright students who are academically focused.

This view is confirmed by Munda et al (2010) who examined the relationship between selected educational facilities and student academic performance in secondary schools in Bungoma District, Kenya. They established that classrooms, laboratories made critical contributions to performance hence facilities in addition to teachers contributed positively to students' academic performance. Some of these schools which are in small and medium categories lack essential facilities but the suggestions to levy parents would overburden them and would be counterproductive in increasing access and transition. Such suggestions would be against the Basic Education Act (2013) which advocates for free and compulsory basic education. Following this foregoing argument, the government should expand the small and medium schools by merging them where necessary to make them economically viable. The frequent registration of schools in every village should be minimised to only economically viable schools to avoid wasting of students and resources.

To rigorously interrogate the influence of FSE policy on students' performance, schools were categorised into small, medium and large based on student population from 2008-2014, where small schools student population range was 128-933, medium 1115-1697 and large 2085-5650. Correlations and regression analysis were computed. The results were as shown in Tables 4.44 to 4.48.

Table 4.44: Relationship between FSE policy and Students Academic Performance in small schools

		Performance
FSE	Pearson Correlation	.243
	Sig. (2-tailed)	.365
	N	16

The results in Table 4.44 shows that the relationship between FSE policy and student academic performance in small schools was positive, weak and not significant (r =.243, N= 16; p>.05).

To estimate the influence of FSE policy on students' academic performance in small schools coefficient of determination was computed and the results were as shown in Table 4.45.

Table 4.45: Regression analysis of FSE policy and student academic performance in small schools

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.243[a]	.059	-.008	1.0525467

a. Predictors: (Constant), FSE

Table 4.45 shows that the influence of FSE policy on student academic performance in small schools was 0.059 as signified by R^2 =0.059. This means that FSE funding did not have significant influence on performance in small schools. This means that the other factors were responsible for 94.1% of variation in student academic performance. There was no need to compute ANOVA to confirm whether FSE was a significant predictor of student academic performance.

This finding is in contrast to findings by Ngeno (2015) who had shown that there was strong correlation between FSE policy and academic performance. Ngeno (2015) did not stratify schools based on their size, therefore the findings of this study is new as little is known in the influence of FSE policy on academic performance in small schools. Previous studies have done general influence of FSE policy on academic performance, however the finding of this study show that a small school with small funding many not benefit from improved academic performance at the current level of funding.

Table 4.46: Relationship between FSE policy and student academic performance in medium schools

		Performance
FSE	Pearson Correlation	-.376
	Sig. (2-tailed)	.228
	N	12

Results in Table 4.46 shows that the relationship between FSE policy and student academic performance in medium schools was negative, weak and not significant. (r=-.376; N=12; p>.05) This means FSE policy had weak influence on student academic performance.

To estimate the influence of FSE policy on student academic performance in medium schools, coefficient of determination was computed. The results were as shown in Table 4.47.

Table 4.47: Regression analysis of FSE policy on Student Academic Performance in medium schools

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.376[a]	.141	.055	.5803244

a. Predictors: (Constant), FSE

From Table 4.47 it can be established that the influence of FSE policy was 14.1% as signified by R^2 of 0.141. The other 85.5% was due to other factors. This relationship was however not significant. Therefore there was no need to confirm whether the FSE was a significant predictor.

Table 4.48: Relationship between FSE policy and student academic performance in large schools

		Performance
FSE	Pearson Correlation	.947
	Sig. (2-tailed)	.015
	N	5

Table 4.48 indicate that there was a strong positive relationship between FSE funding and student academic performance. This relationship was significant ($r = .947$, $N = 5$; $p < .05$). These results were inconsistent with findings from Ngeno (2015) who established that there was moderate influence of FSE policy on student academic performance in Kericho County. Large schools received more funds due to economy of scale compared to small

and medium schools. Probably they were able to support expensive academic programs. Because of their financial capability they could be able to employ BOM teachers, construct adequate classrooms, laboratories, libraries and teachers' houses hence the improved performance.

Since N- value was less than ten times the independent variable, regression analysis was not computed to estimate the actual influence. These results means that the influence observed in Table 4.40 was due to performance in large schools. This is true because the correlations for small and medium schools were weak and not significant.

The overall relationship between FSE policy and student academic performance was moderate, positive and significant. In this respect FSE funds accounted for 31.22% of the effect on academic performance. This implied that other factors contributed up to 66.7% of variations in student academic performance besides FSE funds. In small secondary schools, the total FSE funds received for KCSE candidates was Kshs. 11,322,295 against a performance score of 4.28. The study found no correlation between FSE funding and student academic performance in small schools. Similarly, in medium schools there were non-significant and negative correlations between FSE funds and student academic performance. Despite medium schools receiving Kshs. 19,944,895 cumulatively for KCSE candidates, the mean standard score was 4.875 while in large secondary schools, the total FSE funds received for the candidates was Kshs. 22,726,710 cumulatively against a mean standard score of 6.445. In large schools, the correlation was high, positive and significant with a Pearson correlation co-efficient of 0.947.

According to Ministry of Education (2007), the aim of FSE Policy was to make secondary education affordable. FSE Policy attracted many students and thus influenced access. We established from the study that, FSE Policy had significant influence on access in secondary schools education. This meant that as envisioned by the Task force on affordable secondary school education, the subsidy has worked wonders for access to secondary schools education sub- sector.

Subsequently, FSE Policy has positively and significantly influenced primary to secondary schools transition. However, the study established that the objective of FSE Policy to improve quality, that is, student academic performance was moderate. Search for quality and efficient education system is a concern for every government and education stakeholders. Coombs (1968) said that, quality of education is that education being offered that fits the real needs and values currently and prospectively of a given country. In Kenya, education stakeholders have been asking these questions "Does waving of fees and introduction of FSE Policy enables a child to read, learn, solve arithmetic efficiently and become educated?"

Analysis of the influence of FSE Policy on student performance in small and medium schools indicated a contrary result. That is, FSE Policy did not have an influence on student academic performance in small and medium schools. The relationship was only significant in large schools. This gives an insight that, student academic performance is not pegged on disbursement of FSE funds alone, but there could be other factors influencing student academic performance hence the quality of education. Munda (2010) established that, other factors like availability of classrooms, laboratories in addition to

teachers contribute positively to student academic performance. This confirms our findings that FSE Policy alone does not influence student academic performance.

In order for effective learning to take place, there is need for: adequate space for the learners in a classroom, furniture, teaching aids, and learning materials. However, this has not been the case since the introduction of FSE Policy. Chabari (2010) reported that, since the introduction of FSE Policy, the average number of students in schools increased thus leading to overcrowded classrooms. Further, there was the challenge of inadequate funds which were never released on time. Overcrowded classrooms could militate against good performance in KCSE. In congested rooms teachers lacked control of the class which is required for effective learning, time to mark and correct assignments given to students or even make a follow up upon individual students who might require individual attention by the teacher. This might affect learning. According to Ministry of Education guidelines, the recommended class size is between 10- 45 students. In cases where there are more than 50 students in a class, the management and teaching becomes a serious challenge.

Rono and Onderi (2013) demonstrated that parents' socio-economic status, teacher motivation, competence and commitment, student discipline motivation and commitment influence performance. These are facts which are not related to FSE Policy. Lazy, weak, indisciplined and unconcerned students whether they receive 100% FSE funding cannot perform well in any examination a fact which has been reflected in our studies.

Small and medium schools are mostly new schools which were recently registered, hence lack academic culture of good performance reflected in top established schools in Kenya.

Small and medium schools occasionally are characterised by: indiscipline, truancy by students, some of them also lack laboratories necessary for science practicals and libraries required for reading and making references. Most likely, that is the reason why in our study, influence of FSE Policy was not significant in small and medium schools but was significant in large schools.

Ongeri and Abdi, (2004), cited in Rono, Onderi and Awino (2013) reported that, many of the Kenya's 4,000 secondary schools had bad examination results and that they are about 600 schools that excel, and if a student is not in any of these schools, he or she is not expected to get a credible grade. Probably, these are the schools that have not developed academic culture for excellence. Glennerster (2011) observed that overall student performance in KCSE was poor, only 25% of the students scored at least a C+, the performance was weakest in district schools, where only 11% of the students scored at least a C+, compared to 43% in Provincial schools and 90% in National schools. Glennerster (2011) further observed that, the differences in performance reflected differences in facilities, adequacy of teachers and other resources but also reflected the different levels of academic preparation of the students admitted to these schools. The small schools in our study and medium schools fall under the district and provincial schools mentioned by Glennerster confirming that they have not developed excellent academic culture required for good performance in KCSE. A fact confirmed by Amunga (2010) who observed that, schools are ranked in national examinations in Kenya according to performance index. According to Amunga, this implied that, the higher the mean score, the better the rank. This in turn influenced the demand of places in certain

schools while at the same time, reducing the demand in others. Thus, in our study, the large schools which are more established attract better performing students and further increasing demand for those schools. Probably this is the reason why student academic performance was significant in these large schools.

Ministry of Education (2012) observed that there is severe shortage of teachers, or understaffing which combined with inadequate learning materials, led to poor quality. At the same time, there is inadequate Quality Assurance Services. According to MOE (2012) the drop in quality of education is due to: understaffing, inadequate learning materials and crowded classrooms. As these factors persist, the quality of education continues to suffer with the consequences hence the need to address these issues in small and medium schools for effective and efficient quality education funded by FSE Policy in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The study examined the influence of the FSE Policy on access, transition and student academic performance in Mbita and Suba Sub- Counties. This chapter therefore summarizes the broad areas covered by this thesis. In addition, it provides the final conclusions, recommendations and suggestions for further research.

5.2. Summary

5.2.1 Influence of FSE Policy on Access to Secondary Education

The study established that the influence of FSE policy on access in Mbita and Suba Sub counties was 74.8%. This means that it had a big influence on variation in access. Other factors were responsible for 15.2% of the variance. FSE policy was also a significant predictor of access in all schools that is, small medium and large. In small schools, Free Secondary Education accounted for 80.9% of the variation on access as signified by the coefficient of .809. The other 19.1% could be explained by other factors. In medium schools, Free Secondary Education policy accounted for 96.8% of the variation on access as signified by the coefficient of 0.968. The other 3.2% could be explained by other factors.

5.2.2 Influence of FSE Policy on Transition from Primary to Secondary School Education

The study established that Free Secondary Education policy accounted for 70.1% of the variation in transition as signified by the coefficient of 0.701. The other 29.1% could be

explained by other. In small schools, Free Secondary Education accounted for 74.1% of the variation on transition as signified by the coefficient of .741. The other 25.9% could be explained by other factors. In medium schools, Free Secondary Education accounted for 31.2% of the variation in students academic performance as signified by the coefficient of .312. The other 68.8% could be explained by other factors.

5.2.3 Influence of FSE Policy on Student Academic Performance in Secondary School Education

The study established that Free Secondary Education funding accounted for 31.2% of the variation in student's academic performance as signified by the adjusted R^2 of .312. The other 69.8% could be explained by other factors. In small schools, influence of FSE policy was .8% as signified by adjusted R^2 =-.008 on student academic performance. In medium schools influence of FSE policy was 5.5% as signified by adjusted R^2 of .055. The other 95.5% was due to other factors. This influence was however not significant. This means that FSE funds influences students' academic performance in large schools but exerts very minimal influence in small and medium schools.

5.3 Conclusions

Based on the objectives and findings of the study which examined the influence of FSE Policy on access, transition and student academic performance in Mbita and Suba Sub-Counties, the following conclusions were made:

Free Secondary Education policy had significant influence on access in secondary school education. The contribution is very high, particularly in medium and large secondary schools. This means that as envisioned by the Task force on affordable secondary school

education and subsequent recommendations that were adopted, the cost of secondary school education was the major factor that negatively influenced access. Consequently the subsidy has worked wonders for access to secondary school education sub-sector.

Free Secondary Education policy has positively and significantly influenced primary to secondary school transition. This is because it has made secondary education affordable to many pupils, and their parents. Transition was highest in large secondary schools and medium secondary schools. High transition was also experienced in small schools, but retention rate is low and that is why enrolment in these schools is generally low.

With regard to influence of FSE Policy on student academic performance, the study concluded that FSE Policy influenced student academic performance in general. For small schools the influence of FSE was positive, weak and not significant. In medium small schools was negative, weak and not significant. However in large schools FSE policy on student academic performance was positive, very strong and significant.

5.4 Recommendations

Based on the findings of the study, the following recommendations were made:

a) With regard to access.

i) Free Secondary Education funding should be increased in order to achieve fully the objectives of free secondary education policy.

ii) Small secondary schools should be merged because the impact of free secondary education funding is higher in medium and large secondary schools as opposed to small secondary schools.

iii) The government should regulate the registration of new secondary schools until they are satisfied that the current secondary schools have met the optimal size threshold that is two streams and above.

iv) Medium and large secondary schools based on prudent planning and logistics should be expanded to admit most students because the impact of free secondary education policy is higher in these schools.

v) The government should continually evaluate the free secondary education policy with a view of ensuring that the desired outcomes are being realised.

b) With regard to primary to secondary school transition.

i) FSE funding should be increased in small and medium schools so as to increase transition.

c) With regard to student academic performance FSE funds should be increased in small and medium schools so that a significant influence can be realised.

d) In large schools the FSE funding should be retained as the outcome was high.

5.5 Suggestion for Further Research

The following areas require further research:

i) Examine other factors influencing student academic performance in secondary schools. This is necessary to improve on academic performance as FSE only accounted for some proportion.

ii) Assess the challenges facing the implementation of FSE Policy in Mbita and Suba Sub- Counties. This would provide insight into challenges that militate against the positive influence of FSE funding.

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APPENDICES

APPENDIX I: PRINCIPALS' QUESTIONNAIRE

INTRODUCTION

My name is **Maurice Ndolo**. I am a student pursuing PhD in education at Maseno University. You are requested to participate in this study and provide answers to the questions as honestly and precisely as possible. Response to these questions will be treated with confidence. Please do not write your name or that of your school anywhere on this questionnaire. Please tick (√) where appropriate or fill the required information on the spaces provided.

SECTION A: BACKGROUND INFORMATION OF PRINCIPALS

---

1. Gender Male [ ] Female [ ]
2. Years of experience as Principal_____
3. Highest level of education
    a. Certificate [ ]
    b. Diploma [ ]
    c. Graduate [ ]
    d. Masters [ ]
    e. PhD [ ]
    f. Others specify _____

SECTION B: BACKGROUND INFORMATION OF SCHOOLS

1. **School Location (select only one option)**

   a. Sub-county Suba [ ] Mbita [ ]

SECTION C: SCHOOL ENROLMENT

Please record the total number of students who have been enrolled in each form and for each year indicated.

Briefly comment on contributions of FSE Policy on access to secondary education

FORM	2008	2009	2010	2011	2012	2013	2014
Form 1							
Form 2							
Form 3							
Form 4							
Total							

SECTION D: SCHOOL PERFORMANCE

Please record the total number of students who have been enrolled for the examination and the mean grade obtained for each year indicated.

KCSE Performance	2008	2009	2010	2011	2012	2013	2014
Total Number of KCSE candidates							
Overall Mean Score in KCSE							

SECTION E: FSE POLICY

Please record total FSE funds received by your school between 2008 and 2014

Year	2008	2009	2010	2011	2012	2013	2014
Funds in Ksh							

Briefly comment on contributions of FSE Policy on student performance

_____

_____

_____

APPENDIX II

INTERVIEW SCHEDULE FOR SUB- COUNTY QUALITY ASSURANCE AND STANDARDS OFFICERS

This research is meant for academic purpose. It will try to evaluate the contributions of FSE on access, transition and quality of education in Homa-Bay County, Kenya. You are requested to provide your views and opinion on various issues. There is no right or wrong answers

Questions.

1. To what extent does FSE policy influence access?

   Probe

2. To what extent does FSE policy affect transition?

   Probe

3. To what extent does FSE policy influence student academic performance?

   Probe

4. What should the government do to improve FSE policy?

   Probe

Thank you.

APPENDIX III

DOCUMENT ANALYSIS GUIDE

Item	Document to be used	Remarks
Access /enrolment	• Class registers • Admission registers • Fees registers • MOEST returns on FSE funds	
Transition	• Class registers • Admission registers • Fees registers • MOEST returns on FSE funds	
Academic performance	KNEC results print out	

2. KCSE performance

Sub-County means standard score between 2008 to 2014

Years	2008	2009	2010	2011	2012	2013	2014
KCSE M.S.S							

3. Briefly comment on the contributions of FSE Policy on:

(a) Transition from primary school to secondary school in your Sub- County

_____

_____

_____

(b) Student Academic performance

_____

_____

_____

4. Please record total FSE funds received by schools between 2008 to 2014

Name of school	**Year**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
	Funds in Ksh							

APPENDIX IV

INTERVIEW SCHEDULE FOR SUBCOUNTY SCHOOLS AUDITOR

This research is meant for academic purpose. It will try to evaluate the contributions of FSE on access, transition and quality of education in Homa-Bay County, Kenya. You are requested to provide your views and opinion on various issues. There is no right or wrong answers

Questions.

1. To what extent does FSE policy influence access?

   Probe

2. To what extent does FSE policy affect transition?

   Probe

3. To what extent does FSE policy influence student academic performance?

   Probe

4. What should the government do to improve FSE policy?

   Probe

Thank you.

APPENDIX V

STUDENT FOCUS GROUP DISCUSION

This research is meant for academic purpose. It will try to evaluate the contributions of FSE on access, transition and quality of education in Homa-Bay County, Kenya. You are requested to provide your views and opinion on various issues. There is no right or wrong answers

Questions.

1. To what extent does FSE policy influence access?

   Probe

2. To what extent does FSE policy affect transition?

   Probe

3. To what extent does FSE policy influence student academic performance?

   Probe

4. What should the government do to improve FSE policy?

   Probe

Thank you.

APPENDIX VI

PROPOSED FREE SECONDARY EDUCATION FUNDING FOR 2012

Item	Current	Proposed
Text books, exercise books	2,185	2,622
Laboratory (infrastructure) Equipment	728	1000
Teaching and learning materials	300	360
ICT infrastructure and materials	___	500
Reference materials (Kamusi, dictionary, atlas etc)	70	84
Teacher's guides	113	136
Chalk, dusters and registers(stationary)	5	60
Assessment and examinations	___	800
Repairs, maintenance and improvements	199	239
Local transport and travel	800	960
Administration cost	400	400
Capacity building of BOM	___	100
Electricity, water	500	600
Environment and sanitation	___	250
Science and technology	___	200
Lunch component	___	5,799
Activity fees	500	600
Personal emoluments	3,695	4,758
Student health and safety	300	360
Sanitary pads for girls	___	585
Total(boys)	10,265	19,238
Total(girls)	___	20,413
Less meals(Ksh 5,799)	___	14,614

Source: Republic of Kenya (2012 b) pp. 136

APPENDIX VII
LOCATION OF MBITA AND SUBA SUB COUNTIES