EFFECTS OF HIDDEN COSTS IN FREE SECONDARY EDUCATION ON TRANSITION AND COMPLETION RATES IN PUBLIC BOARDING SCHOOLS IN KISII COUNTY, KENYA

BY

Ngwacho George Areba

Thesis Submitted to Institute of Postgraduate Studies and Research in Partial fulfillment of the Requirements of the Award for Doctor of Philosophy Degree in Educational Management of Kabarak University

October, 2015

DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for the award of a degree in any University or College.

Signed

……………………………………… Date ……………………

Ngwacho George Areba

GDE/M/0834/09/12

Recommendation

This thesis has been submitted for examination with our approval as the University supervisors.

Supervisors

Signed

………………………….. Date……………………

Prof. Theodore . M . O Ayodo,

 Dean & Professor of Education,

School of Theology, Education & Arts,

Kabarak University.

Signed

…………………………. Date…………………….

Dr. Benard Chemwei

Lecturer,

School of Theology, Education & Arts,

Kabarak University.

COPYRIGHT

DEDICATION

The thesis is dedicated to my ever loving dear mum Callen Bosibori Machuka, her late dear loving mother-teacher Kerubo Masiwa, and all my teachers in whose hands precious lives are entrusted from birth and childhood; to all those whom the world calls the underdogs; to all the people who feel dissatisfied with the current standards of their lives and feel the urge to respond to a greater call in this world.

ACKNOWLEDGEMENTS

ABSTRACT

One of the major challenges facing secondary education sector in Kenya over the years is low transition and completion rates. The initiation of Free Primary Education (FPE) in 2003 and Free Secondary Education (FSE) in 2007 in Kenya has enhanced enrollment but still a wide gap exists between primary and secondary enrolment. Financing secondary education is a great challenge to both government and households. In Kenya whereas households meet a negligible cost to cater for Free Primary Education, it is not established clearly how much they pay for Free Secondary Education. Thus cost is a key barrier to transition to secondary school especially for the poor. The study sought to establish the effects of hidden costs in the provision of Free Secondary Education on transition and completion rates in Kisii County. The objectives of the study were to: To find out the hidden costs in the provision of FSE, to establish the effect of the hidden costs on students transition rates and to establish the effect of the hidden costs on students completion rates among public boarding schools in Kisii County. This study was based on Classical Liberal Theory of Equal opportunities advanced by Sherman and Wood (1982) cited by Njeru & Orodho (2003) which expresses the view that each child possesses inborn talents which accelerate them to social promotion hence there should be equal opportunities in all educational systems and such systems should be designed without any barriers of any nature like socio-economic factors, socio-cultural factors, geographical factors and school-based factors which prevent learners from taking advantage of their inborn talents . The study used correlational research design which assisted to assess the effect of hidden costs of FSE on students' transition and completion rates among boarding schools in Kisii County. The target population was 60 Head teachers from 60 public boarding secondary schools in Kisii County, 641 class teachers and 240 PTA class representatives. Krejcie and Morgan (1970)'s scientific statistical table, Stratified and simple random sampling was used to select the required sample for the study of 52 Head teachers, 234 class teachers and 148 PTA representatives. Prior to the study a pilot study was conducted to ensure validity and reliability of the research instruments. Questionnaires and interview schedules were used to collect data. The data was then analyzed by use of regression analysis, frequencies, averages, percentages and presented in tables, bar graphs and pie charts. Thematic analysis was used to analyze qualitative data. Pearson's correlation was used to measure the degree of relationship. Statistical tests were done at α=0.05. It was found that a significant positive relationship exited between hidden costs and students' transition and completion rates. This implies that though the introduction of FSE programme has greatly reduced the financial burden of public secondary school going students, parents still incur some hidden costs which to some extent contribute to low transition and completion rates. It was recommended that since the established hidden costs negatively affect access, the Government of Kenya should increase FSE budgetary allocation to schools to ease parents' burden. Significantly, the study findings will enable education policy-makers and other stakeholders to cope with strategies for easing parents' cost-burden and ways of mobilizing funds to meet the cost of FSE program to ensure its sustainability and to avoid wastage in terms of human and material resources.

Key words: Hidden costs, Transition rates, Completion rates. Kisii County.

TABLE OF CONTENT

LITERATURE REVIEW:

CHAPTER THREE:

APPENDIX 15: CONFERENCE PAPER PUBLICATION FROM THE THESIS 2.147

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

BoM Board of Management

CDoE County Director of Education

EFA Education for All

FSE Free Secondary Education

GER Gross Enrolment Rates

MDGs Millennium Development Goals

MoEST Ministry of Education, Science and Technology

NARC National Alliance Rainbow Coalition

NER Net Enrolment rates

PTA Parents Teachers Association

RoK Republic of Kenya

SPSS Statistical Package for Social Sciences

SSA Sub-Saharan Africa

UNESCO United Nations Educational Scientific and Cultural Organization

USA United States of America

UPE Universal Primary Education

OPERATIONAL DEFINITION OF TERMS

Access: The open nature of education system that is organized as a basic right of every child, it gives opportunity to all potential learners.

Basic Education: Refers to the education offered to cover primary and lower secondary school levels.

Boarding Schools: Schools that provide meals and accommodation to students.

County: Refers to an administrative unit in Kenya headed by a governor.

Completion: Number of learners who after enrolling a given educational programme finish it at the stipulated period of time.

Dropout rate: Means ceasing to attend school to learn and engaging in other activities outside the school before completing primary and secondary schools cycle.

Enrolment: Refers to the state of making a learner officially a member of an educational institution.

Effects: Refer to impact, results or changes experienced as a result of hidden costs of Secondary education.

Efficiency: Relationship between input into a system and output from the system or organization. It relates to the use of all inputs in producing given output.

Educational costs: These are direct and indirect expenses incurred by parents in sending their children to school.

Education programme: The process which pupils undergo in a learning institution.

Free Secondary Education: An education that involves no financial burdens to the parents of the student like levies which may hinder any student from benefiting from it.

Hidden costs: Refers to indirect costs incurred by parents in the provision of free secondary education like motivation fee, remedial levies among others.

Opportunity Cost: Refers to the alternative to secondary school students, which compete for their attention as opposed to going to school.

Wastage: Refers to the ratio of the total number of learners who after enrolment fail to finish schooling at a given period of time.

Transition: Refers to the proportion of graduates who transcend from one level of grade to another.

Wastage rate: Refers to the rate at which the system loose students enrolled or do not move with a given cohort.

Participation rates: It is a measure of the absorption of the institution of the school age going population.

PTA levies: Are fee charged by schools after approval by parents during the annual general meeting.

Public Secondary Schools: Refers to a full time formal education given for four years after completion of primary education and is partly supported by the government and the public through FSE program.

Student: Refers to a learner in a secondary school.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Investment in human resource development enables individuals to contribute effectively to the development of a country. According to UNESCO (2000), illiteracy has been identified as a factor that slows down the economic well being of a nation. This is the reason why many countries including Britain, USA, Sweden, Egypt and Canada, among others, started long ago in the 1950s to finance secondary education. This could partly be responsible for the advancement in these nations. African countries such as Nigeria, Uganda and Kenya are struggling to follow suit. In the year 2000, all the 191 United Nations states adopted the Millennium Declaration, GA Resolution A/54/2000, which aimed at creating a global corporative approach to meeting challenges facing future world development (UNESCO, 2002). The millennium meeting created a framework of goals, targets and indicators famously known as the Millennium Development Goals (MDGs). One of the key MDG is universal education or Education for All (EFA) (UNESCO, 2002). All participating countries, committed themselves to the achievement of this goal and meeting set targets.

It is on this premise that developed countries like North America and Western Europe have achieved almost universal secondary education, with an average net enrolment ratio (NER) exceeding 90% (UNESCO, 2007). In other regions, namely Central and Eastern Europe and Central Asia, the average NER is between 82% and 85%. In the remaining regions, the NERs are considerably lower: Latin American and the Caribbean (67%), East Asia and the Pacific (69%)

the achievement is largely attributed to minimal hidden costs and adequate financing in secondary education by the concerned states (UNESCO, 2007). Education indicators in Canada reveal that public education is available free to all residents until the end of secondary school. Funding from governments covers most costs for a public elementary and secondary education, but families usually have out-of-pocket expenses for their children's school supplies and school-related activities (World Bank, 2006). There is need to establish if households in Kenya play a similar role under FSE programme being the knowledge gap to filled in the current study.

Governments in Sub-Saharan Africa and their financial partners are also increasingly desiring to make secondary education more widely accessible, more relevant, and of higher quality. Consequently secondary participation rates in SSA have increased from 19 percent in 1999 to 30 percent in 2004 (SEIA, 2007). However, the region faces many challenges in meeting the goal of further expansion of secondary education especially on cost implication. Only a handful of countries in the region—Botswana, Cape Verde, Mauritius, and South Africa for example—have achieved secondary education access rates of as high as 80 percent for junior secondary. Some countries, such as Burundi, Burkina Faso, and Rwanda, have not even achieved rates of 20 percent. Ethiopia has GER of 31%, Malawi 28%, Uganda 19%, Zambia 19% Senegal 21% and Lesotho 39% (SEIA, 2007). The transition rate to secondary school is 67.1 percent for East and Southern Africa and only 52.4 percent for West Africa. This trend contrasts sharply with the 98 percent worldwide (Holsinger & Cowell, 2000). In one out of every four African countries, just half of the children enroll at the end of the primary school level. In another 25 percent of African countries only one of three continues into the secondary school level and in three countries: Kenya, Tanzania and Burundi, less than 20 percent of the children do so (UNESCO, 2006).

A study conducted by Aketch and Rolleston (2007), shows that the majority of children in Sub-Saharan Africa do not make it to secondary school. Analysis of Gross Enrollment Rate (GER) shows that two thirds of all countries with secondary GER of 40% and below are in Africa.

Kisii County, the study area is not left behind in this lethargic transition and completion rates. In the year 2011, 14,357 students were admitted in form one in six sub-counties, in 2012, 218(1.5%) did not transit to form two. The 2013 class had a positive deviation of 2,490 (1.5%) students who had transited to a form three class but there was a drastic decline in the year 2014 with 5,161 (31.0%) students not transiting to form four class and overall 2,889 (20.1%) students did not complete the four year secondary school circle having joined form one in 2011 as shown in Table 1.0.

Table 1.0

2011-2014 Kisii County cohort Transition and Completion Rates for six Sub-Counties

SUB-COUNTY	YR 2011	YR 2012			YR 2013			YR 2014			COMPL.RATES	
KENYE NYA	F1	F2	DEV		F3	DEV		F4	DEV		F1-F4	%
	2,577	2,559	-18	0.6 %	3,052	+493	16.2 %	2,184	-868	28.4%	-393	15.3
SAMETA	1,679	1,726	+47	2.7	1,969	+243	12.3 %	1242	-727	37%	-437	26.0
KISII SOUTH	2,031	1,806	-225	11.1 %	2,285	+479	21%	1,485	-800	35%	-546	27.0
MASABA SOUTH	3,243	3,282	+39	1.2 %	3,777	+495	13.1 %	2311	-1466	38.8%	-932	28.7
MARANI	1,986	1,890	-96	4.8 %	2,408	+518	21.5 %	1,444	-964	40%	-542	27.2
Gucha South	2,841	2,876	+35	1.2 %	3,138	+262	8.3%	2,802	-336	10.7%	-39	1.4
TOTAL	14,357	14,139	-218	1.5	16,629	+2,490	1.5%	11,468	-5,161	31.0%	-2,889	20.1

Source: MoE, Kisii County Office

The positive deviation in the form three classes could be attributed to high repetition rates in the form three classes being a practice in many schools before joining the form four classes. The reasons for this low transition are many. As UNESCO (2006) explicates, some families cannot afford to keep their children in secondary school. There was need to establish if this was the case in Kisii County hence a gap filled by the current study.

In Kenya the provision of educational opportunity has been the main objective of the government since independence. This is because education is considered by different stakeholders in Kenya as an important vehicle for self advancement, social, economic as well as political development. In line with the Eighth National Development Plan 1997 – 2001, one of the government's guiding philosophy for education was the concern that every Kenyan had the inalienable right to basic education (RoK, 1997). The Sessional Paper No. 1 of 2005 (RoK, 2005) therefore proposed that secondary education be integrated as part of basic education. Hence, basic education comprises of primary education and secondary education as the basis for FPE and FSE. However, this will remain an uphill task unless the issue of transition from primary to secondary school is addressed hence the concern of this study was to investigate the effects of hidden costs of FSE and their implication on transition and completion rates among selected boarding secondary schools in Kisii County.

 The government is committed to the provision of quality education and training as a human right for all Kenyans in accordance with the Kenyan Constitution (RoK, 2010) and the Basic Education Act, no.14 of 2013 which underscores the right of every child to free and compulsory

basic education as enshrined in the Constitution and the International Conventions such as EFA Goals, Millennium Development Goals (MDGs). Education sector report (MOEST, 2008) confirms that the education sector in Kenya has continued to undertake reforms introduced in the last 3 years, in order to address the overall goals of the National Economic Recovery Strategy for employment and wealth creation as well as National and International development commitments. However there is need to identify the key objectives for the FSE policy as outlined in the National Action Plan on Education For All 2003-2015 among them transition and completion rates (MOEST, 2003). This will be part of the knowledge gaps to be filled by the current study.

The education sector report (MOEST, 2008) reveals that despite the progress made, there are still challenges in terms of enhancing access, equity, quality, relevance and governance. To address some of the identified challenges, the (MOEST, 2008) Education Sector Report therefore came up with a policy to promote access and transition to secondary education. This will entail provision of infrastructure to deepen the gains of FPE and address the concomitant infrastructure needs with the envisaged higher enrollment once the new policy on Free Secondary Education (FSE) funding is adopted. According to Education Sector Report (MOEST, 2008), transition rates from primary to secondary schools has been highlighted as a challenge to the education sector. However, according to this report, one of the strategic objectives of education sector is to increase transition rates from primary to secondary education to 70 percent in 2008, 80 percent in 2012 and 90 percent in 2015.

Following the introduction of FSE as one of the education reform strategies, a circular released on ninth January 2008 by the Ministry of Education spelt the guidelines on FSE implementation albeit on interim basis. Key among these included how the Kshs. 10,265 per student was to be distributed against the various covered vote heads and parents were to meet the remainder of the needs (indirect costs), mostly uniforms, transport and feeding the students in schools (MoEST, 2008). Poor economic growth and the increase of inflation rates have made it difficult for parents to meet indirect costs in FSE (RoK, 2001). The poverty index in Kenya by 2012 stood at 49.8% (KIPPRA, 2013). Yet these are the citizens expected to meet the hidden cost of FSE.
A report of the Ministerial Task Force indicated that 1.5 million school going children were out of school mainly because of the numerous levies (MOE, 2003).

Educational cost has been and is still a challenge to participation rates. There are different costs in education, according to Onsomu (2006), it includes direct costs and hidden costs. Direct costs are costs on professional development, teachers'remuneration, provision of infrastructure, administration and management. Other costs are physical infrastructure development and maintenance, tuition fee, public examinations, catering and accommodation in boarding schools. Hidden costs consist of foregone expenses, Parents Teachers Association (PTA) levies, school uniform costs, book costs, charges on remedial teaching and transport to school. According to the Kenya's Education Sector Report (2008), the education sector has continued to receive significant allocation for both recurrent and development expenditure between 2005 and 2007. In the Sessional Paper No. 1 of 2005 and Kenya Education Sector Support Programme 2005 – 2015, it was revealed that education sector requires increased resource allocation in implementing strategies arising from various plans to deliver Kenya Vision 2030. However, financing of education does not consider hidden costs of

education. In a newsletter of the Ministry of Education, Kenya, issue No.2, 2007; it was revealed that financial requirements of education affects universal access to education.

Cheruiyot (2011) when studying on the effectiveness of subsidies in enhancing optimal enrolment in public secondary schools found that though tuition fee waiver initiative have greatly reduced the financial burden of secondary school education, the parents still meet the hidden costs of education. He also established that on average, parents spend KShs 33,964(79%) for provincial schools and KShs 12,654(%) for day schools on these costs. It was then necessary to establish these hidden costs and their effect on transition and completion. This was an academic gap worth filling by the current study.

In spite of the recognition of education as a right, enrolment rates in secondary schools in Kenya declined from 30% in 1990 to 27% in 1994 with the most declines being realized in arid and semi-arid lands. The enrolment in schools fell by 9% between 1998 and 1999 (Gogo et al., 2010). Based on 1999 census report, a total of 2.8 million boys and girls aged between 14 to 17 years who should have been in secondary school were not enrolled. This declining trend prompted the government of Kenya to strategize ways of enhancing access, equity and provision of quality education. Several strategies were put in place to realize the above goals. Orodho and Njeru (2003) for instance observed that the government recommended increasing of bursary allocation and introduction of the fee waiver as some of the ways of enhancing access and participation in secondary education. However, despite the introduction of free day secondary education and bursary allocation, access and participation at secondary education level has remained proportionately low compared to primary education in Kenya. For instance, in 2004,

enrolment at Early Childhood Education level, primary and secondary levels stood at 1,627,721 (16.4%), 7,394,763 (74.3%) and 926,149 (9.3%) respectively (MoEST, 2005).

In 2009, the enrolment was approximately 2.2 million (16%) at Early Childhood Education, 9.4 million (70%) primary and 1.8 million (13%) secondary (MOEST, 2009). Analysis of the 2009 census data reveals that approximately 6.7 million children of school going age were out of school. Of these, 2.1 million (58%) were of pre-primary age, 1.9 million (23%) primary and 2.7 million (76%) secondary school age (RoK, 2009). Based on this milieu, it was imperative to critically assess the extent to which the enhanced financing and hidden costs of secondary education has affected participation rates at secondary school level. Particularly, this study sought to investigate the extent to which the hidden costs in the programmes have had an impact on transition and completion rates among public boarding secondary schools in Kisii County.

1.2 Statement of the problem

Despite the government's commitment in ensuring high transition and completion rates through Sessional Paper No. 1 of 2005 which proposed a policy of integrating secondary education as part of basic education in Kenya leading to introduction of FSE, still low transition and completion rates remain one of the major challenges facing secondary education sub-sector in Kenya (RoK,2005) . Transition rates from primary to secondary have had marginal increase from 59.6 % in 2007 when FSE was introduced to 64.1 % in 2008, further increasing to 66.9 % in 2009 to 72% in 2010 and 74% in 2011 (RoK, 2012). According to the 2014 Education Sector Report a total of 498,933 students who were admitted in form one in 2010 and were among the first FSE beneficiaries cohorts who were expected to sit for their KCSE in 2013; only 448,667 candidates sat for the KCSE examination while 50,266 students could not be accounted for hence

there is need to establish the cause. The Secondary School Net Enrolment Rate (NER) in Kisii County as at the year 2010 was 35.2% in the same period a clear indication of low participation rates (MOEST, 2014). Kisii County 2009 Census Report underscored that 29,036 (8.8 %) post primary school students were out of school (RoK, 2009). The 2012 Economic Survey shows that approximately 30 per cent of secondary school students fail to transit to the next level every year (RoK, 2012). Low transition and completion rates have been occasioned by introduction of the cost sharing policy in 1988 which justifies the charging of hidden costs by educational managers leading to an increase in school fees at secondary school level. A study conducted by Africa Population and Health Research Centre (2007) observed that cost is a key barrier to transition and completion rates at secondary school level for the poor, who form the majority in Kenya. The study further postulates that whereas households meet negligible cost to meet primary education and about 20% for university education costs, they shoulder 60% of secondary education costs. However the study does not show the nature and extent of these hidden costs being the gap filled by this research (APHRC, 2007). The Kenya Economic Report reveals that the number of people falling into poverty has increased annually. For instance, in 2007, the number of poor people in the Kenyan population was estimated at 18.2 million, rising to 19.5 million and later 20.1 million in 2008 and 2010, respectively. Kisii County poverty index stood at 56 % (RoK, 2013). This state of affairs has caused concern among the education stakeholders and government. It is on this premise that the researcher chose to investigate the effects of hidden costs of FSE and their impact on transition and completion rates in boarding secondary schools in Kisii County.

1.3 Purpose of the study

The study sought to investigate the hidden costs of FSE and their implication on transition and completion rates among public boarding secondary schools in Kisii County. This results from the fact that though the government is contributing towards free secondary education there are other indirect costs that the parents bear in order to supplement the government's efforts. This is perceived to be the cause for decline in public secondary school students' transition and completion rates in Kisii County.

1.4 Objectives of the study

The study sought:

a) To find out the hidden costs in the provision of FSE among public boarding secondary schools in Kisii County.

b) To establish the effect of the hidden costs on student transition rates among public boarding secondary schools in Kisii County.

c) To establish the effect of the hidden costs on student completion rates among public boarding secondary schools in Kisii County.

1.5 Research question

The study sought to answer the following question:

a) What are the hidden costs in the provision of Free Secondary Education among public boarding secondary schools in Kisii County?

1.6 Hypotheses

The study was further guided by the following hypotheses

H_01: Hidden costs have no significant effect on students' transition rates among public boarding schools in Kisii County.

H_02: Hidden costs have no significant effect on students' completion rates among public boarding schools in Kisii County.

1.7 Assumptions of the study

The following assumptions were made while carrying out the research:

i. The respondents could provide truthful responses to the items in the questionnaire and interview schedules.

ii. The parents understood their role in the provision of secondary education.

iii. Schools keep proper records of transition and completion rates, finances and students attendance.

1.8 Scope of the study

The study was carried out in Kisii County, Kenya in the year 2014 and 2015. It sought to establish the effect of hidden costs of FSE on transition and completion rates among boarding secondary schools in Kisii County.

1.9 Limitations of the study

In data collection, the study relied on interviews with the head teachers. As pointed out by Sharma (2008), research has shown that individuals tend to over-rate themselves on desirable

traits and under-rate themselves on undesirable traits. This means that some head teachers may have concealed some information on hidden costs in FSE out of fear of victimization, which may lead to the wrong conclusion that implementation of Free Secondary Education is not being faced with hidden cost challenges. To overcome this, the researcher collected data from teachers and parents. The study was limited by the fact that it was not possible to control some intervening variables. For example, there could be variation in the capacity of the head teachers to handle financial challenges due to experience and training which necessitates the charging of hidden costs. Some have more work experience and could handle the financial challenges better than others and therefore the generalization of findings to all schools needed to be considered basing on this possible diversity. To overcome this, the researcher employed a random sampling technique and collected data from a large proportion of respondents.

1.10 Significance of the study

In Kenya, basic education is a right of every child articulated and provided for in the new constitution (RoK, 2010). The study was based on the fact that, though the government is providing Free Secondary Education there are hidden costs that are not catered for by the government. Consequently the findings in the study will enable education stakeholders and policy-makers to come up with strategies for easing the parents' cost –burden like mobilizing funds from donor communities and bilateral partners among others. Secondly the study will add up to the body of knowledge of secondary education management and education change management besides filling gaps in research which could prompt other scholars and researchers to do similar studies in other regions or levels of education.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The study investigated the effects of hidden costs in Free Secondary Education and their implication on transition and completion rates among boarding schools in Kisii County. This chapter reviewed literature related to the study under the following themes: Hidden costs and free secondary school education, hidden costs and students' transition rates and hidden cost and completion rates.

2.1 Hidden costs and Secondary School Education

2.1.1 Global perspective

Hidden costs are indirect costs of education incurred by parents besides the direct costs of education as indicated in the fees structure approved by the government through the Ministry of Education (Tuwei, 2013). In this study, hidden costs include motivation costs, remedial fees, Parents Teachers Association (PTA) levies, transport costs among others. Meryl Ain (2011) when she was commenting on hidden costs of public education said that US census bureau statistics indicated that 15% of American households were living in poverty in 2010. She identified that poor Americans are having difficulties in paying for hidden levies of education. Hidden levies included charges on academic trips, textbooks and sports equipment.

According to Goldin (2001), the spectacular expansion of secondary education in the United States (US), which took place 40-50 years before the corresponding expansion in European countries, had to do with a template that entailed a sharp departure from the European tradition of secondary schooling which hindered access due to hidden costs. This US template

encompassed a number of virtues: public funding and provision; an open and forgiving system devoid of any segregation in terms of access.

In developed countries, education beyond the compulsory level was usually financed in part and sometimes wholly by the state. In Britain, education up to secondary school level was fully financed by the government (Kristiensena et al, 2006). Parents are only required to ensure that children attend school. In Britain, Education Authority and Central Government are required by Section 7 of the 1944 Act to make education facilities available. This enables parents to carry out their legal duty. Parents are seen as the school's prime legal clients until the child is 16 years of age. Section 36 of the Act states that it shall be the duty of the parent of every child of compulsory school going age to cause him to receive full-time education suitable to his age, ability, and aptitude, either by regular attendance at school or otherwise (World Bank, 2005).The study sought to find out whether in the Kenyan situation the parents had similar roles in the provision of education for their children.

In Japan, the government fiscal policies provide for free education up 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 (Nyaga, 2005). In the United States of America (USA), the Federal Government supports public education. The government is empowered by the Constitution Welfare Clause, Article 1 Section 8, to levy taxes and collect revenues for the support of education. However, Congress decides the extent of such support (Nyaga, 2005). The situation in Kenya is not different from that of Japan and America as the government and the

communities participate in the provision of education. What was not clear is the impact communal participation had on transition and completion rates a gap filled by this study.

In Canada, school fees are an integral part of the education system. Parents are asked to contribute to their children's education through payment of fees (Nyaga, 2005). However, the government recognizes that some parents are not in a position to pay so the government makes provisions to ensure that a child is not denied access to education because of an honest 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 the provinces (Nyaga, 2005). In Kenya, poverty has been a major barrier to education access for many children, and this led to the government introducing Free Secondary Education. However, it was not clear whether the funds allocated by the government for FSE were adequate to meet the needs of the schools to avoid charging hidden costs to supplement the schools budgets which this study sought to establish.

The 2013 Transparency International analysis report shows that among 50 low, middle and high income countries in almost all regions in Africa with data for 2005–2012, household secondary education spending accounted on average for 31% of the total. In almost a quarter of the countries, households spent more on education than governments. Household financing often make up the deficit due to the fact that some governments do not spend sufficient resources on education although fee-free public primary schooling is enshrined in the law. The share of household contributions is by far highest in South Asian countries. In Bangladesh, Sri Lanka and

Pakistan, where governments spend around 2% of GDP on education, households pay about 4% of GDP, which means that their contribution amounts to about two thirds of the total expenditure. By contrast, in five North American and Western European countries, the percentage is about 10%. This study sought to establish if the situation is similar to the Kenyan parents.

Given massive increments in enrollment levels in primary schools following the successful introduction of FPE policy, many governments have realized that charging fees and other related user levies in secondary schools would hinder many of those completing their primary education cycle from continuing to secondary education. Many governments are considering ways to make the poor and marginalized gain access to secondary education given the social, political and economic benefits associated with secondary education (World Bank 2005).

The lack of access to secondary education due to indirect costs is seen to constrain countries' abilities to pursue effective economic growth and development strategies. This has led to governments and donor community placing increasing emphasis on the expansion of secondary education (UNESCO, 2001; World Bank, 2005).Secondary school enrolment rates in many sub-Saharan Africa countries is the lowest in the world and it is attributed to cost implication; of 104 million secondary school age children only one in every four (25%) were enrolled in secondary school in 2006 (UNESCO, 2008:1). Free secondary education is thus perceived as a potential strategy to expanding education opportunities by many countries to their citizens especially the poor and the disadvantaged. Despite economic hardship and financial crises many developing countries including those in Africa have recently extended free education from primary to

secondary. Rwanda and Uganda abolished payments of fees at lower secondary education in 2006 and 2007 respectively. Rwanda extended free education to lower secondary school level due to the high fees charged at secondary education that tended to lock out some of those who qualified from primary. The Uganda government was concerned that only one in every five children completing primary education had access to secondary education and many of those were from economically advantaged households (UNESCO, 2007). These countries have introduced free secondary education policies with the main purpose of ensuring increased access to secondary education by all children regardless of individual economic backgrounds.

Studies on access and retention in primary and lower secondary education in Ghana show that although the FCUBE made an overall enrolments increase, children from poor households continue to be underrepresented in enrolments (Rolleston, 2009). Rolleston (2009) made it explicit that not only indirect costs hinder access of the poor but also latent costs substantially affect the chances of poor children to enroll in and complete basic education. A study of access patterns in Malawi also concludes that access to education in the country continues to reflect household wealth (Chimombo, 2009). Thus, despite direct fees being abolished, these studies clarify that the abolition of fees has not been enough to ensure access to education for the poor as indirect costs are still a barrier to access. There was need to establish if the same scenario was evident in Kenya being the academic gap which informed the current study.

A study from charity family action in United Kingdom (2012) which supports disadvantaged families said that many poorer parents pay about 40% of their income on back to school costs. It

calculates that the bill for equipping a child with school uniform for the first day of secondary school was at an average of $ 160 for boys and $ 180 for girls in UK excluding other expenses. Hannah (2012) in writing about school uniform as an indirect cost said that the Office of Fair Trade in UK wrote to all head teachers asking them to review the arrangements they make for school uniforms. She said schools choose single supplier or retailer where parents and students buy school uniforms making them unable to buy school uniforms from cheaper shops. The office of fair trade (2012) recommended that in order to address issues of poverty and the barrier it gives secondary education, then the costs of school uniforms alongside the cost of shoes, trips and school meals must be kept down. Similarly Katherine Sellgren (2012) Schools in England are being urged to keep the cost of school uniforms down, as many "rebrand" themselves as academies. She further said that the Local Government Association (LGA) says schools have a "moral duty" to keep costs down for parents. The LGA says parents do not have an "endless pot of cash" for new uniforms as schools change colours or logos which consequently affect participation rates. There was need   to establish if the case is true in the Kenyan context hence gap to filled in the present study.

Rose and Al Samarrai (2001) found that the ability to buy exercise books, pens and necessary clothing for school also influence whether children could enroll or mere withdrawn from the first grade. Additional costs like registration payments, getting copies of birth certificates (for registration), text books and uniform costs were indirect costs that many parents in Guinea found difficult to meet according to Colclough, Rose and Tembon (2000). A great challenge to African governments is that of financing of the education programmes. The governments operate with

huge budgetary deficits which always need to be plugged by way of donors infusing budgetary and development support. This leaves the challenge of financing the education programmes especially for the post-primary education programmes to the household and the communities. The challenge leaves the households in a precarious situation whereby they have to do a delicate balancing of act of deciding on whether to pay for education of the learners or meet the daily needs of survival and sustenance taking into accounts that most of Africa's population lives in less than a dollar per day (Matayos, 2010).

Nigerian Action Aid report (2012), highlighted in the Nigerian action aid report *" Education and Promoting the Rights in Schools"* that Inadequate infrastructure, facilities and various hidden levies have been identified as some of the major issues affecting the smooth running of free basic education in Kogi State in Nigeria. He further said that students were charged hidden fees for books that were meant to be free and for maintenance of facilities in the school. He recommended that, the federal, state and the local governments should respect and protect the rights of the child with regard to free and basic education. From this it can be observed that some schools charge hidden levies to students which may increase costs of education to learners.

Katy Hopins (2012) in writing about 5 Hidden Costs of Public High School in United States of America said that getting to and from school can get pricey. He further said that Confronted with the option to pay $1,500 a year for a school bus to come, the Krause family decided to drive their daughter both ways each day instead—a cost of about $150 a week, Krause estimates. For students who have a bus option but would prefer to transport themselves, there may be an additional cost, too: "If you're a senior and you're looking forward to driving your car and

parking at a high school lot, parking fees have gone up," AASA's Domenech notes. These cases further indicate that transport expenses have a considerable share in education costs.There is need to establish if the case is true in the Kenyan context. Maliyamkono and Ogbu, (2003) in their study of Cost sharing in education in secondary schools in Tanzania stated that when a bus stops, students are often told to wait and many times the bus leaves the station without boarding even one of those students. She further said that overall student transportation, especially those in urban areas are awful. She found that fare to school is a cost that has been ignored and yet tend to affect education.

Management partnership services (2008) in their survey on development of student transportation funding methodology options for Washington State in U.S found that funding cost of student transport received by every school from the state had increased significantly in the last 25 years since it was started. $500 about ksh 40,000 is spent on every student each year accounting for about 8% of the student education cost. Report given in Jamaica by school travel service (2011) said that if your child goes to a school more than three miles from your home (measured by the nearest available walking route), you may qualify for financial help to meet the cost of public transport to and from school. Distances are calculated on the basis of a straight-line measurement between the applicant's home address and a point decided by the school (usually the front gates). The local authority uses a computerized system, which measures all distances in metres. Ordnance Survey supplies the co-ordinates that are used to plot an applicant's home address within this system. School Travel services (2011). It can be observed from this report that transport cost or fare to school is an issue in well developed nations also.

2.1.2 Kenyan perspective

Kenya has been trying to achieve the goal of universal education since independence in 1963, with failure and success in equal measure. Various approaches which were seen as likely to augment resources and define strategies for education financing more closely adapted to social and economic realities have been proposed. The most notable was the cost sharing framework, by which the government was to meet salaries of teachers and education administration costs while parents provided tuition fees and textbooks; communities on the other hand were to be responsible for putting up physical facilities and ensuring their maintenance (Elimu Yetu Coalition, 2003). However, given the differential economic endowment of regions and even social groups, disparities in access to education emerged. The disparities were cost related since not all groups could marshal resources on equal footing. UNESCO (2001) reported that under the cost sharing arrangement, parents felt exploited by school committees which were considered unsympathetic to parents due to the burdens they imposed on them. Abagi (2000) lends credence to this view when he observed that school fees contributed 91% to 100% of all financial resources that were available in schools; government subsidies on the other hand hardly exceeded 8% of the schools' total budget.

Task force on the re-alignment of the education sector to the constitution of Kenya 2010 indicated that although the Kenya Government has vigorously expanded access to quality and relevant system of education and training which also offers equal opportunity to all, there are still many challenges affecting children from poor households. This task force recommended that there is need to abolish all school levies which discriminate against poor households. It can be deduced from this that school

levies have some effect on education especially of children from poor economic backgrounds (RoK, 2012).

The introduction of free tuition in secondary schools in 2008 was aimed at providing the economically disadvantaged with an opportunity to benefit from government sponsored education provision. However a study by Karemesi (2010) reveals that providing this education is now beyond the scope of Kenya's education budget, owing to the rapid population growth rate resulting to an ever increasing number of students keen to join the education system at all levels. The study does not indicate by how much hence a gap filled by the current study.

Challenges arising from the pressure placed upon available finances have been steadily growing. Given the new measures that government is undertaking to address issues of access and quality of education in recent years, it is worth examining the influence of costs on students' participation rates as a way of seeking long lasting solutions. As mentioned the provision of free tuition in secondary schools was one of the major education policy reforms upon which the government sought to attract the poor and vulnerable groups into the secondary school system. However it was noted that tuition charges had been introduced in most county schools; charges varied by school, but were generally on the upward spiral. Some schools disguised these levies under different names, such as remedial levy, education support programmes, and academic welfare. Official approval for such levies would seem to go against government policy.

With more than half of Kenya's population living below the poverty line and the rising cost of education, the majority of households, especially among the poor and vulnerable groups, would not be able to invest in the development of quality education at the secondary school level (Njeru

and Orodho, 2003). Njeru and Orodho (2003) further argue that on average, households' contribution to the funding of secondary education amount to 60%, while government's financing constitutes 40% of the aggregate. However, some schools which are categorized as "functional" charge far beyond 60% which becomes unaffordable especially to most poor parents. As a result, the financing of secondary education, that is, the cost-sharing strategy, has become problematic as parents have to shoulder an increasingly larger portion of the costs, thus, creating a negative impact on poor and vulnerable households.

 Ngware, Onsomu and Muthaka (2007) have made the same observation by indicating that the implementation of the cost-sharing policy was confronted with several problems. The authors argue that, there were no clear guidelines as to the extent to which parents and communities were expected to contribute as part of this cost-share programme. Johnstone (2003) also made the observation that in recent years there have been a dramatic, albeit uneven and still contested, shift in the burden of education costs from a situation where the costs were predominantly borne by the government or taxpayers to this being shared with parents and students. Parents are now proportionately contributing more than government. This cost sharing, according to Johnstone (2003), took different forms, either through the introduction of latent(hidden) tuition fees or, where it already existed, a sharp increase in the tuition fees, boarding, books and other costs associated with students' living expenses, which may formerly have been covered by the government (Marcucci, Johnstone, and Ngolovoi, 2008).

Odunga (2015), indicates that a number of public schools are charging parents tuition fee and other levies in disregard of the Basic Education Act 2013. This is also despite the government

providing capitation to schools under FSE programme which has also been increased to KShs14.1billion from KShs13 billion in the 2014/2015 fiscal year. The schools do not provide receipts for such payments and those not ready to make such payments are told to look for alternative schools. Education principal Secretary acknowledged that some public schools were indeed charging levies in disregard of the of the 2013 Basic Education Act Section 29(1) which states that no public school shall charge or cause any parent or guardian to pay any tuition fee. Incase of need to charge extra fees, the Act states that such has to be done with the approval of the Cabinet Secretary in consultation with the County Education Board, provided that no child is denied a chance to attend school because of failure to pay (RoK, 2013). However the provision to charge extra fee while following the laid down procedures has been abused by Boards of Management(BoM) and PTAs who dictate what parents have to pay without consulting them (Orodho, 2014).

According to the government's 2013/2014 – 2015/2016 Medium Term Expenditure Framework (RoK, 2012), the strategy to increase access to secondary education will entail providing free tuition by sending grants to schools to facilitate procurement of teaching and learning materials in schools across the country. The 2014 Task Force Report on Secondary School Fees affirms that indirect costs in secondary education have had impact on participation rates. The report outlines measures to substantially lower the indirect costs in secondary education such as abolishing unnecessary levies and limiting the components of school uniform to essential elements and developing uniform school meal policy for all schools within the same County (RoK, 2014). Hence there was need to gain empirical data on the extent to which indirect costs affect participation rates in free secondary education. This is the gap filled by the current study.

Kenya's long term development strategy, Vision 2030, set out to establish a computer supply programme to equip students with modern ICT skills. The MoE through the Multi-Media Project has already set up a plan to equip selected schools with ICT integrated content delivery systems (RoK, 2012). In an effort to be at par with these developments in education, school management boards through their parents' committees have encouraged parents to support provision of computers in schools which equally threatens to escalate the cost of education. Another notable indirect charge on students is the bus maintenance and insurance levy. It is a charge that is levied to students whose schools have acquired buses often with the sole financial support of parents. Though buses facilitate easy movement of students on trips to participate in academic and co-curricular activities, disparities in levies point at a non regulated levying scheme that could hurt overall students' transition and completion rates in schools (Getange, 2013).

The reviewed study purposed to only assess the financing of day secondary school education and it's implications on the quality of learning in Kisii Sub-County, Kisii County but did not establish the implication of financing on transition and completion rates a gap filled by the current study. Other numerous levies exist in schools, most of which are approved by MoE officials. These included local joint examinations fees, special subject fees, uniform fees, university application fees, activity fees, registration fees, School identification and visitors card levies, school magazines and academic awards levies (Getange, 2013).

A study by Rotich et el, (2014) on negative socio-cultural factors and girls' transition rates in Secondary schools in Narok County in two constituencies of Transmara west and Narok North

revealed high enrolment in primary schooling and low transition rate in secondary level . The study reveled that transition rates of girls in Transmara West Constituency had been declining at the rate of 40% in Primary and 10% in Secondary schools for the last three years while the enrollment in Narok North had been increasing at the rate of 10% in both Primary and Secondary schools. For every 15 girls enrolled for KCPE in class 8, only 1 girl join secondary school in Transmara West. However, in Narok North, for every 10 girls enrolled in class 8, only 1 join secondary school. It implies that there is high rate of girls dropping out of school in Narok County. The findings revealed that there was statistic significant relationship between FGM and Early marriages in the county. Soon after FGM, majority of the girls drop out of school and get married to old rich men as second or third wives thus impacting negatively on transition and completion rates. Both the current and Rotich's study engage transition rates and completion rates as variables under study but the later fails to underscore other factors affecting transition and completion like economic factors other than social-cultural factors hence academic gap filled by the current study.

The current study agrees with Mathia (2015) who sought to establish factors influencing pupils' transition rates from primary to secondary school in Kiambu Sub-County, Kenya. The study was guided by three research objectives. Research objective one sought to assess whether parental level of education influence pupils' transition rates from primary to secondary school, research objective two sought to establish whether cost of education influence pupils' transition rates from primary to secondary school while research objective three sought to assess whether pupils` home background influence pupils' transition rates from primary to secondary school in Kiambu Sub-County. Descriptive survey design was used by the researcher to gather information

26

concerning factors influencing pupils' transition rates from primary to secondary school in Kiambu Sub-County. The study was based on systems theory (1968) .The questionnaire were issued to a size of 13 head teachers, 28 class teachers ,649 pupils from 13 public primary schools while quantitative data was analyzed through descriptive statistics. The findings revealed that parental level of education influence pupils' transition rates from primary to secondary school which shows that parent's level of education had a lot of impact on schooling of children because the more educated parents were the more they were likely to enroll their children and push them through school. The study also revealed that high academic attainment of parents significantly reduce chances of primary school dropout. The cost of secondary education was also found to be very high. This was because parents were required to meet some operational costs such as maintenance and may be required to pay for many other things including food, uniforms, learning materials, boarding fee, medical care and special equipment. Direct cost was too high for parents as was stated by 61.5%) of head teachers and inability of the poor to meet education costs for all their children was a barrier to education as was stated by (61.5%) of head teachers.

The reviewed study concluded that parental level of education influenced pupils' transition rates from primary to secondary school. It was also concluded that high academic attainment of parents significantly reduced chances of primary school dropout. It was also concluded that pupils from lower income background do not make a successful transition to post-primary school, and that parents from good economic background motivates their children to attend educational programs. It was also concluded that the major challenge to access of secondary education was that parents were not able to meet some operational costs for secondary education. The study lastly concluded that direct cost was too high for parents and inability of the poor to

meet education costs for all their children was a barrier to education. In the light of the research findings, the researcher recommended that the government should make proper decisions on measures required for maximum pupils' transition rates in the secondary school. The researcher suggested that since the study was based in only one Sub-County, similar studies ought to be conducted in other regions to compare the results hence a gap informing the current study. Furthermore, the Mathia study engaged only transition rates as dependent variable with no regard to type of school which is a major aspect given that schools are unique by manner of categorization and the study focused on transition rates from primary to secondary a major deviation from the current study which focused on transition and completion rates at secondary school level with specific focus on public boarding secondary schools.

A related study by Ohba (2009) focused on free secondary education and the way it influences access to education for the poor in rural Kenya. Data were collected twice from the same site of a semi-arid rural area in the Makueni district of Kenya to explore transition within a particular community. During the first visit in 2007, through primary school records the study identify 109 children (69 boys and 40 girls) in 101 households who had successfully completed primary school between 2004 and 2006 but had not enrolled in any post-primary education (secondary school and youth polytechnics) by 2007. The study investigated the reasons for non-attendance in secondary school and collected data for the children and their households through surveys and semi-structured interviews. This revealed that about 51 percent of boys and 55 percent of girls in the study did not enter secondary school due to school fees. The study revealed that after the introduction of Free Secondary Education fees had been reduced substantially but not abolished in public schools. Data collected after the introduction of free secondary education showed that

government schools continue to levy fees for lunch, school buildings and boarding equipment. Households are also expected to provide non-discretionary items such as school uniforms, sports uniforms, books, stationary among others.

The reviewed study found that the costs of the first year preparation for day secondary school are about eight times the monthly income for employed parents, 12 to 17 times for self-employed parents and 19 to 20 times for peasant parents engaged in casual work. In the case of boarding schools, the costs of the first year preparation for boarding school were 15 times the monthly income for employed parents, 23 to 33 times for self-employed parents and 38 to 40 times for peasant parents engaged in casual work. The study found that poor households continue to face significant challenges in meeting the costs of 'free secondary education. Moreover, government bursaries for secondary education are awarded to children enrolled in boarding secondary school only; children whose households cannot raise the initial and ongoing costs required for even low cost day secondary schools face substantial challenges in accessing secondary education. The study concluded that government policies aiming to expand access to secondary education for the poor must strive to identify and target socially disadvantaged children who are in need of financial help to access secondary education. Both current study and the reviewed study conquer that affordability is a major barrier in accessing any educational programme. However unlike the current study which was set in both rural and urban set ups, the reviewed study was set against a semi arid rural background. The reviewed study recommended for other studies to be conducted in other areas in order to validate the findings. This is the gap filled by present study.

A study by Ngware, Onsomu, & Muthaka, (2007) examines the financing status of secondary education in Kenya and explores possible cost reduction and financing options in the long term. The study established that educational needs for secondary education in Kenya are on the increase since the introduction of Free Primary Education in 2003. The study postulates that financing of secondary education continues to be a challenge to the government, parents and communities at large. The suggested that identifying sustainable financing options that maximize on cost-effectiveness in resource utilization is critical. The study utilized secondary data obtained from education trend statistics, the 2003 Kenya school census, and the Teachers Service Commission. Some of the insights from the study show that expenditure on secondary education as a proportion of GDP and the total education public budget averaged 1.6% and 22%, respectively. Public financing is predominantly recurrent, while non-recurrent expenditures are estimated at 6%. High-income quintiles benefit more from public provision and financing of secondary education compared to the low-income quintiles.

The reviewed study recommended that government should have feasible financing options which would include increasing secondary education revenue and fiscal allocation on non-salary expenditures. Further the study recommends that cost reduction measures should target the expansion of quality day schools, efficiency utilization of teachers, and streamlined procurements. While the current study specifically dealt with other educational costs like hidden costs and their effect on transition and completion rates among public boarding secondary schools, the reviewed study focuses on financing status of secondary education in Kenya and possible cost reduction and financing options. The study does not establish the effect of financing challenges to participation rates. The study also offers generalized possible cost

reduction measures with no reference to possible cost reduction options for hidden costs incurred by parents. This is the gap filled by the current study.

Munda & Odebero (2013) sought to investigate the relationship between unit cost and students' academic performance in secondary schools in Bungoma County. Descriptive survey research design was used. Proportionate random sampling was used to select eighty class teachers in twenty schools who served as respondents, and gave feedback through structured questionnaires. Pearson's correlation was used to measure the degree of relationship. Statistical tests were done at $\alpha=0.05$. It was found that a significant positive relationship existed between unit cost and academic performance, and government efforts to provide financial subsidy to education were still not adequate to cover vulnerable groups. The study recommended that innovative funding approaches involving a wide range of stakeholders need to be devised to help shore up government efforts and mitigate the deprivation that vulnerable groups endure. While the reviewed study identifies indirect education cost as a factor affecting academic performance in secondary schools, the current study indentifies indirect costs as a factor affecting other variables other than academic performance like transition and completion rates hence   academic gap filled by current study.

Education costs are usually met from public and private sources and through possible cost-saving measures and strategies within the education system. Parents' contribution is one of the private sources while they contribute also to public funding through taxation. This poses the question of how free is free secondary education (Khamati & Nyongesa, 2013). UNESCO (2008), observes that the contribution of parents to financing education is significant but it has never been

quantified and added to the total budget for education. Thus it remains a hidden cost, a miscellaneous cost which is exclusive of the government's annual budget for education. Though there is a general view that secondary education is free, households' educational expenditures can be heavy. Thus it is evident that free secondary education in Kenya is faced with a lot of challenges; arising out of continuous decline in   the share of public funds (Orodho et al, 2014).

2.2 Hidden costs and their effect on students' transition and completion rates

2.2.1 Global perspective

Education transition rates can be defined as the percentage of learners advancing from one level of schooling to the next. It is calculated as the percentage of upcoming year divided by the number of learners in senior class in the preceding year (Hueblar, 2011). The worldwide education transition rates from primary school to secondary school level indicate that eighty five percent (85%) of learners who get to the last grade in primary school get to attend secondary school. The two regions with the lowest education transition rate are West and Central Africa (fifty two percent) The statistics indicate that transition rates are highest in industrialized countries (ninety eight percent) and Eastern Europe (ninety six percent) (UNESCO, 2011).

UNESCO (2015) EFA Global Monitoring Report reveals that as of 2012, there were still 58 million secondary school children who were out of school globally with over half of them living in Sub‑Saharan Africa, a considerable increase compared to 1999, when the region accounted for 40% of the total   and around 100 million children who did not transit from primary to secondary largely due to indirect costs. Based on the trends of the past five years, the report says that 57 million secondary school children would still be out of school in 2015. Inequality in

education has increased, with the poorest and most disadvantaged shouldering the heaviest burden. The world's poorest children are four times more likely not to go to school than the world's richest children, and five times more likely not to complete primary school. Cost remains a steep barrier. The reports further confirm that school dropout remains an issue in 32 countries, mostly in Sub-Saharan Africa, at least 20% of children enrolled do not reach the last grade.

UNESCO (2015) EFA Global Monitoring Report notes that despite the worrying trend on out of school children, secondary education enrolment increased by 27% globally. The gross enrolment ratio rose in lower secondary education from 71% in 1999 to 85% in 2012, and in upper secondary from 45% to 62%. Wide disparity exists among regions: while the lower secondary gross enrolment ratio was above 95% in most regions in 2012, it was 89% in the Arab States, 81% in South and West Asia and 50% in Sub‑Saharan Africa. Inequality is more pronounced at the upper secondary level, where the gross enrolment ratio was around 100% in North America and Western Europe and in Central Asia, but 32% in Sub‑Saharan Africa.

Globally transition rates as at 2012 were at 94%, Developed Countries 99%, Developing Countries 90%, Arab States 95%, Central and Eastern Europe 99%, Central Asia 99%, East Asia 95%, Latin America and the Caribbean 93%, North America and Western Europe 99%, South and West Asia 89%, Sub-Saharan Africa 70%, countries with low income 75%, countries with middle income 94% and countries with high income 99% and Kenya in particular 78% (UNESCO, 2015). Analysis using household surveys showed that completion rates had only reached 37% in low income countries by around 2010. There are wide inequalities in completion, with rates reaching 61% for the richest households but 14% for the poorest. The number of out-

of-school adolescents has fallen since 1999 by 31%, to 69 million. However, it has stagnated since 2007 (UNESCO, 2014). Colclough, Rose and Tembon (2000), in their research, said that those students dropping out most frequently cite a lack of money to pay for school expenses as an important reason for dropping out.

Africa has the challenges of low education transition rates both in primary and secondary school level. This can be attributed to a myriad of factors chiefly among them being over-reliance of donor support programme for the education system. The very lack of innovative programmes by African governments and not building on sustainable programmes in many projects bring in the aspect of overreliance on donor support leading to a situation of crumbling of the programmes on the delay of funding or the withdrawal of the same leaving the learners missing out on the education programmes and in many cases not transiting to the next level (Muga, 2011).

2.2.2 Kenyan perspective

There are many challenges which threaten the sustainability of a robust secondary education regime in Kenya. The key challenges include low enrolment and retention rates, constricted access and equity at higher levels and myriad inefficiencies in managing the limited resources allocated to the education sector (RoK, 2005). According to Education Sector Report (2008) transition rates from primary to secondary schools has been highlighted as a big challenge to the education sector. However, according to this report, one of the strategic objectives of education sector was to increase transition rates from primary to secondary education to 70 percent in 2008, 80 percent in 2012 and 90 percent in 2015. Cost is however underscored as a major challenge (RoK, 2008). Kenya Education Sector Support Programme 2005 – 2010 paper indicates that

there has been a decline in secondary school enrollment. The paper shows that the decline has been caused by factors like high cost of learning and teaching materials, school uniform, transport and development levies, extra expenses for private tuition among other factors (MOEST, 2005).

Transition rates to secondary schooling are almost always above 95 percent in industrialized economies, this is not the case with most countries in the Sub-Saharan Africa, Kenya inclusive. UNESCO report (2000) indicates that the problems of the poor transition from primary to secondary school level have remained a matter of concern in most countries in Sub-saharan Africa. In fact the transition rates to secondary schooling in SSA are lower than 50 percent, it is particularly worrying because secondary education is viewed as a gateway to social economic advancement (UNESCO, 2000). The reasons for this low transition are many. As UNESCO (2006) explains some families cannot afford to keep their children in secondary school. In some countries there are no enough places in secondary schools.

Gachungi (2011) notes that delivery of secondary education in Kenya has been marked by numerous challenges, some of which have culminated in wastage. This wastage has resulted from non-enrollment, declining retention and completion rates, grade repetition and dropout in schools. However the study does not give a critical perspective to public boarding schools where parents incur most of the indirect costs, this was the gap filled by this study. These forms of wastage would hamper the attainment of EFA goals which the government targets to meet by the year 2015. Oyaro (2008), argues that poverty is a challenge to participation rates in Kenya.

In launching FSE in Kenya, the Ministry of Education appreciated the fact that fees' paying was responsible for the low transition rate from primary to secondary schools. With this recognition, the government made a commitment through Sessional Paper Number One of 2005 to increase transition to 70% and over by providing free basic education (RoK, 2005). As already noted, one of the major challenges facing secondary education sub-sector in Kenya over the years is low transition rates. This has contributed to low enrolment at secondary schools with a wide gap existing between primary and secondary enrolment. With the introduction of Free Primary Education in 2003, the gap would have widened further if efforts are not made to enhance access to secondary education. Low enrolment had been occasioned by introduction of the cost sharing policy in 1988. The government of Kenya, through Sessional Paper No.1 of 2005, made a commitment to increase transition from primary to secondary school marginally, nevertheless access has remained to be low (RoK, 2005).

The Kenyan government recognizes education as a human right, the means to developing human resources for development and socio-cultural transformation (RoK, 2010). In spite of the recognition of education as a right, enrolment rates in secondary schools in Kenya declined from 30% in 1990 to 27% in 1994 most affected was arid and semi-arid lands. The enrolment in schools fell by 9% between 1998 and 1999 (Gogo, Ayodo & Othuon, 2010). Based on 1999 census report, a total of 2.8 million boys and girls aged between 14 to 17 years who should have been in secondary school were not enrolled. Despite the introduction of FSE and bursary allocation, access and participation at secondary level have remained proportionately low compared to primary in Kenya (Orodho & Njeru, 2003). For instance, in 2004, enrolment at Early Childhood Education level, primary and secondary levels stood at 1,627,721 (16.4%),

36

7,394,763 (74.3%) and 926,149 (9.3%) respectively (MOE, 2005). In 2009, the enrolment was approximately 2.2 million (16%) at Early Childhood Education, 9.4 million (70%) primary and 1.8 million (13%) secondary (RoK, 2009). Analysis of the 2009 census data reveals that approximately 6.7 million children of school going age were out of school. Of these, 2.1 million (58%) were of pre-primary age, 1.9 million (23%) primary and 2.7 million (76%) secondary school age (RoK, 2009). With this scenario, it was important to critically evaluate the extent to which hidden costs affect participation rates at secondary school level.
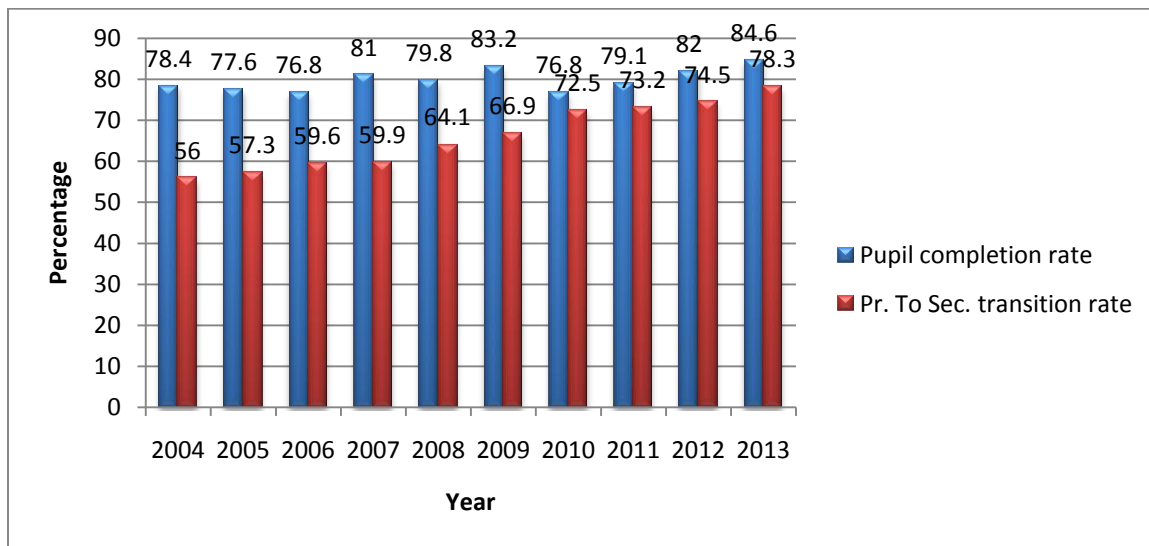
Fig 2.0: Primary Completion Rate (PCR) and Primary to Secondary Transition Rate, 2004-2013

Source: MoE & EMIS, (2014).

Completion Rates were at 76.8% (79.2% boys and 74.4% girls) in 2010 as shown in Figure 2.0, but having declined from the previous year, 83.2% (88.3% and 78.2 % for boys and girls respectively) in 2009. Transition rates from primary to secondary have marginal increase from

37

59.6 % (56.5 % for male and 63.2 % for female) in 2007 to 64.1 % (61.3 % for male and 67.3 % for female) in 2008, further increasing to 66.9 % (64.1 % for male and 69.1 % for female) in 2009 72% in 2010 73.2% in 2011,74.5 in 2012 and 78.3 in 2013 (RoK, 2014). This is still low hence the need to establish reasons for these sluggish trends. In 2009 and 2010, the admission rate was recorded at 62 percent and 66 percent, respectively, 34 percent of pupils completing primary education did not progress to secondary (RoK, 2012).

Table 2.0

Gross Enrolment Rates (GER) and Net Enrolment Rates (NER), 2009-2013

School Level	Enrolment Type	Gender	2009	2010	2011	2012	2013
Pre-primary	GER	Both sexes	60.6	60.9	65.6	66.3	67.2
	NER	Both	49.0	50.0	52.4	53.3	54.1
Primary	GRE	Male	112.8	109.8	115.0	115.4	116.0
		Female	107.2	109.9	115.1	115.9	116.1
		Both	110.0	109.9	115.0	115.8	116.1
	NER	Male	93.6	90.6	94.9	95.0	96.4
		Female	92.1	92.3	96.6	95.7	96.6
		Both	92.9	91.4	95.7	95.3	96.5
	Gender parity		0.98	0.96	0.96	0.97	0.98
	Pr.Completion Rate		83.2	76.8	74.6	80.3	78.7
	Transition Rate;Pr. To Sec.		66.9	72.5	73.3	76.6	78.1
Secondary	GER	Male	49.0	50.9	51.0	51.0	52.3
		Female	41.8	46.3	46.8	47.0	48.4
		Both	45.3	47.8	48.8	49.3	50.1
	NER	Male	36.5	38.0	32.6	32.6	34.7
		Female	35.1	38.9	33.1	33.5	35.2
		Both	35.8	32.0	32.7	33.1	35.0

Source: RoK, (2014).

Secondary school NER recorded an increase from 28.9 % in 2008 to 32.0 % in 2010 to 35.0% in 2013 having progressively improved from 13.7% in 1999 as shown in Table 2.1. In Kisii County Secondary Schools NER stood at 35.2% as at 2010 against the national average of 24.2%. But in

comparison to primary, the NER at secondary school level is far much below hence need to establish what the cause could be in order to remedy the situation where possible (RoK, 2012).

A similar study by Odhiambo (2015) carried out a descriptive study on the effects of the FSE Program among public schools in Nyakach District of Kisumu County. Objectively the study sought to assess the effects of the program on Access, Quality, Retention and completion rates and Equity. The target population for the study was 920 respondents consisting of 58 head teachers, 857 teachers and 5 educational officials. The sample size was 225 respondents made up of 20 head teachers, 200 teachers and 5 educational officials. Proportional sampling was used to select the head teachers, purposive sampling to select the educational officials. Questionnaires were used to collect data from the head teachers, teachers and divisional education officers, while an interview schedule was applied on the district education officer. Observation guidelines were used to collect data on physical and instructional resources. The study revealed that the implementation of the program negatively affected the quality of education offered in the schools; the program had also not succeeded in ensuring gender equity. However the following positive outcomes were documented; the program improved access among other things.

The reviewed study recommended a need to incorporate other government agencies like CDF, Economic stimulus package and NGOs to supplement the FSE funds. To increase the number of teachers and to upgrade their capacities through refresher courses and to create day wings in all boarding schools to expand access. While the research findings from the reviewed study revealed improved access as a positive outcome of FSE, it was passive on those who transited and completed the full cycle of secondary school education after accessing it. The present study

tracked one cohort despite the fact that they had accessed FSE from 2011 to 2014 to ascertain if they all transited and completed the full cycle of secondary education given that parents still supplement government efforts in the provision of FSE. Further the study proves inadequate in its population sampling as it does not incorporate parents who are major stakeholders in the provision of any educational program. This is the academic gap filled by the present study.

Lewin et al (2011) explored aspects of exclusion from education and how patterns of participation have been changing using national data sets. The first part of their analysis used administrative data from countries in Sub Saharan Africa to chart enrolments by grade over the last decade and explore how enrolment had been changing in terms of grade, gender, and age. After establishing key issues that were raised by the data across eight countries the study developed a detailed case study of changes in participation and performance in Kenya using data from the Kenya National Examinations Council. The study showed that the aspirations of Education for All remain far from being met in many countries and many of those who enroll in Grade 1 fail to complete primary or lower secondary school. The study postulates that progress has been patchy and it remains the case that over enrolment in the lower Grades is common (with more enrolled than there are children in the relevant age group as a result of over-aged entry and progression), and less than half the age group progressing through lower secondary school. In all the countries many of those enrolled remain seriously over-age and urban rural differences persist in enrolment status. The detailed case study of data from Kenya complemented the cross national analysis. It showed how uneven growth in participation has been after the announcement of free primary education, and how strongly patterns vary by county. Strikingly it confirms that older children score on average much lower in examinations than younger children, and that this

was likely to exclude older candidates from the best secondary schools. This is a source of considerable inequity since over-age status is associated with poverty.

The reviewed study revealed how children are seriously over-age in many Sub Saharan education systems with powerful consequences for their chances of completing primary and secondary school. According to the study those who are most over-age were more likely to have dropped out. From household survey data across thirteen countries the study argues that children who do not progress to the end of primary school and transit to secondary are overwhelmingly poorer and more likely to be over-age than those who progress through the system and finally end up dropping out all together. The study reveals further that in several countries the numbers over-age have increased rather than decreased as participation rates have improved. This would seem to guarantee that universal access will remain a goal rather than an achievement, especially since over-age children are disproportionately from disadvantaged groups and because being over-age almost certainly reinforces other likely causes of exclusion from education. Reducing the numbers over-age should improve completion rates and could reduce differences in outcomes associated with poverty. Both studies conquer with the assertion that decline in participation rates in the education sector has been a challenge. However the current study sought to establish how hidden costs affect transition and completion rates while the reviewed study sought to reveal how children are seriously over-age in many Sub Saharan education systems a powerful factor likely to make them not to complete primary and secondary school cycle of education.

Aseta (2011) investigated factors and challenges that impacted on enrolment and completion rates of female students in the District category of secondary schools. The study was carried out in Nyamusi Division of Nyamira County, Kenya. The study was guided by the theoretical

framework of the functionalist theory developed by Herber Spenser (1860) and Emile Durkheim (1947) which views societies as organisms with structures which consist of interrelated parts. These structures play a functional role to the total whole. A school in this aspect was viewed as a social system and in it are structures or persons that play functional roles towards it like parents, students, community and the school make up the social system. Failure of the learners to complete the school cycle implies that one party has failed to do the functional role hence affecting participation rates. The instruments for data collection for this study were questionnaires which were administered to the teachers, students and the principals. The interview schedule was administered to the area educational officer. A sample population consisting of 120 students, 48 teachers, 12 principals and the area DEO was used to investigate the challenges impacting on female students' enrolment and completion rates in district secondary schools. Results established that in a class of 45 students, seven students dropped out of school and this rate constituted 16% of annual dropout, girls taking the larger portion than boys. The results revealed that the challenges in Nyamusi Division were: lack of school fees, drug abuse, low achievement, indiscipline problems, pregnancy, death of parents/guardians, single parentage, prolonged absenteeism and poverty levels. The study recommended that apart from the Ministry of Education spending more of its resources on bursaries for needy students, teachers and the school surrounding community should be made more responsible for the dropout cases and those who never enroll.

Adoyo et al (2013) sought to establish the role of principals in promotion of girl-child education in Rongo and Ndhiwa Districts, Kenya. The study employed descriptive survey research design. The study population consisted of 38 Principals, 38 Director of Studies, 2 District Quality

Assurance and Standard Officers, 38 Board of Management Chair persons and 2010 form IV girl students. Simple random sampling technique was used to sample 435 girl students. Questionnaires and interview schedule were used for data collection. The study established that despite the various efforts put in place to promote education, the number of girls keeps on declining hence affecting transition and completion rates. The study revealed that girls tend to lag behind boys creating a notable disparity with regard to access, and completion of secondary education cycle. Gross Enrolment Rate in Rongo District in 2005 for boys was found to be 23.35% while girls was 16.4%, in 2008 it was 40.1% for boys and 31.1% for girls and in 2011 it was 25.6% for boys and 21.3% for girls. In Ndhiwa District Gross Enrolment Rate in 2005 for boys was 26.9% and 19.5% for girls. In 2008 it was 40.3% for boys, 37.2% for girls and in 2011 Gross Enrolment Rate for boys was 36.6% while for girls was 31.4%. Secondly the study established that principals faced many challenges in their endeavors to enhance girl child education. These challenges included teenage pregnancies, school levies, domestic chores and cultural barriers.

The reviewed study concluded that principals faced challenges like domestic chores, girl-child pregnancies, inability to pay school levies, girl-child harassment by teachers and male students, orphan-hood, parents' reluctance to meet girl-child needs, inadequate physical facilities in school, girl- child negative attitude towards education, teachers' attitude towards teen-mothers, long distance that girls walk from home to school, cultural barriers and girl-child absenteeism in their endeavors to promote girl child education. The study recommended those parents, teachers, girls, the government and other stake holders to join forces and be responsible for girls' effective participation in education.

Similarly Aftin & Orodho (2014) sought to examine the dismal transition, retention and performance the girl-child in secondary schools in Rhamu Town in Mandera County, Kenya. The study was premised on the Classical Liberal Theory of Opportunity and Darwinism whose major tenet is that each person is born with a given amount of capacity, which to a large extent is inherited and cannot be substantially changed. Mixed methods employing descriptive and multi-case studies research designs were used to conduct the study. A combination of purposive and stratified random sampling techniques were used to draw 18 teachers, 120 students and 54 parents yielding a total sample size of 192 subjects to participate in the study. Questionnaires were used to collect data from teachers and students, while interviews and focus group discussions were used to collect information from parents.

The reviewed study established that there was high wastage of girls in the schools system because after initial high enrolment of the girls in lower classes of pre-school and primary schools, most of the girls dropped out in upper classes of primary schools particularly between class 5 and 8. The few who proceeded to secondary schools dropped out before completing, thereby portraying very dismal retention and progression profile. The performance of the females compared to their male counterparts was equally poor. The major causes for this state of affairs were: inability of parents to cater for latent (hidden) school levies due to poverty at the household level, retrogressive socio-cultural practices and low premium attached to the education of the girl-child, early pregnancies and marriages, and inability of the Government through the Ministry of Education to sensitize parents on the value of education as well as

enforce punitive aspects of the Basic Education 2013 on parents who fail to take their children of any gender to school.

The reviewed study recommended that the Government of Kenya should enforce the Children's Act that outlaws early forced marriage and punish parents who do not take children of school going age to schools in Mandera County, Kenya. The current research conquers with the reviewed studies that school levies is a factor affecting participation rates. However the reviewed studies deviate from the current study as they deal with only girls in day schools while the current study engages both boys and girls in public boarding schools. While the study population in Aftin & Orodho (2014) is adequate it is inadequate in Adoyo et al (2013) and Aseta (2011) as they do not sample parents who are key stakeholders in the education sector.

A similar study by Tuwei (2013) sought to establish the effects of hidden costs on grade to grade transitions in rural public secondary schools in Nandi County. Four research questions guided the study. The research study adopted a descriptive survey design. The sample comprised of 248 teachers and 510 students. Data were collected by use of questionnaires and were analyzed by use of quantitative techniques. The findings indicated that transition rate of students from one grade to another was still low with teachers giving repetition as the major cause. Teachers also revealed that extra levies are charged on students leading to payment of extra school fee. Findings revealed that costs of school uniform, motivation fee, building fund, examination fee, and remedial teaching fee affected students' transition. Findings on how foregone earnings affected students 'grade to grade transitions were revealed. Findings also revealed that transport

costs affected students'transition. Students also were in agreement with the teachers that problem of getting fare to school lead to absenteeism.

The reviewed study concluded that hidden costs and foregone earnings affected students'grade to grade transition in secondary schools in Nandi County. The study recommended that there was need for regular review of the fees structure guidelines for public secondary schools in view to accommodate the changing economic trends and inflation rates. The study further recommended that it was also essential to develop special funding programmes for female students to address their unique needs. These include need for sanitary pads. The study suggested that there is need to study how hidden costs of education affect transition rates among urban secondary schools since the reviewed study was carried among rural schools in Nandi County to compare the findings. This is the gap filled by the current study which sought to establish the effects of hidden costs on transition and completion rates among public boarding schools in Kisii County for both urban and rural schools. Furthermore the reviewed study engaged only the effect of hidden costs on transition rates while the present study engaged both transition and completion rates.

Njogu, L. K., Maurice, S. & Kihoro, J.M. (2012) investigated factors that contributed to low rate of transition from primary to secondary school in Juja division. Objectives of the study were to establish the number of pupils registered for KCPE Examination in Juja division primary schools and establish measures that could be taken to improve access of standard eight leavers to post primary education. From the findings, the study concludes that enrolment rates in public primary schools in Juja Division of Thika District declined and that the transition rate decreased. The

problem of low transition rated affect boys more than girls. The study concluded that the most prominent causes of declining rates of transition rate of pupils in public primary schools in the division were poverty and hidden school levies. The study recommended for a similar study to be carried at secondary school level so as to make more comprehensive conclusion. A gap the current study sought to address.

Ogolla (2013) sought to establish factors influencing transition rates from public primary schools to secondary schools in Rangwe Division, Homa Bay District. Specifically, the study was set to establish how costs of education affect transition rates from public primary schools to secondary schools; how economic activities of the parents influence the transition rates from public primary schools to secondary schools; how the pupils' family background influence the transition rate from public primary to secondary schools as well as finding out the influence of social cultural practices in the community on the transition rate from public primary to secondary schools. The study was promoted by the fact that transition in Homa Bay District was low compared to the neighboring districts. The study employed a descriptive survey research design where the target population consisted of all the 100 head teachers of the public primary schools in Rangwe Division, Homa Bay district and 2119 pupils comprising the standard eight classes in the public primary schools in the division and the district education officer Homa Bay District. The stratified random sampling method was used to pick 30% of the public primary schools with 34 head teachers and 639 learners selected.

The reviewed study concluded that, transition from primary school to secondary schools was highly determined by the cost of education, economic activities of the parents, learners' family

background as well as the social cultural factors. The cost of education was reflected in the amount incurred to settle the student in school such as indirect school levies. Given that the Kenyan education system insists on a free and compulsory primary education as well as a subsidized secondary education, this study recommended that the government should instigate effective machineries to ensure that no learner is blocked from transiting to secondary school because of fees and other levies.

Related study by Ondieki et al (2015) purposed to establish the effect of early marriages on transition rates of girls from primary to secondary schools in Nyamusi Division, Nyamira County, Kenya. The study used descriptive research design. The study targeted 61 public primary schools and 14 public secondary schools in the division, 567 teachers, 75 head teachers and 3,728 girls and Area Education Officer in Nyamusi Division. Therefore, the accessible population was 4,371. In this study, public primary and secondary schools were stratified into three educational Zones from which stratified simple random sampling was used to select a total of 45 schools to participate in this study. Simple random sampling was used to select the schools from each zone. All the 45 head teachers of the selected schools were purposively selected to participate in this study. This study used questionnaires, interview schedules and documents analysis to collect data for the study. The study established that early marriages are practiced within the division and it affects girls from proceeding to secondary schools. It also leads to girls dropping out of school. It was also established that early marriages has led to repetition of the girls once they go back to school and also lowers completion and graduation rates of the girls. This lead to repetition and dropout rates to be high as the girls are engaged on socio-economic activities at tender age.

Based on the findings of the reviewed study, it was recommended that the National and County Governments to reinforce the Children Act that discourages early marriages to ensure that all children attain basic education, the parents should be sensitized about the provision of free secondary education to enable girls attend school. Sponsors and well wishers to assist girls from economically challenged backgrounds to enable them to proceed and complete their education .Unlike the current study which tracked the effect of hidden costs on transition and completion for both girls and boys at public boarding secondary schools level, the reviewed studies focused on transition rates from primary to secondary with little emphasis on completion rates. This was a gap worth filling.

2.3 Free Secondary Education hidden costs and completion rates

2.3.1 Global perspective

Despite their financial crises and deficits, some governments in SSA have recently extended free education from primary to include secondary school to achieve high completion rates. For instance, Rwanda and Uganda abolished lower secondary education fees in 2006 and 2007, respectively, and Kenya abolished secondary school fees in 2008. There seems to be a common underlying rationale for the abolition of secondary school fees. For instance, Rwanda introduced a Nine Year Basic Education Programme by extending free education from primary to lower secondary education. One of the main reasons for this was because of high fees charged at secondary education. The Government of Rwanda was concerned that high fees and fewer places in secondary education locked out those who completed primary education and qualified for

secondary education (UNESCO, 2008). These countries that have extended free education to the secondary level make it explicit that one of the purposes of the abolition of school fees is to ensure access to secondary education by all children regardless of individual socioeconomic backgrounds. In other words, governments assume that the abolition of secondary school fees will enable high completion rates among the poor who are unable to access secondary education. But in reality, to what extent does hidden costs hinder   access to secondary education? This is the academic gap filled in the current study.

The abolition of school fees at primary and secondary school level in many countries led to more children to access education. This was accompanied in some countries by changes in the legal frameworks to assure basic education. Analysis of documents in the UNESCO Right to Education Database indicates that 94 out of the 107 low and middle income countries have legislated free lower secondary education (UNESCO, 2014). Of these, 66 have constitutional guarantees and 28 enacted other legal measures. As of 2015, only a few nations charge lower secondary school fees, including Botswana, Guinea, Papua New Guinea, South Africa and the United Republic of Tanzania. In addition to suspending lower secondary school fees, two out of three countries where lower secondary education was not compulsory in 2000 had changed their legislation by 2012. Among those countries that legislated compulsory lower secondary education since Dakar were India, Indonesia, Nigeria, Pakistan, Kenya among others. As of 2012, only 25 countries had no legal requirement for lower secondary attendance, including Iraq, Malaysia and Nicaragua (Hill, 2013).

Fee abolition had a strong positive impact on enrolment in the years after its implementation, confirming that school fees are a cost that affects completion rates negatively (UNESCO, 2003 & 2012). Analysis of experiences in countries such as Ethiopia, Ghana, Kenya, Malawi, the United Republic of Tanzania and Uganda found that fee abolition increased the likelihood of students enrolling in school (Alloush, 2010; Deininger, 2003; Morgan et al., 2012; Muyanga et al., 2010). An assessment of progress based on 82 countries globally finds that only 26% achieved universal lower secondary education in 1999. By 2011, 32% of countries had reached that level. By 2015, the proportion of countries reaching that level was expected to grow to 46%. This assessment is based on information from only 40% of all countries. It includes two-thirds of the countries in North America and Western Europe but only a quarter of Sub-Saharan African countries (UNESCO, 2014).

Due to subsidized basic education initiatives, there was some improvement in primary to secondary transition rates. In Arab states in 2011, countries like Algeria recorded 94 % primary to secondary transition rates, Morocco 83 %, Sudan 92% and Djibouti 66%. Central and Eastern Europe countries like Poland had 98%, Croatia 100%, Slovenia 99%, Russian Federation100% and Czech Republic 99%. Sub-Saharan Africa countries like Angola 44%, Burundi 41%, Chad 65%, Congo 64%, Ghana 87%, Swaziland 90%, Uganda 58%, Tanzania 41% and Kenya 78% (Lange, 2015). Although there has been major progress in expanding access to the lower and even upper secondary levels, inequality relating to income and location and even domestic spending on education still persists. Many children, especially those from poor households, often must work, adversely affecting their participation, retention and academic success in secondary education (UNESCO, 2015).

In Korea enrollment rates in secondary school is extremely high, showing a 59 percent at the middle level and a 91 percent at high school with a transition of 99.7 percent in 2007 (MoEHRD and KEDI, 2007). This was achieved without any significant disparity in enrollment and advancement rates indicating successful achievement of gender parity and there have been no significant dropout problems in secondary education. In Chile primary and secondary education has been free and compulsory and non-sectarian since 1920. The state schools provide free education, consisting of 8 years of primary and 4 years secondary education with increased emphasis on vocational training at the secondary level. In 1996, enrollment in primary school totaled 2,241,536 students, with a teacher-student ratio of 30 to 1. Secondary schools had 739,316 students, with 72 percent of those eligible attending secondary school. The literacy level which was 50 percent in 1920 now stands at 95.7 percent in the year 2000 (UNESCO, 2000). In the People's Republic of China the state runs education through the ministry of education. All citizens must attend school for 6 years followed by 6 years of secondary for ages 12-18. The ministry of education reported a 99 percent attendance rate for primary and an 80 percent rate for both middle and secondary school. In 2002, the literacy rate in china was 90.8 percent; 95.1 percent males and 86.5 percent of females (UNESCO, 2007).

Rwanda abolished lower secondary education fees in 2006 followed by Uganda in 2007. The two governments were concerned about low transition rates from primary schools to secondary schools due to limited places and high fees resulting in many qualified pupils dropping out after completing primary education (Ohba, 2009). The Uganda government introduced free secondary education with an aim of doubling the number of children continuing in school (Reuters, 19th Feb, 2007). The program was expected to cost 30 billion Ugandan shillings (US $ 17.15 million).

According to UNESCO (2010), free secondary policy has increased the student enrollments of public secondary schools in Uganda and girls seem to have benefited more from this new USE policy.

2.3.2 Kenyan perspective

In Kenya the FSE policy was implemented in 2008 (Oyaro, 2008), to enhance transition from primary to secondary schools, to accommodate the enrolment gains made at primary level through the FPE (RoK, 2008). This programme, often referred to as free tuition secondary education, costs the government KShs 10,265.00 (US Dollars 120.8) per child per year (see appendix 9 [RoK, 2008]). The fund is horizontally equitably distributed to all students enrolled in schools irrespective of socio–economic backgrounds. This kind of distribution is limiting and it does not in reality guarantee equity in that the rich and the poor or children from marginalized areas are given equal allocation yet they are unable to top up the difference to cater for all school fees requirement. Since the government subsidy is not adequate to cover the entire cost of education and families and households are required to top up, the rich have a higher chance of survival by topping up fees for their children while the poor and marginalized drop out of school. Khamati & Nyongesa (2013) confirms that in most cases parents pay more as they are required to support government effort in infrastructure development in the schools. This implies that they still have a burden to shoulder in the financing of education at secondary school level. However, the study does not show the nature and extent of this parental support hence a gap filled by this study.

A study by Getange (2013) established that the fees charged to households especially in boarding schools is higher than the subsidy given by the government and can propel drop out rates . However the study is not based in the context of FSE a gap filled by this study. Apart from these costs, parents are supposed to meet other indirect costs such as uniform, development levy, personal effects, and lunch for day school students among other expenses (Kaberia and Ndiku, 2011). Whereas, the cost of living has gone up to warrant charges above the government recommendation, the parents and households remain pressed financially to afford the extra levies and or they do it with strain. This has raised the cost of schooling beyond the reach of an ordinary Kenyan from the low income bracket. An average County School in Kenya charges an average of KShs. 35,000 and a National KShs. 70,000 per child per year (less government subsidy) (RoK, 2012). According to World Bank Global Monitoring Report (2006), many children from poor homes are persistently absent from school and subsequently drop out. Areba (2013) confirms that indirect costs on FPE have had a negative impact on primary education participation rates given the poverty levels in the country. However the study was based on FPE hence need to establish if the same is true for Free Secondary Education which is the gap this study sought to fill.

According to Njeru and Orodho (2003) the introduction of cost – sharing created a heavy burden on households to an estimated current expenditure of between 30 and 44 percent of their annual incomes on education. The study concludes that the secondary school bursary is both insufficient to meet the objectives of enhancing access to Secondary Education and reducing dropout rate among the poor, and also improperly managed. The study does not provide in-depth analysis of the situation and what should be done to remedy it thus a gap in the study filled by the current study. The 2014 Task Force Report on Secondary School Fees confirmed that indirect costs in

secondary education have had impact on participation rates. The report concedes that parents have a burden on school fees. It proposes three secondary school financing options; days scholars KShs. 29,975, Boarding KShs 51,839 and Special schools KShs 55,435.Further it proposes that the government increases the current capitation per child KShs 1,020 and Ksh 10,265 respectively in both primary and secondary (RoK, 2014). Despite the issuance of new secondary fees guidelines,   a public out cry of parents across Kenyan Public Secondary schools revealed that principals inflate their charges. This is even after the 2014 Government Task Force led by Kilemi Mwiria recommended drastic cuts in fees which informed the new 2015 fee guidelines gazetted on 11th March 2015 (RoK, 2015). A study by Orodho (2014) established that some national schools were charging fees in excess of KSh 100,000 per year, while Extra County schools were demanding between KSsh. 60,000 and KShs 80,000. The 2015 new secondary school fees guidelines issued stipulate that day schools fee is begged at KShs 9, 374, boarding schools at KShs.53, 543 and special schools at KShs 37,210 per year. Schools are required to spread the fees in the ratio of 50:30:20 during the three terms. The government promised to provide subsidy of KShs 12,870 per student in regular schools and Sh32, 600 for each learner in special schools. The new guidelines were in response to public outcry over reluctance by the Ministry of Education to implement the 2014 Kirimia Mwiria report (Maryanne, 2015).

Even before the 2015 fees guidelines were implemented the proposed fees structure was greeted with negative and positive criticism in equal measure. As parents welcomed the new structure saying it would make secondary school education affordable, head teachers and unions of teachers argued that the reduced fees would affect running of schools and hiring of extra teachers funded by the parents which consume up to 2 million per year given the under staffing situation

in the schools . The chairman of the Kenya Secondary Schools Head teachers Association indicated that the new guidelines would affect planning and management of schools (Maryanne & Ouma, 2015). Secondary school head teachers also warned that cutbacks in school fees demanded by the government would send home over 100,000 teachers employed by board of management in the institutions as teachers employed by Teachers Service Commission are not enough (Oduor, 2015).

While addressing the skyrocketing cost of education, Kabando wa Kabando blamed it not on failure to issue fees guidelines but on policy inertia by the Ministry of Education. He argued that Education Cabinet Secretary is evidently beholden to ravenous cartels. He categorically singled out policy inertia and administrative stagnation by the Ministry of Education on this essential subject extended to Kilemi Mwiria's 2014 Report. He further argues that it is paradoxical that a student in a public university pays lower fees than a student in secondary school (Ouma et el .2015)

A similar study by Wambugu and Mokoena (2013) sought first to determine the direct costs incurred by parents as part of the cost-sharing policy to finance secondary school education in Kenya and, second, to assess the views of parents about the impact of the cost sharing policy. A case study design involving qualitative data was used. Interviews were conducted with parents who serve on the school district committee. Findings revealed that that there has been an increase in indirect cost at secondary school level as a result of the introduction of the cost-sharing policy in Kenya. Children from poor backgrounds continue to be marginalized as some national schools charge exorbitant school fees. Consequently, most parents view cost sharing as a burden, because

not all of them are able to educate their children beyond the primary school level. In addition, some children are not able to register at the schools of their choice and, to reduce expenditure related to school fees, they end up at district secondary schools. Based on the findings the study recommended that the government should establish the unit cost of secondary education and come up with fee guidelines that are acceptable to all and put in place policies to ensure that school administrators adhere to these fee guidelines.

The reviewed study was conducted in only two secondary schools in the Limuru District, the results cannot be generalized. There is, therefore, a need to carry out further research in more learning institutions on the topic, to determine the influence and impact on this policy in the whole country as this would go a long way in assisting the policy-makers adopt measures that will enable all students in secondary schools access the much desired education that would make them better scholars and citizens. Further the reviewed study only sought to determine the indirect costs incurred by parents and their views on these costs with no regard to the effects they pause on transition and completion rates. The current study was informed by this limitation hence academic gap worth filling.

Kaguma 2012 study on girls' completion rate in public mixed day secondary schools in kirinyaga west district, Kirinyaga County reveled that most girls who attend public mixed day secondary schools do not complete secondary level of education. Despite Kenya Government's commitment to enhancement of girl-child education, their completion rate at secondary school level is not a hundred percent. The purpose of the study was to determine factors affecting the girl-child secondary education completion and to suggest strategies to promote school

completion rate among girls in public mixed day secondary in Kirinyaga West District. The study objectives were, to determine school based factors that influence school girl's school completion, to determine home hold factors that influence girl's school completion, to determine parent's perception on the investment in girl's education, to determine strategies for countering the problems facing the girl child to ensure 100 percent completion rate among girls. The study adopted a descriptive survey design to collect information. The target population was all public mixed day secondary schools in Kirinyaga West District. The District had 30 secondary schools, with total enrolment of 8338 students, 4832 boys and 3506 girls. There were twenty five public mixed day secondary schools with total enrolment of 3208 boys and 1920 girls totaling to 5128 students. The sample used was 20 percent of the target population, head teachers, teachers, students, parents, and educational officers simple random sampling was used. The study instruments employed were questionnaires for the head teachers, teachers, students and interview schedules for educational officers and parents with students in the sample public mixed day secondary schools.

The findings from the reviewed study indicated that factors such as the poverty, school levies fees and inadequate government policies does not foster girls secondary education completion rates, other follow-up factors such as teenage pregnancies, early marriages, child labour, unsupportive parents, indiscipline, lack of guidance and counseling, lack of role models, illicit brew, poor performance and lastly motor bike boda boda business. Based on these findings the study recommended that the government to fund fully instead of subsidizing secondary education, proper implementation of government education policies, and to provide the girl-child with sanitary pads monthly, parents to be more involved. The reviewed study conquers with the

present study that indeed indirect costs are a challenge to completion rates. The reviewed study recommended for the same research to be undertaken in boarding schools given that it was carried in day mixed schools to validate the findings. This is the a academic gap which informed the present study which sought to establish the effects of hidden costs on transition and completion rates among public boarding schools in Kisii County.

2.4 Theoretical framework

This study was based the Classical Liberal Theory of Equal Opportunities advanced by Sherman and Wood (1982) cited by Njeru & Orodho (2003) who expressed the view that there should be equal opportunities in education for all. The classical Liberal Theory of Equal Opportunities asserts that each child is born with a given amount of capacity which to a large extent is inherited and cannot be substantially changed. Thus, educational systems should be designed so as to remove barriers of any nature (economic, gender, geographic) that prevent bright students from lower economic backgrounds from taking advantage of inborn talents, which accelerate them to social promotion. The Classical Liberal Theory states that social mobility would be promoted by equal opportunity of education. According to this theory, educational systems should be designed with a view to removing barriers of any nature for example, barriers based on socio-economic factors, socio-cultural factors, and geographical factors, and school-based factors which prevent learners from taking advantage of their inborn talents. The education offered to such groups of learners would accelerate them to social promotion since education is a great equalizer.

In Kenya, the National Rainbow Coalition (NARC) government in 2007 made primary education free and highly subsidized secondary education in a bid to enhance access to education.

However, with the introduction of cost-sharing in education against the background of poverty levels in the country, many parents may not be able to enroll and sustain their children in primary and secondary schools, given the rising hidden and actual cost of education. Therefore, for equity consideration, it practically becomes impossible to ignore the fact that unequal participation in education will in the long run worsen the status of the poor and the vulnerable groups (Njeru & Orodho, 2003). The classical liberal theory was found to be relevant for this study because hidden costs discriminates poor families who cannot afford to keep their children in school hence not giving them equal opportunity. This impacts on transition and completion rates negatively.

2.5 Conceptual framework

A conceptual framework is a hypothesized model identifying the conceptual or variables under study and showing their relationships. Orodho (2004), defines it as being a model of presentation where a researcher conceptualizes or represents the relationship graphically or diagrammatically. An education system (educational programme) like FSE economically is perceived as an industry and the students as the raw materials, which transforms a given quality of inputs into required outputs. In an education system inputs (Educational cost) include financial resource from Government, parents and other stakeholders, material and human resource. The inputs can be both hidden and unhidden costs. The total cost of the resources (expenditure) the parental contribution which are hidden costs to an education system includes the cost of infrastructure, equipment, land, teachers, teaching learning materials, transport, foregone earnings among others. The inputs have to be processed into outputs for them to be beneficial to the learner. (Woodhall, 1970).
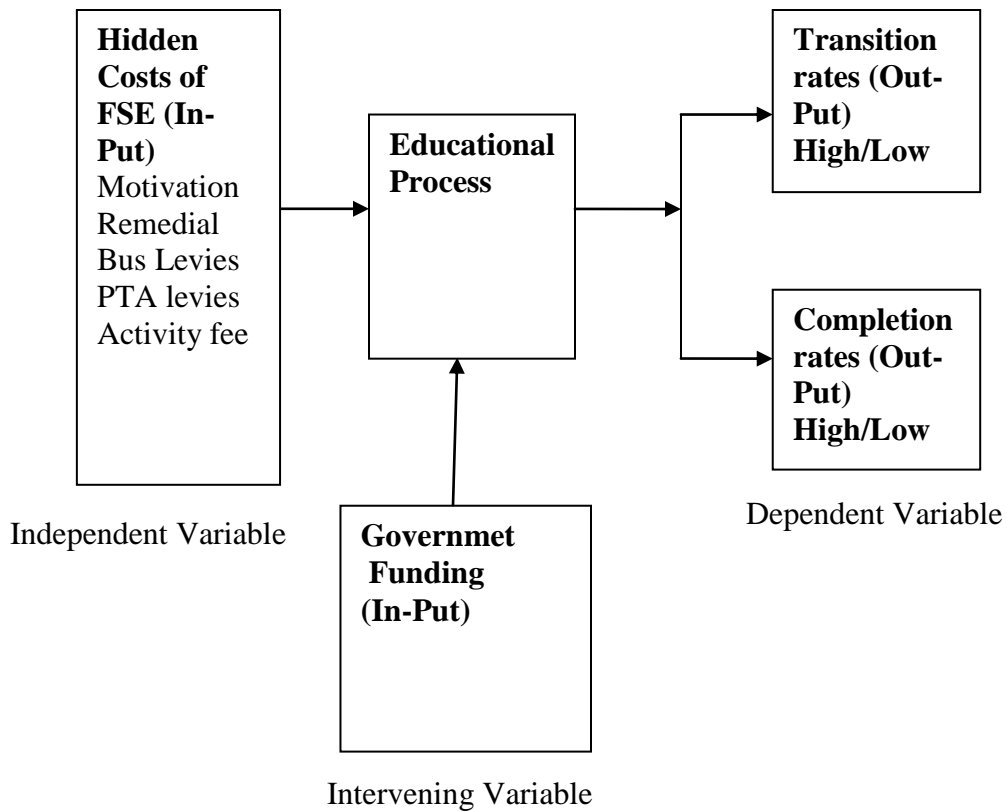
Figure 2.1 Conceptual framework on Hidden Costs of FSE

Source: Researcher (2015)

The Figure 2.1 shows the conceptual framework which encompasses the major variables and their possible influence to each other. The model shows hidden costs in an educational programme (inputs) which is the independent variable being processed into outputs (dependent variable). The various costs of education are the direct and indirect expenses in terms of the facilities and resources required to meet the various FSE needs. These costs are met from various sources such as contribution from the government, parents, donor communities, sponsors cost-savings, scholarships, bursaries, loans and bilateral partners. The Kenyan Government is the

chief financial provider of free secondary education as the intervening variable, however due to unstable economy; it has not been able to fund the programme adequately. Thus parents are forced to supplement the government's efforts in the provision of free secondary education which constitute hidden costs. Adequate input in terms of direct costs by the government is likely to reduce indirect costs(hidden costs) incurred by parents hence affecting the output positively resulting to low wastage rates, high transition and completion rates while inadequate input affects output negatively resulting into high wastage rates, low transition and completion rates .

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This section focuses on the following sub-topics in relation to the methods that were adopted for this research; research design, research locale, target population, sample size and sampling procedures/ techniques, research instruments, piloting of the study, reliability of the instruments, validity of the instruments, data collection procedures and data analysis techniques.

3.1 Research design

Mouton (2001) defines a research design as a plan or blueprint of how one intends to conduct the research. This is further supported by Best and Kahn (2009), who define it as the plans and procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis. The study utilized the correlational research design. Orodho (2003) notes that correlational research design enables the researcher to assess the degree of relationship that exists between two or more variables. In this regard, it enabled the researcher to assess the effect of hidden costs of FSE on students' transition and completion rates being the variables in the study.

3.2 Research locale

The study was carried out in public boarding secondary schools in Kisii County situated in western Kenya, Lake Region. The County borders Nyamira County to the West, Homabay County to the North and Migori County to the South. It covers a total area of 1,317.4 km^2 with a population of 1,152,282 and 245,029 households (RoK, 2009). It consists of nine sub-Counties

namely; Gucha South, Sameta, Masaba South, Kisii Central, Gucha, Kisii South, Nyamache, Marani and Kenyenya. The county has a highland equatorial climate resulting into a bimodal rainfall pattern with an average annual rainfall of 2000mm. Agriculture contributes 80% of household income while other sectors like trade contribute 20%. Socio-economic indicators show that the number of people living in absolute poverty is 60.7% vis-à-vis the national average of 47% (KDDP, 2008-2012). Singleton (1993), advises that the ideal setting for any study should be easily accessible to the researcher and should be that which permits instant rapport with the informants. Kisii County was chosen because it was within reach to the researcher. Furthermore, reports from the County Education Office (MOEST, 2012), for the period before introduction of Subsidized Secondary Education indicated that secondary schools were facing challenges related to drop-outs, understaffing, inadequate physical facilities and congestion in classrooms . It was important also to gain empirical data on FSE especially the effects of hidden costs in FSE and their impact on participation rates in the County since the introduction of FSE in 2008 for appropriate panaceas where possible.

3.3 Target population

Target population is defined as all the members of a real or hypothetical set of people, events or objects to which a researcher wishes to generalize the results of the research study (Borg & Gall, 1989). Orodho (2003), points out that target population is any group of individuals who have one or more characteristics in common that are of interest to the researchers. The target population for this study consisted of all the 60 head teachers from the 60 public boarding secondary schools in Kisii County, 641 class teachers and 240 PTA class representatives. Therefore the total population for the study was 941 subjects.

3.4 Sampling procedures and sample size

3.4.1 The study sample

Orodho (2003), defines a sample as a small group selected for testing which represents a bigger population. According to Borg and Gall (1996), sampling is a research technique used for selecting a given number of subjects from a target population as a representative of the population. Gay (1992) adds that a sample of 10 % of the population is considered minimum while for small population 20% of the population may be required, on the other hand Nwana (1979), recommends 5% to 20% sample for populations that run in thousands, however he asserts that there is no hard and fast rule on sample size. Krejcie and Morgan (1970), have published a scientific formula for determining sample size and table (see appendix 7) for easy reference which was constructed using the following formula.

$$S = X\ 2NP\ (1-P) \div D\ 2\ (N-1) + X\ 2P\ (1-P).$$

S = required sample size.

$X2$ = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

D = the degree of accuracy expressed as a proportion (.05).

No calculations are needed to use the table .To obtain the required sample size, a researcher needs to check through the corresponding values as the table is applicable to any defined population within a given range. Since the study was carried out in 60 public boarding secondary schools clustered in 9 sub-counties, a sample of 52 of the 60 schools was used using simple

random sampling procedure in each stratum. The representative index of $N/60\times52=P$ was used. This resulted to 52 schools; Gucha South 10, Sameta 3, Masaba South 7, Kisii Central 9, Gucha 3, Kisii South 4, Nyamache 3, Marani 4 and Kenyenya 3. Fifty two head teachers were selected automatically from the sampled schools as shown in Table 3.0 and 3.1.

The same method of proportionate random sampling and Krejcie and Morgan (1970) statistical Table was used to select 234 out of 641 class teachers from each sampled school. The representative index of $N/641\times234=P$ was used. This resulted to Gucha South 33, Sameta 18, Masaba South 32, Kisii Central 58, Gucha 11, Kisii South 24, Nyamache 11, Marani 12 and Kenyenya 33. A sample of 148 PTA representatives out of 240 was selected using proportionate random sampling and Krejcie and Morgan (1970) statistical Table. The representative index of $N/240\times 148=P$ was used .This resulted to Gucha South 27, Sameta 10, Masaba South 20, Kisii Central 25, Gucha 7, Kisii South 12, Nyamache 10, Marani 12 and Kenyenya 25. The above samples were proportionally selected from the nine Sub-Counties which represent the strata through a lottery technique as shown in Table 3.0 and 3.1.

3.4.2 Sampling procedure

a. Schools

The study was restricted to the nine sub-counties in Kisii County. They represent the nine strata. Simple random sampling was used to select the 52 representative schools. Each school was assigned a number. The numbers were written down on small pieces of paper which were folded and put in containers representing each stratum. The researcher then picked at random the required number of pieces of papers from each container.

b. Respondents

Head teachers were automatically selected after their schools had been entered. PTA representatives and class teachers were selected randomly from the entered schools. Orodho (2003), states that this technique yields research data that can be generalized to a larger population within margins of error that can be determined statistically. It also permits the researchers to apply inferential statistics to the data. This inference enables the researcher to make certain generations about a population based on obtained values and finally it provides equal opportunity of selection for each element of the population. In this regard, the required number of PTA representatives and class teachers from each school were picked randomly by use of a lottery technique proportionately whereby the symbol Y of paper was mixed with others of equal sizes (shape, texture and colors) and folded into equal sizes and shape, placed in a container mixed well and then the PTA representatives and class teachers were allowed to pick one. Those who picked Y were included in the study.

Table: 3.0

Sampling Matrix

DESCRIPTION	POPULATION	SAMPLE SIZE	REPRESENTATIVE INDEX
Head teachers	60	52	N/60×52=P
Class teachers	641	234	N/641×234=P
PTA Reps	240	148	N/240× 148=P

Source: Kisii County Education Office, (2015).

Table 3.1

Sampling Frame

SUB-COUNTY	SCHOOLS		H/TEACHERS		CLASS TEACHERS		PTA REPS	
	N	P	N	P	N	P	N	P
Masaba South	8	7	8	7	89	32	32	20
Kisii Central	10	9	10	9	160	58	40	25
Kisii South	5	4	5	4	65	24	20	12
Gucha	3	3	3	3	30	11	12	7
Gucha South	11	10	11	10	90	33	44	27
Sameta	4	3	4	3	52	18	16	10
Kenyenya	10	9	10	9	91	33	40	25
Nyamache	4	3	4	3	30	11	16	11
Marani	5	4	5	4	34	12	20	12
Total	60	52	60	52	641	234	240	148

Source: Kisii County Education Office, (2015).

3.5 Research instruments

The data was collected using both primary and secondary sources. Secondary data was collected from official documents from the Ministry of Education, Schools, the Central Bureau of Statistics (CBS), and the government records. Such data included information on student enrolment, transition rates, completion rates, drop-out rates and school fees structures.

3.5.1 Questionnaire for head teachers

Questionnaire was used by the researcher to collect primary data; that was quantitative and qualitative data from the head teachers. According to Orodho (2004), the questionnaire method

can reach a large number of subjects who are able to read and write independently. Khan (1992), says that questionnaires enable the person administering them to explain the purpose of the study and give the meaning of the terms that may not be clear. Further the questionnaires were used for data collection because they offer many advantages in administration. It also presents an even stimulus potentially to large numbers of people simultaneously and provides the investigation with an easy accumulation of data. Gay (1992) maintains that questionnaires give respondents freedom to express their views or opinion and also to make suggestions. It is also anonymous. Anonymity helps to produce more candid answers than is possible in an interview. The questionnaire was used to enlist responses from the head teachers. It comprised of five sections. Section one collected the background information of the respondents. Each of the other four sections collected information related to the hidden costs of Free Secondary Education in relation to students' enrolment, completion rates, parental contribution and adequacy of learning resources. The questionnaire comprised of both close-ended and open-ended items (see appendix 3).

3.5.2 Questionnaire for class teachers

Kothari (2008) defines a questionnaire as a tool that consists of a number of questions printed or typed in a definite order on a form or a set of forms. The questionnaire was used to enlist responses from the teachers. It comprised of three sections. Section one collected the background information of the respondents. Each of the other two sections collected information related to the hidden costs of Free Secondary Education in relation to hidden costs, students' enrolment, transition rates, completion rates, and parental contribution. The questionnaire comprised of both close-ended and open-ended items (see appendix 4.

3.5.3 Interview schedules for parents

Best and Kahn (2009) describe interviews as oral questionnaires. Interviews are crucial means of gathering information that has direct bearing on the research objectives. Interviews can also be used as an explanatory device to help identify variables and relationships besides being used in conjunction with other methods in research undertaking to validate other methods, and to follow up unexpected results (Cohen and Manion, 1995). According to Walker (1985), the use of interviews relies on the fact that people are able to offer accounts of their behaviors, practices and actions to those who ask them questions. Interview schedules were used to guide interviews conducted with the parents on the hidden costs of FSE in Kisii County. The interview guides contained items covering all the objectives of the study. The interview schedule gathered data on the hidden costs of FSE in relation to educational costs from parents, that is in terms of various facilities and resources they were required to provide to meet these costs of FSE (see appendix 5)

3.5.4 Validity of the instruments

Validity is defined as the accuracy and meaningfulness of inferences, which are based on the research results (Orodho, 2005). In other words, validity is the degree to which results obtained from the analysis of the data actually represents the phenomena under study. Validity, according to Borg and Gall (1989) is the degree to which a test measures what it purports to measure. All assessments of validity are subjective opinions based on the judgment of the researcher (Wiersma, 1995). The pilot study assisted to improve face validity of the instruments. The research instruments were validated through the application of content validity procedures. According to Borg and Gall (1989), this is a judgment made better by a team of professionals and in this connection the researcher established content validity by seeking expert judgment from his supervisors while developing and revising the research instruments. This was done

70

by holding discussions, making relevant comments and suggestions that were synchronized with a view of either reviewing them or adopting them for pilot study.

3.5.5 Reliability of the instruments

Reliability is defined by Best and Khan (2008), as the level of internal consistency. Thus, instrument reliability is the degree of consistency that instruments or procedures demonstrate. Mwanje (2001), adds that reliability is the consistency of your measurement or the degree to which an instrument measures the same way each time it is put to use under the same field conditions with the same objects. Mugenda and Mugenda (2003) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial. In order to establish the reliability of the instrument, Cronbach's Alpha was computed. Cronbach's Alpha provides a measure of the internal consistency of a test or scale and it is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test (Tavakol & Dennick, 2011). In order to compute the Alpha values, the data obtained from the pilot study was coded and entered in SPSS version 22. The Alpha values that were generated using SPSS were 0.81 for the head teachers' questionnaire, 0.75 for the class teachers' questionnaire, and 0.71 for parents' schedule. According to DeVellis (2003), the acceptable values of alpha, range from 0.70 to 0.90. The instruments were therefore qualified as reliable.

3.6 Piloting of the study

According to Kombo and Tromp (2006) , piloting enables the researcher to find out if the items in the instruments not only measuring what they are supposed to measure but also consistent a

cross repeated measures of the same constant. Orodho (2002), says that piloting is important in finalizing of research instruments especially when feedback is required in a study. According to Orodho (2004), the purpose of pre- testing the questionnaires is to detect deficiencies in the questionnaires, vague questions and also determine whether the anticipated analytical techniques are appropriate. Before collecting the data for the study, the researcher carried out a pilot study in nine schools. The nine schools were selected randomly, one from each Sub-County. The prepared questionnaires were pre-tested in nine schools in one session. The schools were purposively identified and were excluded from the actual sample of study. From each of the schools where the nine head teachers were stationed, two class teachers and two parents were randomly selected for the pilot study. Therefore the pilot study participants were 9 head teachers, 18 class teachers and 18 PTA representatives, giving a total of 45 cases, which is slightly above the minimum number of 30 cases required for conducting statistical analysis as recommended by Mugenda & Mugenda (2003). During piloting, ambiguous items in the instrument were corrected. It also enabled the researcher to test the reliability of the instrument and also familiarize himself with the administration of the questionnaires in the field (Orodho, 2009).

3.7 Data collection procedures

Kombo and Tromp (2006) define data collection as the gathering of information to serve or prove some facts. Prior to data collection, the researcher sought consent from the director Institute of Post Graduate and Research of Kabarak University (see appendix 12). The researcher further sought for a research permit from the National Commission for Science Technology & Innovations (NACOSTI) which was presented to the Education offices through the County Director of Education (CDOE) for the purpose of obtaining legal consent to carry out the research (see appendix 13). After acquiring the legal consent to carry out the research the

researcher administered the research instruments to the respondents. The consent of the Head teachers of the respective schools was also sought and they were consulted on the mode of administering the questionnaires and the suitable time when the information was to be collected from them, class teachers and the parents' representatives (see appendix 1 and 2). Data from the head teachers and class teachers was collected using questionnaires; interview schedules were used to collect data from parents' representatives while documents analysis were used to collect data from official documents on government cost on FSE, completion and transition rates.

3.8 Methods of data analysis

Data analysis refers to a systematic searching and arranging interviews, field notes, data and other materials obtained from the field with the aims of increasing their understanding and enabling the researcher to present them to others (Orodho, 2005). Kerlinger (1973), defines data analysis as categorization, ordering, manipulation and summarizing of data to obtain answers to research questions. After all data was collected, the researcher conducted data cleaning, which involved identification of incomplete or inaccurate responses, which were corrected to improve the quality of the responses. After data cleaning, the data was coded and entered in the computer for analysis using the Statistical Package for Social Sciences (SPSS) version 22. This research yielded both qualitative and quantitative data. Qualitative data was analyzed qualitatively using content analysis based on analysis of meanings and implications emanating from respondents information and documented data. As observed by Gray (2004), qualitative data provides rich descriptions and explanations that demonstrate the chronological flow of events as well as often leading to serendipitous findings. On the other hand, quantitative data was analyzed using various statistics including regression analysis and measures of central tendency.

73

Quantitative data analysis required the use of a computer spreadsheet, and for this reason SPSS version 22 was used. As Martin and Acuna (2002), observes SPSS Version 22 is able to handle large amount of data, and given its wide spectrum of statistical procedures purposefully designed for social sciences, it is also quite efficient. The research question was analyzed using simple descriptive statistics. The statistics used included frequency counts, means and percentages while for hypotheses one and two regression analysis was used. In order to make reliable inferences from the data, the statistical tests were subjected to tests of significance level of 0.05 (Orodho, 2005). The results of data analysis were presented using frequency distribution tables, pie charts and bar graphs as shown in section four of this study.

3.9 Ethical considerations

Resnik (2005) defines ethics as principals or standards that protect the ownership of participants in a research study. They are actions taken to ensure safety and ownership of the participants is not violated whatsoever. These standards include voluntary participation, informed consent, and confidentiality of information, anonymity to research participants and approval for the study from relevant authorities. The researcher informed the respondents the purpose of the study so as to lessen suspicion. Further, as already stated permission was sought from the relevant authorities prior to data collection. According to Creswell (2008) in research, individuals participating need to know the purpose and aims of the study, how the study will be used and the likely consequences the study will have on their lives. When they participate and provide information, their anonymity should be protected and guaranteed by the researcher. The information collected from the respondents was treated with strict confidentiality and was only used for the purpose of this study. The researcher's citations from the original sources were recognized appropriately.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter presents data collected from the field, analysis, presentation and interpretation of the findings. The main objective of the study was to investigate the hidden costs of FSE to parents and their impact on transition and completion rates in Kisii County. The data were collected from head teachers, class teachers and PTA representatives in 52 public boarding secondary schools stratified in nine sub-counties of Kisii County, using questionnaires and interview schedules. The data collected sought to answer the following research question and hypotheses.

1. What are the hidden costs in the provision of FSE in Kisii County?

$H_{01:}$ Hidden costs have no significant effect on students' transition rates among public boarding schools in Kisii County.

$H_{02:}$ Hidden costs have no significant effect on students' completion rates among public boarding schools in Kisii County.

The respondents provided the information required in the questionnaires without undue pressure from the researcher. The researcher then collected the questionnaires, analyzed, presented and interpreted the findings. The first section for this chapter summarizes the personal data of the study participants. The other sections present analysis based on each research questions as stated below:-

4.1 Demographic data of participants

The study was analyzed using data from 52 head teachers, 234 class teachers and 148 PTA representatives; with a wide range of demographic distinctiveness. These characteristics are summarized and presented in this section.

4.1.1. Demographic data of head teachers

Of the 52 head teachers who participated in the study 41 (78.8%) were male while 11 (21.1%) were female. Majority of them; that is 33 (63.5%) head teachers were Bachelors' Degree holders, 5 (9.6%) were Diploma Certificate holders and 14 (26.9%) were Masters' Degree holders. As shown in Figure 4.1. The head teachers had varying years of experience ranging from two to over fifteen years as shown in Table 4.1 and Figure 4.1.

Table 4.1

Head Teachers' Demographic Data

	Gucha South	Sameta	Nyamache	Masaba South	Kisii South	Kisii Central	Kenyenya	Gucha	Marani	Total
SUB-COUNTIES										
Frequency	10 19.2%	3 5.8%	3 5.8%	7 13.5%	4 7.7%	9 17.3%	9 17.3%	3 5.8%	4 7.7%	52 100%

GENDER			
	MALE	FEMALE	TOTAL
Frequency	41 78.8%	11 21.1%	52 100.0%

QUALIFICATIONS				
	DIPLOMA	DEGREE	MASTERS	PhD	TOTAL
Frequency	5 9.6%	33 63.5%	14 26.9%	- -	52 100.0%

TEACHING EXPERIENCE				
	1-5	6-10	11-15	OVER 15	TOTAL
Frequency	25 48.1%	14 26.9%	7 13.5%	6 11.5%	52 100.0%

The information on the head teachers' academic qualifications and experience in the sampled schools was significant to verify their competence since they were the administrators responsible for running of FSE as MOEST agents especially on finances. Other related studies have underscored head teachers' academic and work experience as a contributing factor towards the mismanagement of FSE funds and imposition of illegal levies constituting hidden costs to parents to fill the gap hence impacting negatively on transition and completion rate. Many principals managing schools lack the knowledge of management process. It is presumed that

adequate availability and proper utilization of physical resources improves performance and output of the institutions (Aijaz, 2010).
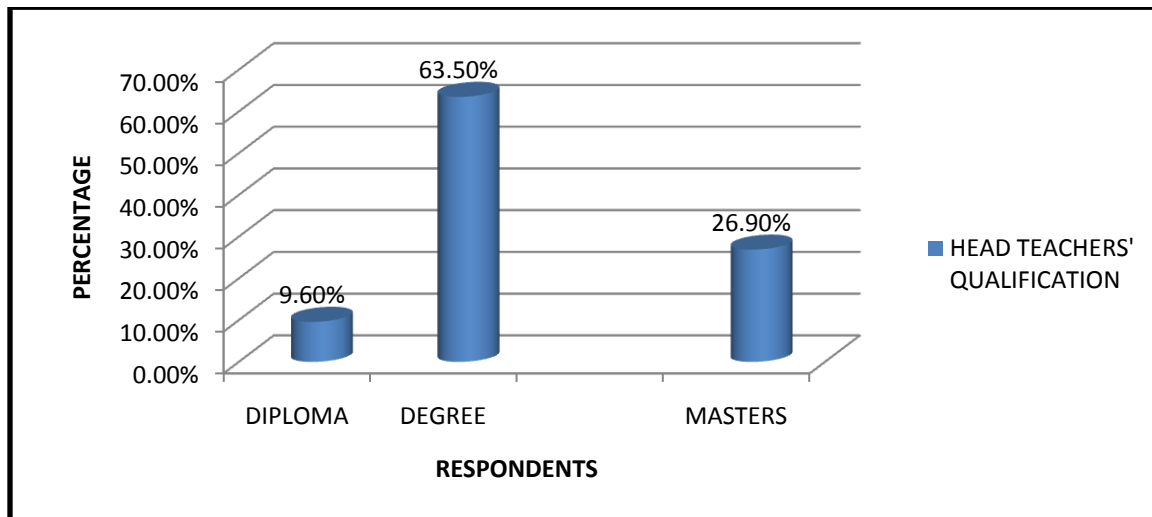
Figure 4.1.

 Professional Qualifications of the Head/Teachers

Monga're (2012), sought to assess the impact of management of physical resources on KCSE performance among public secondary schools in Kisii Central Sub-County. The study concluded that school managers need innovative skills in terms of acquisition, utilization and maintenance of physical and material resources. She thus recommended in- servicing of head teachers to enable them perform their roles effectively. Hence this study reinforces the current study especially on Monga're's suggestion on the need to in-service the head teachers to avoid mismanagement of already scarce material and financial resources of which cost is again passed on to parents as hidden costs .

4.1.2. Demographic data of class teachers

Of the 234 class teachers who participated in the study 132 (56.4%) were male while 102 (43.6%) were female. Majority of them 145 (62 %) class teachers were Bachelors' Degree

holders, while 63 (26.9%) were Diploma Certificate holders and 26 (11.1%) were Masters'

Degree holders. As shown in Table 4.2.

Table 4.2

Class Teachers' Demographic Data

	SUB-COUNTIES									
	Gucha South	Sameta	Nyamache	Masaba South	Kisii South	Kisii Central	Kenyenya	Gucha	Marani	Total
Frequency	33 14.6%	18 7.8%	11 5.3%	32 19.3%	24 7.7%	58 21.1%	33 14.6%	11 5.3%	12 3.9%	234 100%
	GENDER									
	MALE			FEMALE			TOTAL			
Frequency	132 56.4%			102 43.6%			234 100.0%			
	QUALIFICATIONS									
	DIPLOMA	DEGREE		MASTERS	PhD		TOTAL			
Frequency	63 26.9%	145 62%		26 11.1%	- -		234 100.0%			
	TEACHING EXPERIENCE									
	1-5	6-10		11-15	OVER 15		TOTAL			
Frequency	68 29.1%	81 34.6%		54 23.1%	31 13.2%		234 100.0%			

The information on the class teachers' academic qualification and experience in the sampled

schools was significant to verify their competences since they were the ones responsible for

running their respective classes as delegated by head teachers on various aspects especially on

record keeping and welfare of students which was of concern in this study in tracking transition

and completion rates. This view is supported by Nzoka (2006) who argues that HODs and class

teachers administered departments and classes and had a responsibility to update the head

teachers on records necessary, curriculum delivery and material requirements of their respective department and classes.

4.1.3 Demographic data of PTA Representatives

There were 148 PTA representatives who participated in the study. The majority of the sampled parents came from Gucha South Sub-County 27(18.2%), Kisii Cental 25 (16.9%), Kenyenya 25 (16.9%), Masaba South 20 (13.5%), Marani 12 (8.1%), Kisii South12(8.1%) while 10(6.8%) were from Nyamache, 10 (6.8%) Sameta and 7 (4.7%) were from Gucha sub-county. Of the 148 PTA representatives, 56 (37.8%) were female and 1158 (58.1%) were male. Majority of the parents were married; that is 1400 (70.1%) while 596 (29.9%) were single as presented in the Table 4.3.

Table 4.3

Demographic Data of PTA Representatives

	Kisii Central	Kisii South	Masaba South	Gucha South	Kenyanya	Nyamache	Marani	Sameta	Gucha	Total
	SUB-COUNTY									
Frequency	25	12	20	27	25	10	12	10	7	148
	16.9%	8.1%	13.5%	18.2%	16.9%	6.8%	8.1%	6.8%	4.7%	100%

	GENDER				
	MALE		**FEMALE**		**TOTAL**
Frequency	92		56		148
	62.2%		37.8%		100.0%

	MARITAL STATUS				
	MARRIED		**SINGLE**		**TOTAL**
Frequency	104		44		148
	70.9%		29.1%		100.0%

	No. of students in Secondary School			
	1-2	3-4	5 and above	Total
Frequency	120	24	4	148
	81.1%	16.2%	2.7%	100.0%

Parents have always played a critical role in the provision of education for their children in various aspects. As established in table 4.3; 44 (29.1%) of the sampled parents representatives (PTAs) were single parents and 24 (16.2%) had more than three children in secondary schools. This implies that these parents were likely to be affected financially given their burden of large families and dependence on single support consequently leading to their children dropping out of schools and impacting negatively on participation rates. As noted, Kenya's Economic Report (2013), revealed that the number of people falling into poverty has increased annually and is projected to rise for as long as poverty persists. For instance, in 2007, the number of poor people in the Kenyan population was estimated at 18.2 million, rising to 19.5 million and later 20.1 million in 2008 and 2010. Kisii county poverty index stood at 56 % as at 2013. UNESCO (2000),

confirms that poverty forces children out of school in poor families hence impacting negatively on transition and completion rates.

4.3 Hidden costs met by parents under FSE programme

The research question number one of this study was to establish the hidden costs of FSE to parents. To this end, interview schedules and questionnaires were used to obtain data from 52 H/teachers, 148 PTA representatives and 234 class teachers from the sampled schools in Kisii County respectively. The findings presented on Table 4.4 and Table 4.5 showed that annually, parents incurred hidden costs under the FSE programme

Table
4:4 Hidden Costs parents meet under FSE programme

INSURANCE OF BUSES AND VANS

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	24	46.2	46.2	46.2	1000
	YES	28	53.8	53.8	100.0	
	Total	52	100.0	100.0		

DEVELOPMENT FUND

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	YES	52	100.0	100.0	100.0	5000

COMPUTER STUDIES

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	20	38.5	38.5	38.5	3000
	YES	32	61.5	61.5	100.0	
	Total	52	100.0	100.0		

INTERNAL TESTS

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	YES	52	100.0	100.0	100.0	2000

ACTIVITY FEES

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	4	7.7	7.7	7.7	1000
	YES	48	92.3	92.3	100.0	
	Total	52	100.0	100.0		

SUPPLEMENTARY TEXTBOOKS

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	YES	52	100.0	100.0	100.0	6000

CAUTION MONEY

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	YES	52	100.0	100.0	100.0	500

PRIZE AWARD

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	6	11.5	11.5	11.5	2000
	YES	46	88.5	88.5	100.0	
	Total	52	100.0	100.0		

It can be deduced from Table 4.4 and Table 4.5 that annually parents incur quite a number of hidden costs under FSE programme. All parents in the 52 sampled (100%) confirmed paying development fee (100%), internal tests (100%), supplementary books (100%), caution money (100%), BOM teachers salary (100%) and School Identification Cards (100%) while parents

from 28 schools (53.8%) confirmed to have paid for school bus levies, 32 (61.5%) computer studies, 40 (76.9%) optional subjects, 38 (73.1%) academic trips among other levies and a few of the sampled fee structures (see appendix 9 and 10).

Table 4.5
Other Hidden Costs parents incur under FSE programme

ACADEMIC SUPPORT PROGRAM

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	11	21.2	21.2	21.2	5000
	YES	41	78.8	78.8	100.0	
	Total	52	100.0	100.0		

BOM TEACHERS

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	YES	52	100.0	100.0	100.0	2000

SCHOOL BUS LEVIES

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	24	46.2	46.2	46.2	3000
	YES	28	53.8	53.8	100.0	
	Total	52	100.0	100.0		

PARENTAL CARE

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	49	94.2	94.2	94.2	2000
	YES	3	5.8	5.8	100.0	
	Total	52	100.0	100.0		

SCHOOL ID

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	YES	52	100.0	100.0	100.0	500

UNIVERSITY APPLICATION FORMS

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	11	21.2	21.2	21.2	300
	YES	41	78.8	78.8	100.0	
	Total	52	100.0	100.0		

OPTIONAL SUBJECTS

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	12	23.1	23.1	23.1	2000
	YES	40	76.9	76.9	100.0	
	Total	52	100.0	100.0		

ACADEMIC FIELD TRIPS

		Frequency	Percent	Valid Percent	Cumulative Percent	Average Cost
Valid	NO	14	26.9	26.9	26.9	2500
	YES	38	73.1	73.1	100.0	
	Total	52	100.0	100.0		
	G.Total	52	100	100	100	37800

It can be deduced from Table 4.4 and 4.5   that annually parents spend an average of KShs 37,800 per child under the FSE programme less government subsidy. Much of these funds fund supplementary books, KShs 6,000, Development, KShs 5,000, academic support programmes KShs 5,000 and Computer studies 3,000 KShs. On the other hand, internal tests charges were relatively low at KShs 2,000 and activity fee KShs 1,000 because the government supplemented annually though not adequately. Moreover it was noted that parents spent KShs 5,000 on extra tuition, KShs 500 on caution on BoM teachers and KShs 3,000 on bus levies.

Evidently, as shown in Table 4.4 and 4.5, parents stepped in to supplement the non-statutory fee under FSE programme. Consequently this constitutes the hidden cost/indirect cost met by parents. However according to information from most head teachers who feared victimization from higher authorities; parents provided mainly uniforms and boarding fee for their children. The explication from the data presented above is that parents contribute towards FSE but unfortunately many of these parents depended on unreliable sources of income which were hardly enough to meet the basic needs of their families and have something to spare for meeting the hidden costs of FSE. Consequently most of their children dropped out of school impacting negatively on transition and completion rates.

Kremer and Ngatia (2008) evaluated a random lottery that gave uniforms to students in Busia District, Kenya. They found that there were improvements in attendance and preliminarily test scores for students who receive uniforms. They measured the impact of providing uniforms free to students in schools. This idea of providing uniforms reduces cost of education for those

85

students, who would have had to purchase the uniforms. This is confirmed by Lewin (2008), who points out that one of the greatest challenges of gaining access to secondary education in Sub Saharan Africa is affordability. This is because secondary education in the majority of the countries is part of a fee-paying sector. This means that parents are required to meet some operational costs such as tuition and maintenance and may be required to pay for many other things including food, uniforms, learning materials, and special equipment. Consequently, children from poor households whose parents cannot meet the costs are less likely to participate in secondary education.

Scrutiny of the Kenyan Public Secondary School fees structures in the year 2015 by Nation Media Group across the Kenyan schools revealed that schools in Kisii county and other parts of the country charged fees which was beyond the affordability of most parents (Odunga, 2015).In this regard the study sought parental views on their perception on hidden costs of FSE in regards to affordability. 85 (57.4%) of the 148 (100%) PTA representatives revealed that the hidden costs were high to afford, 51 (34.5%) said they were too high and 12 (8.1%) low as shown in Table 4.6 and Figure 4.2.

Table 4.6

Parents' Perception on Hidden Costs of FSE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LOW	12	8.1	8.1	8.1
	HIGH	85	57.4	57.4	65.5
	TOO HIGH	51	34.5	34.5	100.0
	Total	148	100.0	100.0	

Other studies also show that although free education reduces households' direct costs, indirect costs remain as a substantive deterrent for children from poor households to gain access to education. Ghana is one of the countries that have been providing free basic education since 1996. Under the Free Compulsory Universal Basic Education (FCUBE)5, not only primary but also lower secondary education became free of charge. However, as a result of the abolition of school fees, some schools introduced indirect fees to compensate the lost revenue, which was in some cases an obligation for district authorities thus, parents in primary and lower secondary school were still required to pay for operational costs, parent teacher association (PTA), textbooks, uniforms and other costs (Akyeampong, 2009).
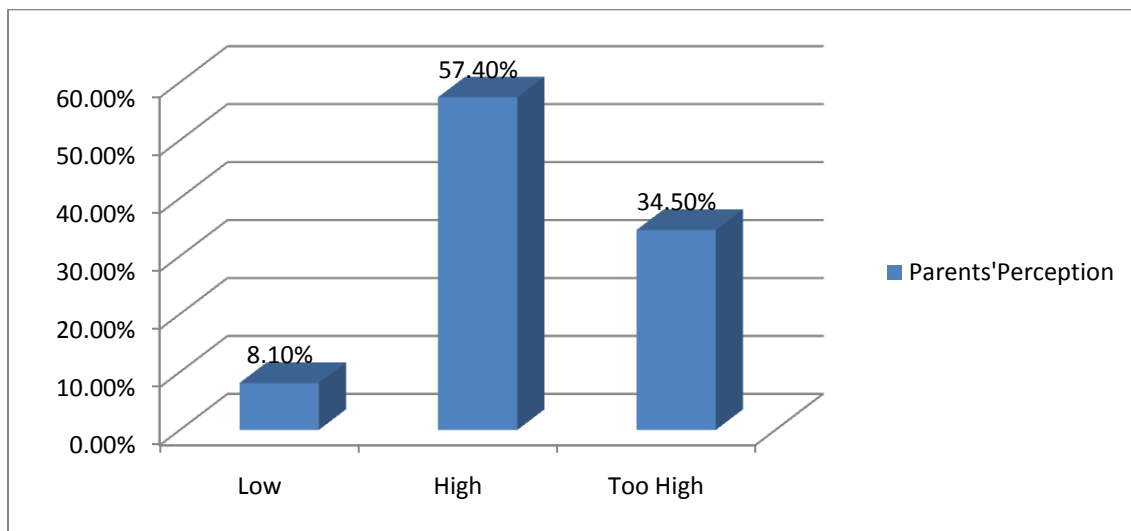
Figure 4.2

Parents' perception on Hidden Costs of FSE

The study further sought to find out from the 234 class teachers if hidden affected transition and completion rates. 216 (92.3%) confirmed that it does while 18 (7.7%) denied of its effect on participation rates as shown in Table 4.7 .

Table 4.7

Do Hidden Costs Affect Transition and Completion Rates in your School?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Number of teachers who said NO	18	7.7	7.7	7.7
	Number of teachers who said YES	216	92.3	92.3	100.0
	Total	234	100.0	100.0	

To validate the claims that hidden costs affected the participation rates, the researcher sought to know from the sampled parents if they had any student who had dropped from school due to hidden costs of FSE. Table 4.8 and Figure 4.3 showed that 20 parents (13.5%) indicated that they had children who had dropped from school while 128 (86.5%) did not. They stated various reasons for the drop-outs as; development fund (25.0%), BoM teachers levies (25.0%), academic support fees (15.0%), bus fund (10.0%), supplementary books fee (10.0%) and activity fees (10.0%) development fees (24.7 %,) as shown in Table 4.8.

Table 4.8

Reasons for Dropping out of School

Has any of your child dropped out of school?		F	%
	YES	20	13.5
	NO	128	86.5
Total		148	100.0
Reason for dropping		F	%
Optional Subjects levies		1	5.0
Development fund		5	25.0
Bus fund		2	10.0
Activity fee		2	10.0
BoM Teachers levies		5	25.0
Supplementary books fee		2	10.0
Academic support fee		3	15.0
Total		20	100.0

The Table 4.8 and Figure 4.3 above underscore the already held proposition that hidden costs under FSE programme affect transition and completion rates. This findings correspond with Muthwii's who established that still under the Free Primary Education, parents were still responsible for meeting the costs of school construction thus, schools levied fees for development which affect participation rates negatively (Muthwii, 2004). The study was carried out in the context of FPE hence the current study validates the same argument under FSE programme as knowledge gap filled.

89
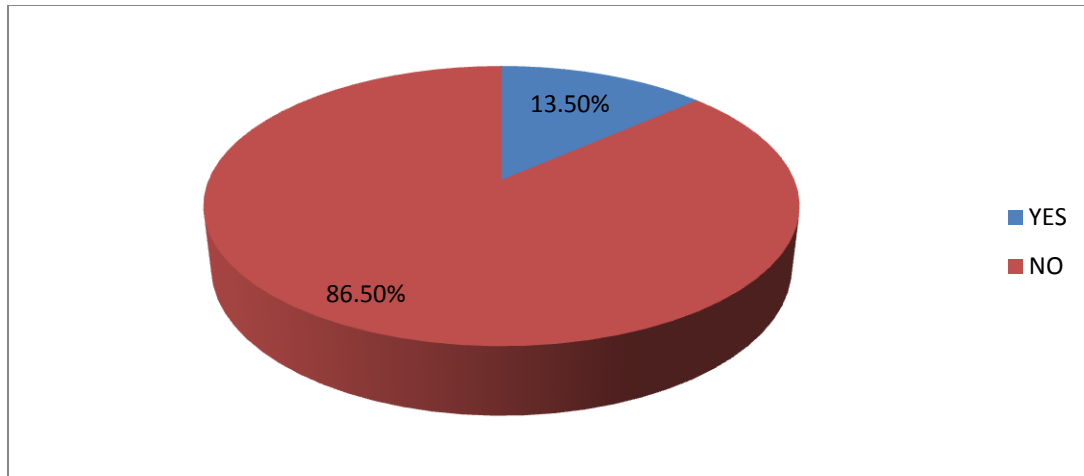
Figure 4.3

Has any of your Child Dropped out from School?

The study further established from class teachers that students who failed to pay the set hidden costs were sent away from school. Those who fail to raise the required fee may opt to dessert school all together. All the 234 (100%) sampled class teachers confirmed that head teachers send students home to collect the required levies as shown in Table 4.9 below.

Table 4.9

Does your Head Teacher send Students Home for School Levies?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Number of teachers who said YES	234	100.0	100.0	100.0

This confirms the parliamentary education house committee Report of 2012 which pointed out that the Free Secondary School programme had faced many challenges including lack of schools to match the growth in enrolment arising from the big number of graduates from primary schools, shortage of teaching materials, extra levies and large number of school drop-outs (Siringi, 2012).

4.4 The impact of the hidden costs on students' transition rates

The second objective was to establish the effect of the hidden costs on student transition rates among public boarding secondary schools in Kisii County. The researcher found it necessary to analyze this phenomenon in order to access the impact of the hidden costs of FSE on students' transition rates. Questionnaires were used to capture responses from head teachers and class teachers. The results of the transition rates were determined by tracking 1 cohort in each of the 52 sampled schools as from 2011 to 2014 in terms of drop out rates against hidden costs in the 9 Sub-Counties. Each cohort was tracked for 4 years resulting to 208 observation cases in total.

To achieve this objective the data collected was analyzed using simple linear regression to determine whether there is a relationship between the two variables. The transition rates were taken as the response variable while the hidden costs were taken as the predictor variable. The correlation between the two variables was also calculated to determine the strength of the linear relationship between the two variables as shown in Table 4.10.

Table 4.10

Average Hidden Costs and number of Students who failed to Transit.

	Mean	Std. Deviation	N
NUMBER OF STUDENTS FAIL TO MOVE TO THE NEXT CLASS	13.32	1.861	208
TOTAL HIDDEN COSTS	23878.4856	1840.05480	208

Table 4.10 on average hidden costs and number of students who failed to transit indicated that an average of 14 students failed to transit to the next class per year at an average hidden cost of KShs 23,878.45. The study further sought to establish if there was any correlation between hidden cost and students' transition rates. The Pearson's correlation coefficient of .925 as shown in Table 4.11 indicated that there was strong positive linear correlation between the two variables (transition and hidden costs). This implied that as one variable increased so did the other. As hidden costs increased the number of students who failed to transit increased and thus those who transited to the next class reduced respectively. Table 4.11 shows the correlations between total hidden costs and number of students who failed to transit to the next class.

Table 4.11
 Correlations between total Hidden Costs and no. of Students who failed to Transit.

		NUMBER OF STUDENTS FAILED TO MOVE TO THE NEXT CLASS	TOTAL HIDDEN COSTS
Pearson Correlation	NUMBER OF STUDENTS FAILED TO MOVE TO THE NEXT CLASS	1.000	.925
	TOTAL HIDDEN COSTS	.925	1.000
Sig. (1-tailed)	NUMBER OF STUDENTS FAILED TO MOVE TO THE NEXT CLASS	.	.000
	TOTAL HIDDEN COSTS	.000	.
N	NUMBER OF STUDENTS FAILED TO MOVE TO THE NEXT CLASS	208	208
	TOTAL HIDDEN COSTS	208	208

*Correlation is significant at the 0.01 level (1-tailed).

Results as presented in Table 4.11 indicate that hidden costs were significantly related to transition rates at α = 0.05. The correlation coefficient was found to be positive: therefore increased hidden costs were likely to have a positive impact on transition rates. A model summary and regression equation were generated from the correlation established above where the predictor (constant) was the total hidden costs and dependent variable being number of students who failed to transit to the next class. In the model summary the R square of 0.85 was multiplied by 100 to get 85% of the total variation caused by the independent variable (hidden costs) being explained by the model with a standard error of estimates of 0.708 as shown in Table 4.12 and Table 4.13 respectively.

Table 4.12

Regression Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.925[a]	.856	.855	.708

*a. Predictor: (Constant), hidden costs

*b. Dependent Variable: Students who failed to transit

Table 4.13

Regression Equation for Coefficients for Transition and total Hidden Costs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig. .000	95.0% Confidence Interval for B	
							Lower Bound	Upper Bound
		B	Std. Error	Beta				
1	(Constant)	-9.030	.640		-14.103		-10.29	-7.768
	TOTAL HIDDEN COSTS	.001	.000	.925	35.005	.000	.001	.001

*a. Dependent Variable: Transition rates

The coefficients in the Table 4.13 were used in coming up with the model that best predicts the dependent variable from the independent variable that is;

$y = a_0 + b1X$ Where

Y= Transition

a_0= constant

x= total hidden costs

Therefore:

$$y = -9.030 + .001X$$

If total hidden costs in a particular year for a particular school were KShs 20,000, then the number of students who would fail to transit to the next class would be 30 and if they increased to KShs 35,000 then those who fail to transit would be 60. Therefore conclusively as the total hidden costs increased, so did the number of students who failed to transit to the next class.

Transition decreased with increase in total hidden costs. The significance of the regression equation above to the study is that it enabled the researcher to establish that there was positive linear correlation between the two variables. As the independent variable increased so did the response variable as show in the example above. The significance level of .000 is less than .05 that is at 95% confidence interval implying that the model is statistically significant as a predictor of the variables under study.

The first hypothesis of study hypothesized that hidden costs have no significant effect on students' transition rates among public boarding schools in Kisii County. This hypothesis was tested by using the regression analysis and it was shown that hidden costs and transition rates are highly correlated(r=.925). Based on the findings of the regression equation in table 4.13 we reject the null hypothesis (p<0.05) of there being no significant effect of hidden costs on students' transition rates and therefore adopt the alternative hypothesis which states that hidden costs have significant effect on students' transition rates among public boarding schools in Kisii County. It therefore implies that hidden costs have a significant positive effect on transition rates.

The findings above concur with the 2004/2005 Education Sector Repot which revealed that though there are several reasons for low transition and completion rates at secondary level, high costs of fees is one important cause (MOEST, 2004 & 2005). Akyeampong (2009) and Rolleston (2009) in their study made it explicit that not only do indirect costs hinder access of the poor but also opportunity costs substantially affect the chances of poor children to enroll in and complete basic education. A similar study of access patterns in Malawi also concludes that access to education in the country continues to reflect household wealth (Chimombo, 2009).

Thus, despite direct fees being abolished, the current study and the reviewed studies clarify that the abolition of fees has not been enough to ensure access to education for the poor as hidden costs out weigh parents' ability to educate their children.

4.5.2 The impact of the hidden costs on students' completion rates

The researcher found it necessary to analyze this phenomenon in order to access the impact of the hidden costs of FSE on students' completion rates. This study investigated the effect of the hidden costs to students' completion rates. To achieve this objective questionnaires and interview schedules were used to capture responses from head teachers, class teachers and PTA representatives. Data was analyzed using simple linear regression to determine whether there was a relationship between the two variables. The completion rates were taken as the response variable while the hidden costs were taken as the predictor variable. The correlation between the two variables was calculated to determine the strength of the linear relationship between the two variables. The summarized descriptive statistical results of the completion trends in the 52 sampled schools in the nine sub-Counties in Kisii County were presented in Table 4.14

96

Table 4.14

Total hidden costs and students who failed to complete the four year circle.

	Mean	Std. Deviation	N
NUMBER THAT FAILED TO COMPLETE THE FOUR YEARS	55.13	9.577	52
TOTAL HIDDEN COSTS FOR THE FOUR YEARS	62352.134	10048.4237	52

Information in Table 4.14 on descriptive statistics indicates that   an average of 56 students failed to complete the four years of secondary school education at an average total hidden costs of KShs 62,352.13. The researcher found it worthwhile to analyze the correlations between completion rates and total hidden costs. The Pearson's correlation coefficient of .902 showed a strong positive linear correlation between the two variables; that is   completion rates and hidden costs which implies that as one variable increased so did the other. Hence as the hidden costs increased the total number of students who failed to complete the four years of secondary school education also increased as shown in Table 4.15.

Table 4.15
Correlations between Completion Rates and total Hidden Costs

		NUMBER THAT FAILED TO COMPLETE THE FOUR YEARS	TOTAL HIDDEN COSTS FOR THE FOUR YEARS
Pearson Correlation	NUMBER THAT FAILD TO COMPLETE THE FOUR YEARS	1.000	.902
	TOTAL HIDDEN COSTS FOR THE FOUR YEARS	.902	1.000
Sig. (1-tailed)	NUMBER THAT FAILED TO COMPLETE THE FOUR YEARS	.	.000
	TOTAL HIDDEN COSTS FOR THE FOUR YEARS	.000	.
N	NUMBER THAT FAILED TO COMPLETE THE FOUR YEARS	52	52
	TOTAL HIDDEN COSTS FOR THE FOUR YEARS	52	52

*Correlation is significant at the 0.01 level (1-tailed).

The findings in Table 4.15 revealed that the Pearson's correlation coefficient of .902 showed a strong positive linear correlation between the two variables of completion and hidden costs which implied that as one variable increased so did the other. Hence as the hidden costs increased the total number of students who failed to complete the four years of secondary school education also increased.

A model summary was generated from the correction established above where the predictor (constant) was the total hidden costs and dependent variable being number of students who failed to complete the four year circle of secondary education. In the model summary, the R square of .813 is multiplied by 100 to get 81.3 % of the total variation caused by the independent variable

(hidden costs) being explained by the model and regression equation with a standard error of estimates of 2.232 as shown in Table 4.16 and Table 4.17.

Table 4.16

Completion Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902[a]	.813	.810	2.232

*a. Predictor: (Constant), total hidden costs

*b. Dependent Variable: Students who failed to complete

Table 4.17

Regression Equation for Coefficients for Completion and total Hidden Costs.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.525	3.676		.417	.000
	TOTAL HIDDEN COSTS FOR THE FOUR YEARS	.001	.000	.902	14.765	.000

*a. Dependent Variable: completion rates

The coefficients in the Table 4.17 were used in coming up with the model that best predicts the dependent variable from the independent variable that is;

$y = a_0 + b1X$ Where

        Y= Completion rates

        a_0= constant

x= total hidden costs

Therefore:$y = 1.53 + .001X$

If total hidden costs in a particular year and school were KShs 20,000 then the number of students who would failed to complete the four years of secondary education would be 21 and if they increased to KShs 35,000 then those who fail to complete would be 36. Therefore as the total hidden costs increased so did the number of students who failed to complete the four years of secondary education. Hence completion decreased with increase in total hidden costs. The significance level of .000 is less than .05 that is 95% confidence interval implying that the model is statistically significant as a predictor of the variables under study. The second hypothesis of the study hypothesized that hidden costs have no significant effect on students' completion rates among public boarding schools in Kisii County. This hypothesis was tested by using the regression analysis and it was shown that hidden costs and completion rates are highly correlated(r=.902). Based on the findings of the regression equation in table 4.13 we reject the null hypothesis (p<0.05) of there being no significant effect of hidden costs on students' completion rates and therefore adopt the alternative hypothesis which states that hidden costs have significant effect on students' completion rates among public boarding schools in Kisii County. It therefore implies that hidden costs have a significant positive effect on completion rates.

The findings in Table 4.14 and 4.15 confirm the Education Cabinet Secretary's remarks while releasing the 2014 KCSE examination results whose batch comprised of the first lot to have enjoyed the full cycle of free learning from primary to secondary enrolled in class one in 2003 and form one in 2011 respectively that completion rates at secondary school level remain a

challenge. According to remarks by the Education Cabinet Secretary, during the year 2011 when the 2014 KCSE cohort joined Form One, a total of 521,601 students were admitted into secondary schools. Out of these, only 483,630 sat for KCSE in the year 2014, consequently 7.85 per cent had dropped out. This is besides the over 200,000 KCPE candidates who were not admitted to form one for one reason or the other (Jamah, 2015). According to the records from Kenya Bureau of Statistics, in 2003 during the inception of FPE programme there were 7,117,300 pupils admitted to class one but at the end of the secondary cycle in 2014 KCSE about 6.5 million students had dropped out. In 2010 when the same candidates were expected to sit for KCPE only 741,507 candidates were registered (RoK, 2015).

4.5.3 Suggestions on how to reduce hidden costs of FSE

The study finally sought to establish from the respondents, their suggestions on how to reduce the FSE especially on the cost. The findings of the suggestions are summarized and presented in Table 4.18.

Table 4.18

How FSE Hidden Costs can be Reduced.

What Needs to be Done	N	%
Increase budgetary allocation on FSE (RoK)	434	100.0
Seek support from donors to supplement FSE funds	418	96.3
Supplement from bursaries	352	81.1
Seek support from CDF	302	69.6
Effective implementation of Govern. Policy on hidden costs	220	50.7

Among the suggestions on how to improve FSE were; increase in budgetary allocation for the FSE funds by the government 434 (100 %.), seek support to supplement FSE funds from donors 418 (96.3%), supplement from bursaries 352 (81.1%) supplement from CDF 302 (69.6%), effective implementation of government policy on ban against charging illegal costs 220 (50.7) The suggestions were postulated as the possible solutions towards boosting the wastage rates in schools occasioned by hidden costs of FSE. A study by Lewin (2008), on projections of the financing required for a significant expansion of access to secondary education indicates that enrolments in secondary education cannot be expanded at the present unit cost levels. The 2013 Basic Education Act, Part iv Section 39 states that it is the duty of the Cabinet Secretary to provide infrastructure, learning and teaching equipment and appropriate financial resources to schools (RoK, 2013)

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The study set out to explore the effects of hidden costs in the provision of Free Secondary Education Programme on transition and completion rates in Kisii County. The research objectives were:

a) To establish the hidden costs in the provision of FSE

b) To analyze the effect of the hidden costs on student transition rates in Kisii County

c) To analyze the effect of the hidden costs on student completion rates in Kisii County

Correlational design was used in conducting this study. The sample selected for the study consisted of 234 class teachers, 148 parents' representatives and 52 head teachers. Of the 234 class teachers 132 (56.4%) were male and 102 (43.6%) were female , 63 (26.9%) were diploma holders,145 (62%) were degree holders and 26 (11.1%) were Masters Degree holders. Of the 148 parents 92 (62.2%) were male and 56 (37.8%) were female. Of the 52 head teachers, 41 (78.8) were male and 11 (21.1%) were female, 5 (9.6%) were Diploma Certificate holders, 33 (63.5%) Degree holders and 14 (26.9%) Masters Degree holders. They were head teachers for 52 public boarding schools which benefited from FSE programme.

The instruments used in the study were the head teachers' questionnaires to gather information from the head teachers and class teachers and parents' interview schedules to collect information from parents. Research question one was analyzed using simple descriptive statistics. Research

questions two and three were analyzed using simple linear regression. The statistics used included frequency counts, means, averages and percentages .The results of data analysis were presented using frequency distribution tables, pie charts and bar graphs. In this chapter the major findings of the study were summarized, conclusion drawn and recommendations made based on the findings established.

5.1 Summary of the major findings

The summary of the findings was guided by the research objectives as follows:

5.1.1. Hidden Costs of Secondary Education met by the parents

The first research objective was to establish the hidden costs met by parents in the provision of FSE. From the results presented in the previous chapter the major costs met by parents under the FSE are; school bus and van levies ,academic trips levies, development fee, activity fee, school Board of Management teachers' salaries, prize award levies, optional subjects levies, caution money, parental care levies, university application forms levies, school IDs levies, academic support programme levies, insurance of buses and vans levies and supplementary textbooks .This amounts to an average of KShs 37,800 annually as shown in Table 4.4 and 4.5 in chapter four of this study. This expenditure remains a hidden cost as it is not quantified and budgeted for by the government in its annual national education budget. However most head teachers argued that parents majorly provided uniforms and boarding fee for their children as the cost met by parents due to fear for victimization by the relevant authorities. Unfortunately many of these parents had erratic sources of income which were hardly enough to meet the basic needs of their families and have something to spare to meet the hidden costs of FSE hence this had negative implication on transition and completion   rates.

5.1.2. Impact of the hidden costs of FSE on students' transition rates

The second research objective was to analyze the impact of the hidden costs on students' transition rates. To achieve this objective the data collected was analyzed using simple linear regression to establish whether there was a relationship between the hidden costs and students transition rates. The transition rates were taken as the response variable while the hidden costs were taken as the predictor variable. The correlation between the two variables was calculated to determine the strength of the linear relationship between the two variables as shown in Table 4.10 in chapter four. The findings from the 208 observed cases in one cohort as from year 2011 to 2014 revealed that on average, 14 students failed to transit to the next class per year at an average hidden cost of KShs 23,878.45. The study revealed that there was a correlation between hidden cost and students' transition rates in the sampled schools. The Pearson's correlation coefficient of .925 as shown in Table 4.11 of chapter four indicated that there was a strong positive linear correlation between transition rates and hidden costs. This implied that as hidden costs increased the number of students who failed to transit to the next class also increased.

As it was discussed in chapter four table 4.6, majority of the parents representatives 85 (65.5%) perceived the hidden costs of FSE as high and 51 (34.5%) as too high for them . 216 (92.3%) of the 234 sampled class teachers in chapter four Table 4.7 indicated that hidden costs affected transition rates .

5.1.3 Impact of the hidden costs of FSE on students' completion rates

The third research objective was to analyze the impact of the hidden costs on students' completion rates. To achieve this objective the data collected was analyzed using simple linear regression to establish whether there was a relationship between the hidden costs and students

completion rates. The completion rates were taken as the response variable while the hidden costs were taken as the predictor variable. The correlation between hidden costs and completion rates were calculated to determine the strength of the linear relationship between the two variables as shown in chapter four Table 4.15. The findings from the 208 observed cases in one cohort from year 2011 to 2014 revealed that an average of 56 students failed to complete the four year circle per school class at an average hidden cost of KShs 62,352.13 as shown in Table 4.14 in chapter four. The study revealed that there was a correlation between hidden costs and students' completion rates in the 52 sampled schools. The Pearson's correlation coefficient of .902 as shown in Table 4.15 of chapter four indicated that there was a strong positive linear correlation between completion rates and hidden costs. This implied that as hidden costs increased the number of students who failed to complete the four year secondary course also increased. As established in table 4.8 in chapter four 20 (13.5%) of the parents of the 148 sampled parents confirmed that their children had dropped out of school due to hidden cost. All the 234 (100%) of the sampled class teachers agreed that students were normally sent home to collect the hidden costs levies and some end up dropping out of school all together.

5.2 CONCLUSION

From the foregoing research findings there were hidden costs on FSE which affect the effective implementation of FSE Programme especially participation rates in Kisii county hence educational wastage. Such costs included: School Bus and Van levies, academic trips levies, development fee, activity fee, School Board of Management teachers' salaries, prize award levies, optional subjects levies, caution money, parental care levies, university application forms levies, school ID levies, academic support programme levies, insurance of buses and vans levies and supplementary textbooks among others. The overall analysis indicates that there is evidence of educational wastage.

Secondly the study has revealed that there are many hidden costs met by parents as fore-mentioned under the FSE programme yet many parents have unreliable sources of income, consequently these hidden costs are a big burden to them. Majority of the parents representatives in the study sample perceived the hidden costs of FSE as too high for them to meet.

Thirdly the study through literature review revealed increase in enrolment immediately after the inception of FSE but a decline in enrolment in the subsequent forms as evidenced in the decrease in transition and completion rates among the sampled schools. This was attributed to hidden costs of FSE as fore-mentioned.

Irrefutably FSE programme has enhanced retention albeit evidence of wastage though not so much mainly due to hidden costs of FSE as revealed in chapter four of this study. This raises a serious and pertinent question "How free is Free Secondary Education?" The literal sense of the concept FSE is an education programme that is fee-free and does not involve much financial burden to parents which may hinder any student from accessing it. The concept FSE embraces inclusiveness in terms of access of all potential learners regardless of their social, political, spiritual or economic inclinations. This has been reinforced by the newly promulgated 2010 Kenya Constitution in article 53 (1b) which states that every child has the right to free and compulsory basic education whose provision shall be the government's (ROK, 2010).

As affirmed in the background information of this study, investment in human resource development enables individuals to contribute more positively and effectively to the development of the country. According to UNESCO (2000), illiteracy has been identified as a factor that slows down the economic well being of the nation. Overwhelmingly the education sector in Kenya is faced with challenges such as the hidden costs among others resulting into wastage in terms of participation rates as revealed in chapter four of this study hence recommendations given in this chapter will serve as a remedy if implemented towards improving the situation if as a country we have to make strides economically, socially and politically.

Notably, as fore-mentioned the study findings emphasized the impact of hidden costs on the provision of FSE with direct reference on participation rates, which will enable education policy-makers, planners, administrators, managers and other stakeholders to cope with strategies

recommended to ease parents' cost-burden and find ways of mobilizing funds to meet the cost of FSE programme to ensure its sustainability to avoid wastage in terms of participation rates and material resources as outlined in the recommendations.

Conclusively the study has provided information that could form the basis for further critical assessment and evaluation of the FSE situation by future researchers to facilitate more tangible and valid solutions to the challenges where possible.

5.3 RECOMMENDATIONS

Based on the results presented, the researcher recommends the following measures to make FSE more effective:

1) The government should formulate policies that could regulate charging indirect levies such as motivation fees which drain underprivileged parents. Threatening school managers with stern warnings over overcharging fees beyond the government ceiling without action has not yielded any results. Indeed, more and more ways are being formulated by school authorities to drain the already poor parents.

2) The government should increase the budgetary allocation for FSE programme given the high cost of living to avoid a scenario where head teachers pass the same cost to parenrs and guardians as hidden cost.

3) Secondary schools with available unutilized land should   initiate income- generating activities to supplement the government funding on FSE and avoid over-reliance on the government and parents.

4) The government should enhance transparency and accountability in government institutions to win back donor confidence in financing education which will relief parents and guardians from numerous hidden costs charged upon them by schools.

5) The Ministry of Education and school managers should mobilize and encourage greater participation from various stakeholders and development partners, including local and international communities, to support the FSE programme to ensure its sustainability.

6) The government should employ more TSC teachers to assist cutting down expenses spent on employing teachers by the school Management Boards which is part of the hidden cost expenses charged upon parents and guardians

7) The study recommends that policy makers, managers and other educational stakeholders should embark on rigorous context-specific cost-benefit and social analysis on fee abolition policy options that are feasible and could yield results for different Counties as challenges experienced by parents on indirect costs of FSE are context/regional based.

8) The CDF allocation should be augmented to cater for the provision of physical infrastructure in schools to reduce the burden on poor parents.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

i. This study was conducted in only one county therefore findings cannot be generalized to other areas in the Republic. Future study could be extended to other counties to validate the findings.

ii. This study considered148 parents representatives in Kisii County and 52 schools sampled which were boarding schools. A similar study needs to be conducted in Public day schools, given that the hidden costs of FSE are likely to affect day schools also.

iii. Studies should be undertaken on the cost of Secondary Education in low cost private boarding schools, which are not financed by the government under FSE Programme but also attended by children from underprivileged backgrounds, to determine the unit cost of non-subsidized secondary education provision consequently determining the possibility of government involvement financially in future to relieve the parents who are equally strained but sacrifice for the sake of their children.

iv. The findings also emphasized the unreliability of other possible sources of raising funds to meet costs of FSE. Further research should be conducted on how these possible other sources can be effectively tapped to raise more funds to supplement the parents and government's abilities in meeting the costs of Free Secondary Education

WORK PLAN 2013-2015

Activity/ Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Proposal writing -2013				■	■	■	■	■	■	■	■	■
Development of instruments-2014	■	■	■	■	■							
Piloting-2014						■	■					
Data collection-2014								■	■			
Data coding-2014										■	■	
Computer data entry & Report Writing -2014-2015	■	■	■									■
Report writing & corrections Continued-2015	■	■	■									
Submission of final report-2015					■	■						
Activity/ Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Proposal writing -2013				■	■	■	■	■	■	■	■	■
Development of instruments-2014	■	■	■	■	■							
Piloting-2014						■	■					
Data collection-2014								■	■			
Data coding-2014										■	■	
Computer data entry & Report Writing -2014-2015	■	■	■									
Report writing & corrections Continued-2015						■	■	■				
Submission of final report-2015											■	

RESEARCH BUDGET

No.	Item	Cost
1	Computer and secretarial services	
	a) Typing and proposal writing	10,000
	b) Typing and printing final copies	15,000
	c) Typing, printing and photocopying questionnaires	8,000
2	Stationery	
	a) Writing Material	1,500
	b) Duplicating papers	5,000
	c) Pens	200
3	Travelling expenses and snacks	
	a) Pre-testing questionnaires	5,000
	b) Administering questionnaires	5,000
	c) Collecting questionnaires	5,000
	d) Contacting supervisors	10,000
	e) Visiting libraries for research purposes	10,000
4	Mailing and Telephone expenses	5,000
5	Binding expenses	
	a) Proposal (7 copies)	3,500
	b) Final report (7 copies)	10,500
6	Data analysis	15,000
	Total cost	**108,700**

REFERENCES

Abagi, O. (2000). *Situational analysis of the education sector in Kenya.* A report prepared for
CARE Kenya. Nairobi: Institute of Policy Analysis and Research.

Abagi, O. (1999*). Educational Reform in Kenya for the next Decade: Implementing policies for
adjustment and revitalization.* Nairobi: Institute of Policy Analysis and Research.

Abagi, O. & Odipo, G. (1997). *Efficiency of education in Kenya situational analysis and
implications for educational reform.* Nairobi: Institute of Policy Analysis and Research.

Action Aid Nigeria, (2012). ―*Education and Promoting the Rights in School.* Kogi state:
Nigeria.

Adoyo. O .R, Simatwa. E. M, & Yalo. A. (2013). Role of principals in promotion of girl-child
education in mixed day secondary schools in Kenya: A case study of Rongo and Ndhiwa
Districts. *International Journal of Education and Research* Volume *4. Issue 2, 2013 p .190-
217 ISSN:* 2141-5161.

Aftin, K. D, & Orodho, J. A. (2014). Dismal transition, retention and performance of the girl-
child: What are the explanatory variables in Rhamu Town, Mandera County, Kenya? *Journal
Of Humanities And Social Science (IOSR-JHSS) Volume 19, Issue 7, 2014, PP 37-46 e-ISSN: 2279-
0837, p-ISSN: 2279-0845.*

Alloush, M. (2010). *Does free schooling fill the seats? Evaluating the changes in educational
attainment associated with abolishing school fees in four African Countries.* Unpublished
M.ED Thesis Georgetown University, Washington, DC.

Areba, G .N. (2013). The hidden costs of free primary education and their impact on
enrolment in Kisii Central District. *Journal of Education and Practice: Vol.4.No.18.*

Aseta, J. (2011). *Challenges impacting on female students enrolment and completion rates in public secondary schools in Nyamusi Division in Ekerenyo District, Kenya.* Unpublished M.ED Thesis, Kenyatta University, Nairobi, Kenya.

Amunga, D. P. (1997). *An investigation of secondary school dropout in Teso District. Unpublished PGDE Project*: Egerton University, Kenya.

Akyeampong, K. (2009). Revisiting free compulsory universal basic education (FCUBE) in Ghana. *Comparative Education 45 (2). 175-195.*

Aroni, S. K. (2007). *Resource inputs and their impact on school KCPE performance in Kisii Central District, Kenya*. Unpublished M.ED Project: Kenyatta University.

Ayieke, A. (2005). *Free Primary Education in Kenya: Examining the benefits, challenges and sustainability.* Unpublished M.ED Thesis: Kenyatta University.

Ayodo T. M, Othuon. L. A. (2010). The impact of cost sharing strategy on access, equity and equality of secondary education in Kenya. *Kenya Journal Educational Planning Economics Manage. 2(June, 2010).*

Best, J. W. & Khan , V.J. (1988). *Research in education*. Boston: All and Bacon.

Best, W.J., & Kahn, V.J. (2009). *Research in education*. New Delhi: Pearl offset press.

Bruns, B., Mingat, A., and Rakotomalala, R. (2003). *Achieving universal primary education by 2015: A chance for every child*. Washington, DC, World Bank.

Cheruiyot, K.C. (2011). *The effectiveness of subsidies in enhancing optional enrolment in public secondary schools in Kericho District, Kenya*. Unpublished M.ED Project: Kenyatta University.

Chimombo, J. (2009). Changing patterns of access to basic education in Malawi: Comparative

Education. 297-31. Brook.

Clemens, M. (2004). *The long walk to school: International education goals in historical*

perspective. Washington, DC, Center for Global Development. (Working Paper, 37.).

Cohen, L. & Marion, L. (1995*). Research methods in education,*: Rout ledge, London.

Colclough, C. & Lewis, K. M. (1993). *Educating all the children*: *Strategies for schooling*.
South Clarefon Press: Oxford.

Colclough, C., Rose, P. and Tembon, M. (2000). Gender inequalities in primary schooling; the
roles of poverty and adverse cultural practice. *International journal of educational*
development 20: 5-27.

Crewswell, J.W. (2008). *Educational Research, Planning conducting and evaluating quantitative*
and qualitative research. Pearson Education. Inc. New Jersey 07458.

Dana, S. (2006). *The impact of free primary education on enrolment in Kenya*. Unpublished
M.ED Thesis: Stanford University.

DeVellis, R. (2003). *Scale development: Theory and applications:*   Thousand Oaks, CA: Sage.

Elimu Yetu Coalition, (2003). *Reform agenda for education sector in Kenya: Setting beacons*
for policy legislative framework. Nairobi: Elimu Yetu Coalition.

Gay, L. (1992). *Educational research, competencies for analysis and application*. 2nd
Edition. New York: Macmillan Publishers.

Getange, K. (2005*). I*nstitutional initiatives in supplementing the financing of secondary*
education in Kisii District .Unpublished M.ED Thesis ,Maseno University, Kisumu, Kenya.

 Goldin, C. (2001). *The human capital century and American Leadership: Virtues of*
 the past. NBER Working Paper No. 8239, Cambridge: National Bureau for Economic
 Research.

Greenhill, R. and Ali, A. (2013). *Paying for progress: How will emerging post-2015 goals be*

   financed in the new aid landscape? London: Overseas Development Institute.

   (Working Paper, 366).

Hannah, R. (2012). *Heads warned by OFT over school uniform costs*. BBC News education report.

Huoblair, F. (2011). *International education statistics.* London: Macmillan Publishers.

Holsinger, D. & Cowell, R. (2000). *Positioning secondary-school education in developing*

   *Countrie*s Paris: IIEP/UNESCO.

Kaguma,V.W. (2012). *Girls' completion rate in public mixed day secondary schools in*

   Kirinyaga West District, Kirinyaga County. Unpublished M.ED Thesis: Kenyatta University.

Kerlinger, N. F. (1983). *Foundations of behavioral research*. Delhi: Surjeet Publication.

Khamati & Nyongesa. (2013). Factors influencing the implementation of free secondary

   education in Mumias District. *Journal of Social Science for Policy Implications: Vol.4.No.18*

   June ,2013.

Kombo, D. & Tromp, D.L.A.(2006).*Proposal and thesis writing*, Panlives Publications. Africa,

   Nairobi.

Kothari, C.R.(2008).*Research Methodology: Methods and techniques:* New Delhi: New

   age Longman Inc.

Kristiensena, Stein and Pratiknob. (2006). Decentralizing education in Indonesia. *International*

   Journal of Educational Development, 26: 513-531.

Krejcie, R. V. & Morgan,D.W. (1970). *Determining sample size for research activities*.

   Educational and Psychological Measurement, 30, 607-610.

Lange, S. (2015). Have education goals accelerated progress? Background paper for *EFA Global*

   Monitoring Report 2015.

Lewin, K. M. (2008). *Strategies for sustainable financing of secondary education in Sub-Saharan Africa*. World Bank Working Paper No.136. Washington DC: World Bank.

Lewin, K.M., Wasanga, P., Wanderi, E., Somerset, A. (2011). *Participation and Performance in education in Sub-Saharan Africa with special reference to Kenya: Improving Policy and Practice* CREATE Pathways to Access Research Monograph No. 61. Brighton: University of Sussex.

Lockhead, M. E. & Vespoor, A. M. (1991). *Improving primary education in developing countries.* Buckingham: Oxford University Press.

Maliyamkono T.L. & Ogbu, O. (2000). *Cost sharing in education and health .*TEMA publishers' company ltd, Mauritius 83 – 136.

Management partnership services. (2008). *Development of student transportation funding methodology options for Washington State.* Rockville, Maryland

Mathia, A. (2015).*Factors influencing pupils' transition rates from primary to secondary school in Kiambu Sub-County, Kenya.* Unpublished M.ED Thesis, University of Nairobi, Nairobi, Kenya.

Matayos, M. (2010). *Challenges of education programmes and development in post colonial Africa a working paper for the international finance corporation.*

Marcucci, P., Johnson, B., & Ngolovoi, M. (2008). Higher educational cost-sharing, dual-track tuition fees and higher education access: the East African experience.

Meryl A. (2011). *The hidden costs of public education*. Wjcorbett; New york.

MoEST. (2003a). *A report of sector review and departmentation of free primary education.* Nairobi: Ministry of Education Science and Technology.

Mouton, J. (2001). *How to succeed in your master's and doctoral studies: a South African guide and resource book.* Pretoria: Van Schaik.

Morgan, C., Petrosino, A. and Fronius, T. (2012). *A Systematic review of the evidence of the impact of eliminating school user fees in low-income developing countries*. London, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Muyanga, M., Olwande, J., Mueni, E. and Wambugu, S. (2010). Free primary education in Kenya: An impact evaluation using propensity score methods. J. M. Cockburn. And J. Kabubo-Mariara (Eds), *Child welfare in developing countries*. New York, Springer.

Mutiga, M. (2010). *Status of education in Kenya, indication for planning and policy formulation, special report Nairobi, a policy brief for the Kenya institute of research policy and analysis*.

Mugenda, O. & Mugenda, A. (1999). *Research methods: Qualitative and quantitative approaches*. Nairobi: Acts Press.

Muranga. F, Kilaha. K & Wanyonyi.D. (2013). Emerging issues in secondary school education in Kenya. *International Journal of Advanced Research: Vol.1,213-240.*

Munda. S .W, & Odebero. S . (2013). The influence of education costs on students' academic performance in Kenya: An empirical study of Bungoma County secondary schools. *Asian Journal of Educational Research Volume 2. Issue 1 2014*.

NARC. (2002). *Manifesto for the National Rainbow Coalition* (NARC), Nairobi: NARC.

Ngaca, G. (2009), Kenya education sector support programme at mid course. *Elimu News Vol. 4, 30-31.*

Ngware, M. W., Onsomu, E. N., & Muthaka, D. I. (2007). Financing secondary education in Kenya: Cost reduction and financing options. *Education Policy Analysis   Archives, Vol.15* No.24. Retrieved 3th September, 2015 from http://epaa.asu.edu/epaa/v15n24/.

Njeru, J. M. (2005). *Impact of social economic status of households on universal free primary education in Mbeere District Kenya*. Unpublished M.ED Project: Kenyatta University.

Njeru, E. and Orodho, J. (2003). Education financing in Kenya: Secondary school bursary

    scheme implementation and challenges, IPAR DP/035 2003, Nairobi: Institute of

    Policy Analysis and Research.

Johnstone, D.B. (2003). Cost-sharing in higher education: tuition, finance assistance and

    accessibility. *Sociological Review,* 39(3), 351-374.

Njogu, L. K., Maurice, S. & Kihoro, J.M. (2012). Factors Hampering the continuity of education

    of standard eight leavers in Kenya: Survey of Juja Division in Thika District, Kenya.

    International Journal of Business and Commerce Vol. 1, No. 9: May 2012 (p.127-148), ISSN:

    2225-2436.

Nwana, O. C. (1979). *Educational Research*. Lagos: Nelson Africa.

Nyaga, B. M. (2005). *Effects of delayed fees payments on the teaching and*

    learning process in public secondary schools in Mbeere District, Kenya;

    Unpublished M.Ed Thesis, Nairobi: Kenyatta University.

Nzoka, D. M. (2006). *Administrative problems confronting female head teachers in*

    secondary schools in Machakos District,Eastern Province. UnpublishedM.ED Project:

    Kenyatta University.

Obidoa, M. (2006). *Enhancing the instructional supervisory skills of principals of secondary*

    schools, Principals Year Book. A Publication of All Nigerian Conference of

    Principals of Schools. Nzukka, Nigeria: Moke Social Publishers.

Odhiambo, E.G. (2015). *The effects of Kenya's Subsidized Secondary Education program on*

    access, retention, equity and quality: A case study of Nyakach Sub - County, Kisumu County,

    Kenya. Unpublished M.ED Thesis, Kenyatta University.

Odunga, D. (2015). Parents still paying illegal tuition fees, Daily Nation 20[th]May. Nairobi:

Nation Media Group.

Ogeta, N,O. (2004). *The contributions of parents to the cost of upper primary education*

implications for free primary education: A Case Study of South Nyanza., Unpublished Ph.D

thesis, Kenyatta University, Nairobi, Kenya.

Ogolla,J.O. (2013). *Factors influencing transition rate of learners from primary to secondary*

schools in Rangwe Division of Homa Bay District, Kenya. Unpublished M.ED Thesis:

University of Nairobi.

Okumbe, J. A. (2004). *Techniques of writing research proposals and methods*. Nairobi; Masola

Publishers.

Olembo, J. O. & Ross. (1992). *Financing secondary education in Kenya*. Nairobi: Bureau of

Educational Research, Kenyatta University.

Ong'unya, R. O. (2004). *Issues and challenges head teacher face in the management of FPE in*

Ukwala Location, Siaya District. Unpublished M.ED Project: Kenyatta University.

Ontwani, J. R. (2004). *Problems faced by head teachers in the management of FPE. A Case of*

Busia District. Unpublished M.ED Project: Kenyatta University.

Ondieki et al. (2015). Effect of early marriage on transition rates of girls from primary to

secondary schools in Nyamusi Division of Nyamira County, Kenya. *International Journal of*

Novel Research in Education and Learning Vol. 2, Issue 2, pp: (1-10), April 2015: ISSN 2394-

9686.

Ohba, A. (2009). *Does free secondary education enable the poor to gain access? A*

study from rural Kenya. CREATE Pathways to Access, Research Monograph

No 21.

Orodho, J. A. (2005). *Elements of education and social science research methods*. Nairobi:

Masola Publishers.

Orodho, J. A. (2008). *Techniques of writing research proposals & reports in educational and social sciences.Maseno:*Kanezja Hp Enterprises.

Orodho, J. A. ,Waweru, P. N,. Ndichu, .M & Nthinguri, R. (2013). Basic education in Kenya: Focus on strategies applied to cope with school-based challenges inhibiting effective implementation of   curriculum. *International Journal of Education and Research.* Vol.1.No.11 20113. 1-20 www.ijer.com.

Orodho, J. A. (2014). Policies on free primary and secondary education in East Africa: Are Kenya and Tanzania on course to attain Education For All (EFA) by 2015? International Organization of Scientific Research (IOSR) J*ournal of Humanities and Social Sciences (IOR-JHSS).*Vol.19, Issue1, Ver,V (Jan 2014) pp11-20 www.iosrjournals.org .

Onsomu, E. N., Muthaka, D., Ngware, M & Kosimbei,G (2006). *Financing of secondary education in Kenya: costs and options.* Kenya institute for public policy, research and analysis. Nairobi.

Onyango, G. A. (2001). *Competences needed by secondary schools head teachers an implication for preservice and inservice education*: A case of Nairobi and Kakamega Districts,Kenya. Unpublished PhD dissertation. Kenyatta University, Nairobi.

Pauline, D. James, T. & James, S. (2008). *Impact of free primary education in Kenya*, London; Sage Publishers: Los Angels.

Peil, M. (1995). *Social science research method*. A handbook for Africa. Nairobi: EAEP.

Psachoropoulous, G. & Woodhall, (1985). *Education for development: An analysis of investment choices.* New York: Oxford University Press.

Republic of Kenya. (1964). *Report on the Kenya Educational Commission*. Nairobi: Government Printer.

Republic of Kenya. (1976*). Report on the National Committee Educational objectives and*

Policies. Nairobi: Government Printer.

Republic of Kenya. (1988 a*). Report of the Presidential working Party on Educational Manpower Training for the Next Decade and Beyond.* Nairobi: Government Printer.

Republic of Kenya. (1988 b). Sessional paper No. 6 of 1988. Nairobi: Government Printer.

Republic of Kenya. (1999). *The Commission of Inquiry into the Education System of Kenya.* Nairobi :Government Printer.

Republic of Kenya. (2001). *Education for All (EFA),* Kenya. A National Handbook for 2000 and Beyond. Nairobi: Ministry of Education Science and Technology.

Republic of Kenya. (2001). *Education sector issues, challenges, policies and strategies*. (MOE) Nairobi: Government Printer.

Republic of Kenya. (2002). *Economic survey*, Nairobi: Government Printer.

Republic of Kenya. (2011). *Economic survey*, Nairobi: Government Printer.

Republic of Kenya. (2013). *Economic survey*, Nairobi: Government Printer.

Republic of Kenya. (2003 a). Report of the task force on implementation of Free Primary Education. Nairobi: Jomo Kenyatta Foundation.

Republic of Kenya. (2003 b). Education sector strategies review and development, Nairobi: MoEST.

Republic of Kenya. (2003 c). *Economic survey*, Nairobi: Government Printer.

Republic of Kenya. (2003 d). *National action plan on education for all*, Nairobi: MoEST.

Republic of Kenya. (2005). Sessional Paper No.1 of 2005 on a policy framework for Education Training and Research. Nairobi: MoEST.

Republic of Kenya. (2008). *Kenya National Bureau of Statistics, Nairobi*: Government Printer.

Republic of Kenya. (2009). *Kenya Economic Report*. Nairobi: Government Printer.

Republic of Kenya. (2010 a). *Kenya Population Census Report.* Nairobi: Government Printer.

Republic of Kenya. (2010 b). *The National Assessment System For Monitoring Learner Achievement* (NASMLA), Nairobi: KNEC.

Republic of Kenya. (2010 c). *The Kenyan Constitution.* Nairobi: Government Printer.

Republic of Kenya. (2003). *Parental commitment for primary education in Kenya,* 30th May 2003: Nairobi: Government Printer.

Republic of Kenya (MOEST). (2006). *Draft Education sector report.* Nairobi: Government Printer.

Republic of Kenya (2012), *Task force on the re-alignment of the education sector to the constitution of Kenya 2010.* Report of the task force: Ministry of education.

Republic of Kenya. (2013). *The Basic Education Act No.14 of 2013.*Nairobi: Government Printer.

Resinik, D.B. (2005). *What is ethics in research and why it is important*? National Institute of health Website. 4th February 2014.

Rose*, P. (2007). Supporting Non-state Providers in Basic Education Service Delivery. CREATE Pathways to Access Research Monograph No. 4. Brighton: University of Sussex.*

Rose & Al Samarrai. (2001). *Cost of taking a child to school*. Chicago University Press.

Rolleston, C. (2009). The determination of exclusion: Evidence from Ghana living Standard Survey.

Rotich, K., Stephen, K., Rono, J, & Mutisya. S. University Education of the Maasai Girls in Kenya at Crossroad: A Viewpoint of the Role of local leaders and Socio-Cultural factors. *The International Journal of Social Sciences and Humanities Invention Volume 1 issue 1 2014 p*

.51-61 ISSN: 2349-2031.

UNESCO. (2002). *Millennium Declaration Darker Framework for action in 2002*. Paris:
UNESCO.

UNESCO. (2001). General secondary school education in the twenty-first century: Trends,
challenges and priorities. Beijing, China: UNESCO International Expert Meeting on
Secondary Schooling.

UNESCO. (2005). *EFA. Global Monitoring Report: The role of the organization
and social context of schools.* http://portal.org/education.

UNESCO. (2007). *Strong foundations: Early childhood care and education.* The EFA
Global Monitoring Report. Paris: UNESCO.

UNESCO. (2008). Education for All Global monitoring Report, Institute of Statistics.   .
Paris:UNESCO

UNESCO, (2011). *International education statistics:* A situation analysis of the
international position.

UNESCO. (2014). *Teaching and learning: Achieving quality for all.* The EFA
Global Monitoring Report. Paris: UNESCO.

UNESCO .(2015). *Education For All 2000-2015: Achievements and Challenges.* The EFA
Global Monitoring Report. Paris: UNESCO.

Rolleston, C. (2009). The determination of exclusion: Evidence from the Ghana Living
Standards Surveys 1991-2006. *Comparative Education 45 (2). 197-218.*

UN . (2010). Poverty rates in Kenya. *Daily Nation, 25th July.* Nairobi: Nation

SEIA. 2007. *At the Crossroads: Choices for secondary education in Sub-Saharan Africa.*
Washington D.C.: The World Bank

Sharma, S. R. (Ed.) (2008). *Encyclopaedia of modern educational research*. New

    Delhi: Anmol Publications Private Ltd.

Transparency International. (2013). *Global Corruption Report: Education*. Berlin, Transparency

    International.

Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of*

    Medical Education. 2: 53-55.

Tuwei, E. K. B. (2013). *Effects of hidden costs on students' grade to grade transition rates in*

    secondary schools in Nandi County, Kenya. Unpublished M.ED Thesis: University of

    Nairobi.

Wambugu ,.J and Mokoena, S. (2013). Education financing in Kenya: Parents' perceptions about

    the implementation of the Cost-Sharing Policy in secondary school education. *Mediterranean*

    Journal of Social Sciences, MCSER Publishing, Rome-Italy, Vol .4 No 13, November 2013:

    ISSN 2039-9340.

World Bank .(2007). Recruiting retaining and retraining secondary school teaches and

    principals in sub-Saharan Africa. Working Paper No.99 Washington D.C: World

    Bank.

World Bank. (2006). Global Monitoring Report: MDGs: Strengthening mutual accountability,

    air trade and governance. Washington D.C: The International Bank for Reconstruction

    and Development.

World Bank. (2005). Expanding opportunities and building competencies for young people:

    A new agenda for secondary education: Washington D.C: World Bank.

World Bank. (2011). *Migration and remittances factbook 2nd edition*. Washington, DC, World

    Bank.

World Bank. (2014). *Food price watch*. Washington, DC, World Bank, Poverty Reduction and

Equity Department. (Year 5, Issue 17, May 2014).

APPENDIX 1: LETTER TO RESPONDENT

Ngwacho George Areba,

Kabarak University,

Private Bag-20157,

Kabarak.

The Head Teacher,

…………………Sec. School,

Kisii.

Dear Sir / Madam,

RE: RESEARCH IN YOUR SCHOOL.

I am a PhD student at Kabarak University, currently carrying out a research titled ' *The hidden costs of secondary education to parents and their implication on transition and completion rates in Kisii County'.*

Your school has been selected to take part in the study. I would like to request for permission to conduct the activity and also respond to a list of questions in a questionnaire to be administered.

The information you will provide will be treated with utmost confidentiality. Your assistance and support will be highly appreciated.

Thanks in advance.

Yours sincerly,

George Areba.

APPENDIX 2: LETTER TO RESPONDENT

Ngwacho George Areba ,

Kabarak University,

Private Bag-20157,

Kabarak.,

………………….. 2015.

The respondent,

………….. Sec. School,

Kisii.

Dear Respondent,

<u>**RE: QUESTIONNAIRE.**</u>

I am a PhD student at Kabarak University carrying out a research titled '*The hidden costs of Free Secondary Education to parents and their implication on transition and completion rates in Kisii County'*.

I kindly request that you respond to the questionnaire items attached as honestly as possible and to the best of your knowledge. The study will go along way towards improving the education programme. Do not write your name or any kind of identification. Your responses will be treated with utmost confidentiality.

 Yours Sincerly,

George Areba.

APPENDIX 3: QUESTIONNAIRE FOR THE HEAD TEACHERS

This questionnaire is designed to gather information on the hidden costs of free secondary education to the parents of Kisii County. Kindly respond to the questions as honestly as possible and your response will be treated with utmost confidentiality.Do not write your name in this questionnaire. This questionnaire comprises of part A, B & C.

Part A: Background information

1. a) Name of the school………………………………………………………….

   b) Education sub-county …………………………………………………………………

   c) Describe your gender   I) Male [   ]   ii) Female [   ]

2. How long have you served as a head teacher?

   a. Less than 5 years   [   ]

   b. Over 5 years   [   ]

   c. Between 10 and 20 years   [   ]

   d. Over 20 years   [   ]

3. What are your highest academic /professional qualifications?

   a. Diploma   [   ]

   b. BED   [   ]

   c. Other, specify ……………………………………………………………

Part B: Information on costs met by the government, facilities and resources the school possesses, which are met by parents.

4 a) Does your school have adequate facilities and resources required for learning?

     i. Adequate facilities   [   ]

     ii. Inadequate facilities   [   ]

b) Which source has your school benefited from in providing the above facilities?

     i Ministry of education   [   ]

     ii Kenya school equipment scheme   [   ]

    iii. Fundraising   [   ]

    iv. School fees   [   ]

     v. Community bodies   [   ]

    vi. Income generating projects   [   ]

   vii. Church organizations   [   ]

  viii. Other; specify …………………………………………………

5a) Are there any problems associated with these sources?

   i) Yes   [   ]

   ii) No   [   ]

   iii) If yes; Explain …………………………………………………………………

6.a) Are the FSE funds disbursed to your school enough?

i) Yes   [   ]
ii) No   [   ]

b)If the answer is no; how do you meet the deficit? ………………… ………… ……
…………………………………………………………… …………………………………………

c) What challenges are you encountering in obtaining the school supplies under the FSE programme?

    i) Inadequate funds   [ ]
    ii) Delayed disbursement of funds   [ ]
    iii) Bureaucratic procedures   [ ]
    iv) Others specify …………………………………………………………………..
…………………………………………………………………………………………………

Hidden cost met by parents

8a (i) what are the expected and actual expenditure per the following cost per parent?

1000	2000	3000	4000	5000	other	
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Development fund/PTA
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Supplementary books
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Internal Evaluation fee
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Bus fund fee
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	BOM Teachers salary
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Supplementary books
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Activity fees
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Academic support programme
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Optional subjects fee

(ii)What other role do parents play in your school?
……………………………………………………………………………………………………
……………………………………………………………………………

a) How do you collect money from parents who are unwilling to pay voluntarily?
        ……………………………………………………………………………………………
        …………………………………………………………………………

b) What do you do with children from extremely poor background or orphans who cannot afford to pay these levies?
        ……………………………………………………………………………………………
        …………………………………………………………………………

9a) Is there extra tuition / coaching in your school?
        i) Yes   [   ]
        ii) No   [   ]
  b) If yes, how much do parents pay?…………………………………………………
  c) What happens to children whose parents do not pay?...........…………………………

Part C: Impact of Hidden costs on FSE
10 a) What is your perception on the costs of FSE to parents?
        i) Extremely high   [   ]
        ii) Very high   [   ]
        iii) High   [   ]
        iv) Low   [   ]

v) Very low   [   ]

b) In your own opinion, which of the following problems do parents face in meeting the hidden cost of FSE?

                i) Economic challenges   [   ]

                ii) Social challenges   [   ]

                iii) School based problems   [   ]

                iv) Any other specify ……………………………………………

c) Of the following economic problem. Which ones affect the ability of parents in meeting the hidden cost of FSE?

      i) Unreliable source of income   [   ]

      ii) Large families   [   ]

      iii) High cost of living   [   ]

      iv) Inflation in the country   [   ]

      v) Unreliable alternative source of income   [   ]

11(a) Students enrolment in form one for a period of four years by gender

Year	2011	2012	2013	2014
Girls				
Boys				
Total				

b) Pupils who proceeded to the next grade in 2011- 2014

Year	F 1	F 2	F3	F4
2008				
2009				
2010				
2011				
2012				
2013				
2014				

12. How many pupils dropped from school 2011- 2014?

Year	F 1	F2	F3	F4
2011				
2012				
2013				
2014				

13a) Does the school participate in co- curricular activities?

        i) Yes   [   ]

        ii) No   [   ]

b) Is the funding adequate?

        i) Yes   [   ]

        ii) No   [   ]

c) If No, what do you do? …………………………………………………………………

14a) What is average contribution of each parent to the PTA kitty?

………………………………………………………………………………………………

b) What do you do with students whose parents are unable to pay PTA funds?

………………………………………………………………………………………………

15 a) Generally how would you describe the rate of absenteeism among students because of their present failure to meet their financial obligations to the school?

……

…………………………………………………………………………………………………

b) What reasons are behind the current dropout rates in your school?

……………………………………………………………………………………………

………………………………………………………………………………………………...

c) Do you think the hidden cost of FSE contributes to the drop our rates?

    i) Yes   [   ]

    ii) No   [   ]

d) If yes, give five examples of these costs.

    i)   ……………………………………………………………………………

    ii)   ……………………………………………………………………………...

    iii)   ……………………………………………………………………………..

    iv)   ……………………………………………………………………………….

    v)   ……………………………………………………………………………...

16a) Comment on what can be done to reduce the hidden costs of FSE programme.

……

……

……

END:

Thanks for taking your time to fill in this questionnaire.

APPENDIX 4: QUESTIONNAIRE FOR THE CLASS TEACHERS

This questionnaire is designed to gather information on the hidden costs of Free Secondary Education to the parents of Kisii County. Kindly respond to the questions as honestly as possible and your response will be treated with utmost confidentiality.

Do not write your name in this questionnaire.

This questionnaire comprises of part A, B & C.

Part A: Background information

1.a) School name…………………………………………

 b) Educational Sub-County…………………………………..

 c) Gender

i) Male   [   ]

ii) Female **[   ]**

d.Which class I you in charge?------------------------

e. For how long have you taught in this school?

Part B:Information on Hidden Costs of FSE

2.a). What do you understand by the term hidden costs under FSE context?

----

b) From your own perspective do hidden costs affect the students participation rates in this school?

Yes[   ] No[   ]

c) Does your school head teacher send students home for school levies? Yes [   ] No [   ]

If yes state some of these school levies---

----

d) How long do they take before they come back to school? [   ]

e). If they are completely unable, do you make a follow up? Yes [   ]   No [   ]

f). Who are their sponsors?

Parents [   ] guardians [   ] church[   ] NGs [   ]

g). How do they make up for the lost time? ---

Part C: Information on transition and completion rates

3a). Has any of your students failed transit to the next form due to hidden costs of FSE?

Yes [   ]   No [   ]

b). If yes in which form and how many: F1 year 2011 [   ] F2 year 2012[   ] F3 year 2013 [   ] F4 year 2014 [   ]

c).How many of your form ones were admitted in the school in the year 2011? [   ]

How many transited to form 2 year 2012[   ] form 3 year 2013 [   ]   form 4 year 2014[   ]?

12. a).Other than FSE tuition fees and hidden costs, do students in your school benefit from any financial aid? Yes [   ]   No [   ]

b). If yes state---

13. What do you think should be done to reduce the hidden costs under FSE?

APPENDIX 5: INTERVIEW SCHEDULE FOR PTA REPS

The purpose of this interview is to find out the hidden costs of Free Secondary Education to parents of Kisii County.

You are kindly required to give honest and correct information. The information you will give will be treated with utmost confidentiality and will only be used for research purpose only.

The interview schedule comprises of part A and B

Part A: Background information on parents' source of income to meet the expected expenditure on costs of FSE.

1. a) School name…………………………………………
    b) Educational Sub-County…………………………………..
    c) Gender
     i) Male   [   ]
     ii) Female   [   ]
    d) Marital Status
     i)Married   [   ]
     ii)Single   [   ]
2. a) How many children do you have in secondary school?
       Gender
                 i)   Male…………………………….
                 ii)   Female………………………….
                 iii)   F 1- 4………………………….
    b) How many have dropped out of school?

    ……………………………………………………………………………………….
    …………………………………………………………………………………………

c) Specify the number of children who have dropped in terms of sex and form.
                 i. Number…………………..
                 ii. Sex………………………..
                 iii. Class…………………..
3. a) Why has / have your child / children dropped from school?
       ………………………………………………………………
       ……………………………………………………………………………………...
    b) Incase of your children who have dropped out, has any follow up been made?
    Yes[   ] No.[   ]
     c) If yes by who?
       …………………………………………………………………………………..

       ……………………………………………………………………………………….
4. a) What kind of employment are you engaged in?
       ……………………………………………………………………………………………
       ……………………………………………………………………………………….
    b) How much income per month do you derive from your employment?
       …………………………………………………………………………………

Part B: Parents' perception on FSE, economic challenges, school based factors affecting FSE & suggestions on how to reduce the cost on FSE.

5. Has any of your child been sent home to collect any school levies? Yes [   ] No [   ]

6. How much was contributed by parents to the school in 2005_____
2005_____2006_____2007_____2009_____2010_____

7. What is your perception as parent to the hidden costs of FSE?

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………..

8) Which economic challenge affects your ability to meet the hidden cost of FSE?

……………………………………………………………………………………………
…………………………………………………………………………………………...

9. Of the following school –based problems, which ones affect your
ability in meeting the cost of FSE?
i)	Burdened curriculum	[ ]
ii)	Misappropriation of funds by school authorities	[ ]
iii)	To many levies	[ ]
iv)	Poor planning by school authority	[ ]
v)	Frosty relationship between teachers and parents	[ ]

10a) Do you think your child's education would be affected in any way if you   failed to meet the cost?

…………………………………………………………………………………….
.…………………………………………………………………………………..
…………………………………………………………………………………..

b) Please suggest any way in which the cost of free Secondary Education can be reduced.

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

END:

Thanks for taking your time to respond to the question

APPENDIX 6: KISII COUNTY MAP

APPENDIX 7 SAMPLING TABLE

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—N is population size. S is sample size.

Source: Krejcie & Morgan, 1970

APPENDIX 8: 2015 BOARDING FEE STRUCTURE AS PER THE MoE

Source: Ministry of Education, 2015 Circular.

VOTE HEAD	NATIONAL,EXTRA COUNTY & COUNTY BOARDING(KES)
Teaching Learning Material	4,792
Meals	32,385
Repairs, Maintenance & Improvement	3,192
Local Travel & Transport	2,421
Administration Costs	3,316
EWC	7,802
Medical	786
Activity Fee	1,398
Personal Emolument	8,672
Approved PTA	0
Insurance(Medical & property)	1,660
Total School Fees	**66,424**
Less GoK Subsidy	**12,870**
Total Fees Less Government Funding	**53,553**

APPENDIX 9: GOVERN. ALLOCATION OF FSE PER STUDENT

S/No.	Vote Head	Amount (Ksh)
1	Tuition	3600
2	Repairs, Maintenance and Improvement	400
3	Local Travel and Transport	400
4	Administrative Costs	500
5	Electricity, Water and Conservancy	500
6	Activity	600
7	Personal Emolument	3965
8	Medical	300
Total		**10,265**

Source: Ministry of Education, 2008 Circular.

FEES STRUCTURE FOR FORM I 2015

A. VOTEHEAD

BOARDING	28,338
R.M.I	2,400
L. T & T	3,000
ADMINSITRATION COST	2,500
E.W. & C	3,500
PERSONAL EMOLUMENT	10,162
MEDICAL	300

B. REGIONAL SPORTS 1, 800

C. DEVELOPMENT 13,000

D. ACADEMIC SUPPORT PROGRAMME 4,000

E. CAUTION MONEY 500

F. GENERATOR 3,000

G. PROJECT 5,000

H. INSURANCE OF TWO BUSES AND ONE VAN 1,000

FORM I	TERM I	TERM 2	TERM 3	TOTAL
AMOUNT	39,335	35,000	4,165	78,520

APPENDIX 11: SAMPLE FEE STRUCTURE 2

FEES STRUCTURE FOR THE YEAR 2014

FORMS ONE TO FOUR

VOTE HEAD	FORM ONE			FORM TWO			FORM THREE			FORM FOUR		
	1ST TERM	2ND TERM	3RD TERM	1ST TERM	2ND TERM	3RD TERM	1ST TERM	2ND TERM	3RD TERM	1ST TERM	2ND TERM	3RD TERM
PERSONAL EMOLUMENT	5,519.00	2,444.00	572.00	5,519.00	2,444.00	572.00	5,519.00	2,444.00	572.00	5,519.00	2,444.00	572.00
BOARDING	12,000.00	9,670.00	7,260.00	12,000.00	9,670.00	7,260.00	12,000.00	9,670.00	7,260.00	12,000.00	9,670.00	7,260.00
LOCAL TRAV.& TRANSPORT	3,485.00	2,000.00	316.00	3,485.00	2,000.00	316.00	3,485.00	2,000.00	316.00	3,485.00	2,000.00	316.00
REPAIRS MAINT& IMPROV	2,120.00	1,500.00	557.00	2,120.00	1,500.00	557.00	2,120.00	1,500.00	557.00	2,120.00	1,500.00	557.00
ELECT WATER & CONSERV.	3,969.00	2,501.00		3,969.00	2,501.00		3,969.00	2,501.00		3,369.00	3,101.00	
ADM. COSTS	2,527.00		1,000.00	2,527.00		1,000.00	2,527.00		1,000.00	2,527.00		1,000.00
MEDICAL	320.00	180.00		320.00	180.00		320.00	180.00		320.00	180.00	
P.T.A.	5,500.00			5,500.00			5,500.00			5,500.00		
AWARDS	5,000.00			5,000.00			5,000.00			4,000.00	1,000.00	
ACTIVITY	1,060.00			1,060.00			1,060.00			1,050.00		
TUITION	2,000.00		1,000.00	2,000.00		1,000.00	2,000.00		1,000.00	2,000.00		1,000.00
UNIFORMS	4,150.00			3,000.00			3,800.00			3,800.00		
COMPUTER	700.00	700.00	700.00	700.00	700.00	700.00	-					
REMEDIAL/PARENTAL CARE			2,000.00			2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
K.C.S.E EXAMS										5,800.00		
MOCK										800.00		
ENDOWMENT FUND	500.00			500.00			500.00			500.00		
DEVELOPMENT	5,000.00											
BUS FUND	3,000.00				1,500.00			1,000.00		1,000.00		
	56,850.00	18,995.00	13,405.00	47,700.00	20,495.00	13,405.00	49,800.00	21,295.00	12,705.00	55,800.00	21,895.00	12,705.00
		89,250.00			81,600.00			83,800.00			90,400.00	

NOTE:All new students will pay for the following

Development	5000.00
Bus Fund	3000.00

143

APPENDIX 12: INTRODUCTORY LETTER

INSTITUTE OF POST GRADUATE STUDIES AND RESEARCH

Private Bag - 20157   Tel: 0203511275
KABARAK, KENYA   Fax: 254-51-343012
E-mail: directorpostgraduate@kabarak.ac.ke   www.kabarak.ac.ke

7TH April, 2015

The Director General
National Commission for Science, Technology & Innovation (NACOSTI)
P.O. Box 30623 – 00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH BY NGWACHO GEORGE AREBA- REG. NO. GDE/0834/09/12

The above named is a Doctoral student at Kabarak University in the School of Theology, Education& Arts, Department of Education. He is carrying out research entitled **"Effects of Hidden Costs of Free Secondary Education on Transition and Completion Rates : A Case Study of Selected Public Boarding Schools in Kisii County".** He has defended his proposal and has been authorized to proceed with field research.

The information obtained in the course of this research will be used for academic purposes only and will be treated with utmost confidentiality.

Please provide the necessary assistance.

Thank you.

Yours faithfully,

Dr. Betty Jeruto Tikoko
DIRECTOR - (POST-GRADUATE STUDIES & RESEARCH)

Kabarak University Moral Code
As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord. (1 Peter 3:15)

APPENDIX 13: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MR. NGWACHO GEORGE AREBA
of KABARAK UNIVERSITY, 3974-40200
KISII,has been permitted to conduct
research in *Kisii County*

on the topic: *EFFECTS OF HIDDEN
COSTS OF FREE SECONDARY EDUCATION
ON TRANSITION AND COMPLETION
RATES: A CASE STUDY OF SELECTED
PUBLIC BOARDING SCHOOLS IN KISII
COUNTY*

for the period ending:
31st December,2015

Permit No : NACOSTI/P/15/7093/5831
Date Of Issue : 11th June,2015
Fee Recieved :Ksh 2,000

....
**Applicant's
Signature**

....
Director General
**National Commission for Science,
Technology & Innovation**

145

APPENDIX 14: CONFERENCE PAPER PUBLICATION FROM THE THESIS 1.

Areba(June,2015) Effects of Hidden Costs in Free Secondary Education on Transition and Completion Rates in Public Boarding Schools in Kisii County. A paper presented during the 4th Educational Management Society of Kenya (EMSK) Conference held on 9th-12th June, 2015 at Masinde Muliro University of Science and Technology. Available at www.mmust.ac.ke

MASINDE MULIRO UNIVERSITY OF SCIENCE & TECHNOLOGY (MMUST) – EDUCATION MANAGEMENT SOCIETY OF KENYS (EMSK) INTERNATIONAL CONFERENCE
9TH – 12TH JUNE 2015
Masinde Muliro University of Science & Technology
P. O. Box 190-50100, Kakamega, Kenya
Website: www.mmust.ac.ke
Email: eduseconference@mmust.ac.ke

Ref: MMU/COR: 403053   Date: 18th May 2015

Dear Ngwacho G. Areba,

SUBJECT: ABSTRACT ACCEPTANCE AND INVITATION TO THE MMUST – EMSK CONFERENCE FROM 9TH TO 12TH JUNE 2015

Masinde Muliro University of Science and Technology (MMUST) in collaboration with Educational Management Society of Kenya (EMSK) will host an International Conference on Security at MMUST, Kakamega, Kenya from 10th to 12th June 2015. The theme of the conference is **"New Paradigms in National and International Security: The Role of National and County Governance, Education, Science, Technology and the Media."**

On behalf of the National Organizing Committee, I am glad to inform you that your paper titled **"Effects Of Hidden Costs Of Free Secondary Education On Transition And Completion RATES: A CASE STUDY OF Selected Public Boarding Schools In Kisii County"** has been accepted for Oral Presentation. You are requested to submit the corrected abstract immediately and the full paper as per the call guidelines on or before 5th June 2015, aligning it to the specific sub-themes. Welcome to Kakamega.

For more information on the conference, please visit the www.mmust.ac.ke

Thank you.

Yours faithfully,

Prof. Achoka, J. S. K.
Convenor,
MMUST – EMSK International Conference

Conference contacts: +254-721-232432, +254-722-882026, +254-734-775226

146

APPENDIX 15: CONFERENCE PAPER PUBLICATION FROM THE THESIS 2.

Areba(July,2015) Effects of hidden costs in Free Secondary Education on Transition and Completion Rates in Public Boarding Schools in Kisii County. A paper presented during the 5th Kabarak University Annual and International Conference held on 14th-17th July,2015 at Kabarak University Main Campus. Available at www.kabarak.ac.ke

KABARAK UNIVERSITY

Certificate of Participation

This is to certify that

Ngwacho George Areba

Successfully Presented a paper titled

"Effects of Hidden Costs of Free Secondary Education on Transition and Completion Rates: A Case Study of Selected Public Boarding Schools in Kisii County."

in the 5th Annual Kabarak International Research Conference held on 14th – 17th July 2015

Conference Theme

Research, Innovation For Sustainable Development and a Secure World

_____
Registrar

_____
Deputy Vice Chancellor