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

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DECLARATION

This research project is my original work and has not been presented for a degree program in any university.

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DEDICATION

This work is dedicated to the memory of my father the late Solomon Gura Ochoro. He took me by the hands and taught me to believe in myself. The best role model I ever had.
ACKNOWLEDGEMENT

I wish to extend my gratitude to my lectures in the department of Educational Management, Policy and Curriculum Studies, for the theoretical base that informed this work and to my two supervisors Dr. Samwel N. Waweru, and Dr. Felicita W. Njuguna, Lecturers, Department of Educational Management, Policy and Curriculum Studies.

Secondly, I wish to thank my family for their support, patience and acceptance to bear all the inconveniences arising in the course of this work and to my classmates, for their discussions, encouragement and invaluable suggestions.

I also wish to thank the Principal of my school for his support in carrying out this work and to my staff mates for bearing the inconveniences of standing in for me from time to time while carrying out this study.

Finally, and more importantly may God the almighty be exalted and glorified for his favor of life and providence throughout the course of this work.
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<tr>
<td>EFA</td>
<td>Education for All</td>
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<td>FPE</td>
<td>Free Primary Education</td>
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<td>FSE</td>
<td>Free Secondary Education</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GER</td>
<td>Gross Enrolment Rates</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>KCSE</td>
<td>Kenya Certificate of Secondary Education</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<td>NER</td>
<td>Net Enrolment Rates</td>
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<td>RoK</td>
<td>Republic of Kenya</td>
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<td>SAPs</td>
<td>Structural Adjustment Programs</td>
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<td>UNESCO</td>
<td>United Nations Education Scientific and Cultural Organization</td>
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<tr>
<td>UNICEF</td>
<td>United Nations International Children Education Fund</td>
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<td>UPE</td>
<td>Universal Primary Education</td>
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</table>
ABSTRACT

The education sector has tremendously grown since Kenya attained independence. From the reports of the various commissions of inquiry and task forces on education, there is evidence of the need to curb the ever rising costs of education to households in order to ensure maximum access and completion rates. The government introduced the Free Primary Education program in 2003. The launch of this initiative saw increased enrolments in primary schools. However, only about 50% of those pupils completing their primary level of education were able to access secondary education as acknowledged by the government in sessional paper No. 1 (2005). This was attributed mainly to the rising cost of financing secondary education by many households. MOEST suggested an initiative for the implementation of Free Secondary Education (FSE) along the same line as FPE programme in all public secondary schools with effect from January 2008. The government of Kenya (GOK) specific target was to achieve transition rates of 70% in 2008 and 80% in 2012 from primary to secondary school level from the then rate of 50% (2005). The government aimed to have 90% to 100% completion rates by 2015. The government therefore introduced the Subsidized Secondary Education under the FSE program in 2008. The researcher carried out a descriptive study on the effects of the Program among public schools in Nyakach District of Kisumu County. The objective of this study was to assess the effects of the program on Access, Quality, Retention and completion rates and Equity. The target population 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. Validity of the instruments was done through the help of the researcher’s supervisors who are having expert in research in his area of specialty and through piloting. Reliability was tested through test-retest technique and Pearson's Correlation Coefficient formula used to compute the reliability coefficient, a correlation coefficient of 0.84 was established. Data analysis was done using the SPSS after editing and coding. Descriptive statistics was used to analyze quantitative data while qualitative data was analyzed through thematic analysis and a report made. The following were the findings: the implementation of the program negatively affected the quality of education offered in the schools; the program has also not succeeded in ensuring gender equity. However the following positive outcomes were documented; the program improved access among other things. The researcher recommends 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.
CHAPTER ONE

INTRODUCTION

1.1 Introduction to the Study

This chapter gives an overview of the problem under study, the purpose and objectives of the study. It outlines the research questions, assumptions, limitations and delimitations of the study. It also gives the context in which this study was done by looking at both the theoretical and conceptual framework underlying the study.

1.2 Background to the Study

Kenya just like the other African states had its own system of education before the coming of the Arabs and Europeans. Indigenous education was tangible, definite and clearly intelligible. Learning had to take place in the context of real life experiences in one's own environment. Traditional education was practical and provided by society, which bore any incidental costs. The coming of the Europeans brought with it the formal system of education. It was basically developed to teach the Africans European cultures, which in practice were based on elitism, where the society was divided into upper, middle and lower classes (Bunyi 1999, Ntarangwi 2003).

The concept of formal education has greatly ignored the principle of the social function of education and overstressed on the academic horizon of the learner, usually in preparation for a public examination. This tendency has brought with it the problem of wastage in education. The government looks at education provision and training to all its citizens as critical to its development strategy. It considers the provision of basic education as a long term objective and strategy to enhance the capacity of its citizens to interact positively and in a sustainable manner with their
environment to earn livelihoods and to develop its quality of human resource; to actualize universal access to education and training for all including the disadvantaged, marginalized and the vulnerable as a necessary tool for the provision of services. Upon attaining independence, expanding access to education for those who had hitherto been excluded by the colonial administration became an important means of gaining full legitimacy and reassuring the citizens that political independence was not a sham (Bogonko, 1992). Many Kenyans realized that there were greater opportunities for the educated nationals as the new nation needed qualified manpower to replace the departing colonialists both in the public and private sectors. There arose a combined effort between the government and local communities in the provision of education. Mzee Jomo Kenyatta, the founding father of the nation, soon after liberation was quick to remind Kenyans that any gainful development could only be attained by embracing modern education and hard work.

“....and as we make merry at this time, remember we are relaxing before the toil that is to come. We must work harder and fight our enemies: ignorance, sickness and poverty. I therefore give you the call ‘Harambee’ which means pulling together for our country Kenya” (Kenyatta, 1964).

Kenyatta was quick to realize that many Kenyans would misconstrue independence as an end in itself and laze about. This was just the beginning of the daunting task of shaping the destiny of the young country. The Harambee call saw the emergence and expansion of secondary schools through combined efforts of the state, the church and local communities all over Kenya.

Immediately after independence, the government, in demonstrating the importance it attached to the education of its people, appointed the Kenya Education Commission,
1964, under the chair of Prof. Ominde to look into the various issues affecting education. The commission recommended desegregation of schools and Universal Primary Education (UPE) among others. This was in an effort to reform the education system inherited from the colonial Government and make it more inclusive and responsive to the needs of the nation. Of urgency was the need to create the needed human capital to replace the departing colonialists in both public and private sectors.

The Sessional Paper No. 10 of 1965 on African Socialism and its Application to Planning in Kenya (RoK, 1965) perceived education as "more of an economic than a social service. The principal means of relieving the shortage of domestic skilled manpower and equalizing employment opportunities among Kenyans". The nation's human resource inherited from the colonial Government was largely uneducated, untrained, inexperienced and un-benefited by the growth of the economy. The government’s Five Year Development Plan of 1964-1968 stressed on the idea of universal primary education, as a way of reducing poverty and social inequality. Between 1964 and 1982, the government embarked on measures to improve primary school enrolments; fees were remitted to children whose parents could not pay, boarding facilities introduced to nomadic communities and existing facilities expanded. Tuition fees were abolished as the government increased its expenditure in primary schools at the expense of secondary schools. The Structural Adjustment Programs (SAPs) propagated by International Monetary Fund (IMF) and World Bank in the 1980s in Kenya occurred against a background of the country's declining economic performance, this increased poverty levels (RoK, 1999a). The result was the introduction of cost-sharing policy at all levels of education in Kenya.
in 1988 (RoK, 1988). The policy adversely affected many aspects of education resulting to low enrolment rates, insufficient provision of learning resources and deterioration in the quality of education provided. The cost sharing policy created a heavy burden on most households. Many poor and marginalized households unable to shoulder the increased costs pulled their children out of school resulting to massive declines in enrolment, retention and completion rates. It is estimated that the policy increased household expenditures on education by about 33% to 44% of their annual incomes, with about 37.3% of this being spent on indirect costs like uniforms, books, transport, stationery and pocket money.

The Kenya government produced the first Poverty Reduction Strategy Paper in 1998, (RoK, 1998). In its Human resource development chapter, the Government stressed that to improve the quality of life for its citizens, it would focus its resources on improving the provision of and access to basic social services, particularly education and health, by seeking a closer partnership with development partners, NGOs, religious organizations and other private providers in order to increase the range and quality of provision. It noted that after the high enrolments in the two post-independence decades, there had been a reversal at all levels of education characterized by non-enrolment, high level of drop outs, low completion rates especially among girls and poor transition rates from one level of education to another. This can largely be attributed to the high cost of education especially made worse by the introduction of the cost sharing policy. The Governments priority should be to increase access to education at all levels by lowering the costs borne by households. In showing the seriousness with which it takes the issue of access to education, in its Interim Report on Poverty Reduction Strategy (2000-2003) the
Government pledged to improve access by increasing the provision of textbooks and other teaching and learning resources, to encourage more day schools, by providing science equipment and other support materials and bursaries to poor households (RoK, 2003).

Nyakach Sub County, before the introduction of the Subsidized Secondary Education program had been experiencing increasing cases of student wastage, especially through dropping out before completion of the secondary cycle. This can be attributed to the fact that the area is characterized by general low-income levels due to few sustainable economic activities and the prevalence of small-scale subsistence farming. The area can be geographically divided into two; the upper part, which is predominantly hilly and rugged allowing for little agriculture and the lower part bordering on Lake Victoria where fishing and sand mining are the major economic activities. Due to high levels of poverty, many students have dropped out of school to pursue activities like fishing, sand harvesting, charcoal burning and brick making in order to support their family’s meager incomes. The area has also been ravaged by HIV/Aids forcing many children out of school to fend for their siblings and at times their ailing parents. It is therefore hoped that the introduction of free secondary education together with other intervention measures by both the government and NGOs like bursaries from CDF committee, School-Feeding Programs etc. will see more students enroll and subsequently be sustained in our schools.

It is against this background that on 11th February 2008, President Mwai Kibaki officially launched the government's new subsidized secondary education policy
under the Free Secondary Education (FSE) program by releasing Kshs.2.9 billion as the first batch of funds for the program. This was a very noble gesture by the Government. However given the massive financial resources that the Government will invest in funding the program, it is very critical to assess its impact and determine whether the benefits envisaged by the programme going to be attained and whether or not it is sustainable so that the likely benefits are permanent.

1.3 Statement of the Problem

The government's fundamental goal for education is to prepare and equip its youth to be happy and useful members of the society. This can only be attained by improving the efficiency and effectiveness of the education sector. Despite available evidence of low enrolments in countries that levy charges and much higher in those that have made commitment to free education, the impact of the FSE program in Kenya is yet to be fully documented. This study therefore sought to assess and document how the subsidized secondary education under the FSE Program has impacted on access, retention, quality and equity in education and find out if the FSE program is sustainable so that the benefits to be achieved will be enjoyed in the long run.

1.4 Purpose of the Study

This purpose of this study was to find out the actual effects of the FSE on access, Retention and completion rates, equity and quality with an aim of informing educational practices in Kenya.
1.5 Objectives of the Study

In carrying out this study the researcher, was guided by the following objectives;

i. To analyze student enrolment trends within the sampled public secondary schools within the sub county so as to determine the effect of the FSE program on access.

ii. To establish the effects of the FSE program on retention and completion rates among the schools.

iii. To establish the effects of the FSE program on gender equity.

iv. To determine the impact of the FSE program on quality.

1.6 Research Questions

The following research questions guided the study;

i. What is the current enrolment trends following the implementation of the FSE Program?

ii. How has the FSE program influenced retention and completion rates within the schools?

iii. How has the implementation of the FSE program affected gender equity within the schools?

iv. How has the FSE program impacted on quality of education offered within the schools?

1.7 Significance of the Study

This research focused on determining the effects of the governments subsidized secondary education on access, retention, equity and quality within sampled schools in Nyakach Sub County the study has compiled data which may be used by the
government to improve on the effectiveness of the FSE programme. Educational managers and policy makers can also use the data to develop policies that would effectively address the issues of access, retention, equity and quality of the education offered.

1.8 Assumptions

The researcher made the following assumptions in this study

i. That all the targeted respondents will give to the best of their knowledge sincere, factual and reliable information.

ii. That the factors identified as resulting to the success or otherwise of the FSE program in Nyakach Sub County are the same for all schools in similar settings.

1.9 Limitations

i. The availability of little literature on free secondary education in Kenya. Being a recent development in the education sector in Kenya, the researcher therefore used part of the available literature on primary education and free secondary education and relevant international cases.

ii. Given the vast nature of the district, coupled with its rugged terrain, largely characterized by a relatively poor road network hindering accessibility, the researcher spent considerable time and financial resources in the collection of data. The researcher acquired a loan to help him finance the study.

iii. Being a school based program the researcher was constrained for time, considering that he also had other responsibilities and duties like teaching, supervision of co-curricular activities and studying at the same time.
1.10 Delimitations

i. The study was only based on public secondary schools within the district since it is only such schools that benefit from the FSE program.

ii. The researcher only sampled those schools that have been in existence for more than five years. Many of the recently established schools will therefore not be considered, as they may not have adequate data for comparison.

i. The scope of the study was only confined to Nyakach Sub County of Kisumu County. This will limit the generalizations only to those schools that share the same settings.

1.11 Theoretical Framework

This study was based on the theory of Structural Functionalism as espoused by Herbert Spencer (1860) and Emille Durkheim. (1858-1917). The Structural Functionalism Theory sets out to interpret the society as a structure with interrelated parts. The society is seen as a whole in terms of the function of its constituent elements: norms, customs, traditions and institutions. The theory focuses on the mutual integration and interconnection of society. Social institutions collectively form a social structure function to maintain harmony on the social whole. Herbert Spencer (1860) views the society as composed of parts just like those of an organism that work towards the proper functioning of the body as a whole. In his organic solidarity theory, Durkheim argues about the integration that results from specialization and interdependence. As societies, become complex, integration results from the recognition that each needs the other. Such societies, he says will be organized around economic and political organizations. Therefore, division of labor creates social cohesion. Durkheim tried to explain how certain societies maintain
internal stability and survive over time. He proposed that such societies tend to be segmented, with equivalent parts held together by shared values, common symbols and systems of exchange. In modern complex societies each member performs very different tasks, resulting to strong interdependence. The society is seen as a coherent, bounded and fundamentally relational entity that functions like an organism, with their various parts working together in an unconscious, quasi-automatic fashion towards achieving a social equilibrium.

The theory was found relevant to this study since with the implementation of the FSE program, there is need for all the stakeholders as part of the larger whole system, to play their respective roles effectively for the policy to succeed. These roles will however be played be played within certain constraints; overstretched facilities, inadequate resources and personnel, negative attitudes by parents and community, retrogressive cultural practices etc.

1.12 Conceptual Framework
This study adopted a model from, the works of Herbert Spencer (1860) and Emile Durkheim (1858-1917). Spenser and Durkheim tried to explain the existence and quality of different parts of a society by reference to what function they served in keeping the society healthy and balance i.e. functionalism. Durkheim insisted that the society was more than the sum of its parts. He further argued that one of the functions of education is to maintain social roles. The school is a miniature society. It has similar hierarchy, rules and expectations to the outside world. It trains young people to fulfill societal roles. In his organic solidarity theory, Durkheim believes that social cohesion was based on each individual's dependence on every other in the
society for survival. He views the society as a conscience, embraces or regulates that are held together by organic solidarity (Durkheim, 1916). It is, therefore, important for the success of the FSE program that all stakeholders like the school administrators, teachers, pupils, the community, government play their roles effectively.

Following the increasing enrolments trends in primary schools due to the successful implementation of the FPE program, there is pressure on the government to increase transition rates to secondary schools by ensuring sustainability of its FSE program without compromising on the quality of education offered. The question therefore is what has been the actual impact of the FSE policy on enrolment levels, retention and completion rates, quality and equity? Is the policy sustainable?
Figure 1.1: Conceptual Framework

Independent Variable  
FSE Programme  
- Funding of FSE  
- Relevance and appropriateness of curriculum  
- Policy on EFA  
- School feeding program  
- Remuneration and motivation of teachers  
- Bursary schemes and grants

Intervening Variables

Households
- Income levels  
- Family size  
- Opportunity costs  
- HIV/AIDS and other disease  
- Social status

Schools
- Physical facilities and instructional materials  
- Effective instructional supervision  
- Conducive teaching-learning environment

Community
- Societal Aspirations  
- Expectations and Attitudes  
- Role Models  
- Cultural practices  
- Security

Students
- Discipline  
- Entry Behavior  
- Peer influence  
- Ambitions and Aspirations

Dependent Variable

Successful Program
- Increased enrolments  
- High retention and completion rates  
- Increased equity  
- Quality education

(Source: Adopted by Author)
## 1.13 Definition of Operational Terms

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<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td><strong>Access</strong></td>
<td>The opportunity for all irrespective of their socio-economic backgrounds to participate in education.</td>
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<td><strong>Basic Education</strong></td>
<td>Refers to the education offered to cover primary and lower secondary school levels.</td>
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<td><strong>Cost-sharing</strong></td>
<td>This is the involvement of households to meet part of the cost of educating their children while the government also meets the remainder of the costs.</td>
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<td><strong>Effects</strong></td>
<td>Refers to a strong impression or impact on something or somebody.</td>
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<td><strong>Efficiency</strong></td>
<td>Refers to how well or desirable educational resources are put into effective use.</td>
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<td><strong>FSE Program</strong></td>
<td>The governments subsidized secondary education program introduced in 2008.</td>
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<td><strong>Inequality</strong></td>
<td>Refers to any biased or skewed distribution of educational resources and opportunities</td>
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<td><strong>Public Secondary Schools</strong></td>
<td>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.</td>
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<tr>
<td><strong>Quality Education</strong></td>
<td>Refers to the outcomes of education that satisfy the needs of the society by focusing on the acquisition of relevant competencies, skills and knowledge.</td>
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<td><strong>Transition Rates</strong></td>
<td>Refers to the proportion of graduates who transcend from one level of schooling to another.</td>
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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to the problem content. Literature was reviewed from books, newspaper articles and studies carried out by different researchers locally and internationally. The review focused on the following topics:

i. The right to and Importance of education.
ii. Rationale for Free Secondary Education.
iii. Financing secondary education
iv. Challenges to Free Secondary Education.
v. Impact of free secondary education.
   a. Impact on Enrollment levels
   b. Impact on Retention and Completion rates
   c. Impact on Gender Equity
   d. Impact on Quality
vi. Summary of Literature review

2.2 The Right to Education

The universal declaration of human rights (UN 1948) asserts that everyone regardless of gender, race, tribe or socio-economic status has a right to education (UN 1973:29). On the basis of the above declaration Ferguson (1992:20) thus argues that secondary education should therefore be made accessible to all, and higher education equally accessible. Education shall be directed to the full development of the human personality and to strengthening respect for human rights and fundamental freedoms. Governments must therefore not allow any poverty based
exclusion by adopting policies that increase the rates of access, retention and completion without compromising on quality of the education offered. There should also be other initiatives like free feeding programs, affordable health care and sensitization on retrogressive cultural practices, to compliment the FSE policy in helping retain children from poor households and the marginalized in school.

The world Education Forum held between the 26th and 28th April 2000 in Dakar Senegal adopted the Dakar Framework, Education for All: Meeting our Collective Commitments (2000). The declaration reaffirmed the goals of education for all as laid out by the World Conference on Education for All, Jomttien, Thailand (1990) and other similar conferences like The World Summit for Children (1990), The Conference on Human Rights (1993), The World Summit for Social Development (1995), The Fifth International conference on Adult Education (1997), The International Conference on Child Labor (1997) etc. It committed governments to achieving quality basic education for all by 2015, with the donor community pledging that no country will be thwarted in its effort by lack of resources. The framework also reaffirmed the Universal Declaration of Human Rights and the Convention on the Rights of the Child (UNICEF 1989): that all children, young people and adults have the right to benefit from education that enable them to develop their personalities, for its only through education that individuals potential is tapped in order to improve their lives and transform their societies.
The participants further committed themselves to attain the following goals as regards education;

i. Expand and improve comprehensive early childhood care and education especially for the most vulnerable and disadvantaged children.

ii. Ensure that by 2015, all children particularly girl children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality.

iii. Ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and skill program.


To achieve above, the participants agreed on the following strategies among others;

i. To mobilize strong national and political commitment for education for all, develop national action plans and enhance significantly investment in basic education.

ii. To promote education for all with a sustainable and well integrated sector framework clearly linked to poverty elimination and development strategies.

iii. Develop responsive, participatory and accountable system of educational governance and management.
Kenya, like many of the other African states have organized forums on basic education for all in which possible strategies to equalize education opportunities have been translated and debated (ROK 1989:1992: Kere and Obura, 1992). The Kenyan parliament passed into law the Children’s Act in 2000, a law that affirms education as a basic right to every child. Part II of the Children's Act to further safeguard the rights and welfare of the child provides that the government shall use to the maximum its available resources with a view to achieve progressively the full realization of the right of the child set out in this Act. It further stresses that every child shall be entitled to education, the provision of which shall be the responsibility of the government and households (RoK 2001:505).

In its Sessional Paper No. 4(2001): The Economic Recovery Strategy for Wealth and Employment Creation, the Government acknowledges the fact that the country has high levels of inequality in education. The poor and the marginalized are proportionally less educated and consequently less skilled than the rich (RoK, 2001). This confirms what Francois (2008) argues of as the sorry state of the right to education in the developing world when he says that in the developing countries education has been regarded as the essential characteristics of true independence, as the yeast in the loaf of political variety and the means of creating national consciousness, that the developing countries, face to face with the right to education and its demand are like frail Basques braving the ocean waves. The equalization of educational opportunity (increasing access, retention and quality) between boys and girls has been problematic world over more so in the developing countries.
Given the scenario above and in spite of the evidence of enormous challenges, it is imperative on the Government to mobilize all available resources to ensure the smooth and successful implementation of the program. By opening up access to those completing their primary level of education, and ensuring that they are retained to complete their secondary level education, the Government will attain the EFA goal by 2015.

2.3 Importance of Education

The end of World War II ushered in a great social revolution throughout the world. There was a growing awareness of the important role of education in human, social and economic development (Beeby, C.E.1966:9). According to Nishimura and Orodho (1999) direct evidence of the causal relationship between formal education and development in Kenya, just like in many other African states is blurred and less extensive than for the developed countries; however signals in place indicate that appropriate education and training would have a positive impact on the socio-economic and political development of a country like Kenya. Early research concentrating on investigating the correlation between education and economic growth showed that formal education and training of a country’s workforce results in its economic growth, Schultz (1961) and Dension (1992). This view is further strengthened by Triandis and Reoff (1980), who argue that schooling build skills such as the ability to organize knowledge into meaningful categories, to transfer knowledge from one situation to the other and to be more selective in using information. Educated individuals therefore are more innovative and creative and generally have the competencies to adapt to new technologies. Grave (1989) concurs; by saying schooling facilitates greater technological adaptiveness. Borg and
Gall (1989) also say that educated people are productive both socially and economically since they are achievement oriented self-reliant, initiative in problem solving situations and, adaptive to change and assume responsibility easily and more quickly. The World Bank Discussion Paper No 257 (1994) also highlighted the high correlation between national investment in education and economic growth, by holding that virtually all the newly industrialized nations of the past 25 years achieved universal primary enrolment by 1965. In the political and social arena education is perceived to have a positive impact on making informed decisions and choices and contributes to the formulation and implementation of social policies by promoting good governance and evolution of a civil society through community and National capacity building (Orodho, 1997; World Bank, 1990:1991). Furthermore, if education is taken as the process through which people acquire knowledge, skills, values and attitudes by which they develop an appreciation of cultural values by which they make rules, laws and obligations that ensure societal survival by which all the above are passed from generation to generation, it would then be clear that education is the true bedrock of society, culture and civilization, a powerful tool for perpetuating socio-economic and political development (Sollipo, 1990:XVIII).

Without education therefore a people's culture, tradition and aspirations would not be passed on from one generation to the other. These benefits must be harnessed. The government must take greater measure to increase access, improve quality and eliminate cost related exclusion in education. However if this program is not successfully implemented then the numerous benefits of education alluded to above: tool for passing on culture, education and training, a means for attaining socio-economic and political development, a tool to enable the masses make informed decisions and choices etc will not be realized.
2.4 Financing Education

Whereas the benefits of education like increased numeracy and literacy, acquisition of work skills, higher earnings and by consequence increased incomes to households, planned families etc. are largely personal and indivisible, not all the benefits are confined to those who have paid for it, it is not even possible to exclude the less educated from the spillover benefits like improved technologies better products and services etc. Education should therefore be looked at as a quasi-public good, whose provision if left to economic forces like the price mechanism may result into social under investment as it may not be affordable to many. This need for equity together with growing evidence of the positive contribution of education to national development has made many governments the world over to subsidize education or even provide it absolutely free. According to statistics obtained from Education for All Report (2006), the average in terms of GDP percentage spent on education in Sub-Saharan Africa is about 4%. This indicates the low degree of priority given to education despite its numerous benefits compared to other areas of government expenditure. In fact as Delors et al (1996) argue, governments need to invest up to 6% of their GDP on education, since the level of government spending on public education reflects its commitment to the education of its citizens.

Public financing of education in Kenya started in 1909 when financial grants were first given to Missionary schools which were conducting industrial training (Mutua, 1975). This clearly indicates that as early as the colonial days there was a realization of the need for cooperation between the government and other stakeholders in the provision and financing of education. The Frazer commission recommended the establishment of a stratified racial type education seeing the government increase its
education spending to improve European schools. It was on the basis of its recommendations that the Board of Education was found in 1910. The board started considering giving grants to mission stations to hold them facilitates the provision of education. In 1925 an inquiry into the Grants in Aid System resulted in a considerable increase in allowances to schools for building and equipment maintenance subject to satisfactory report by the government inspector (Sifuna, 1990).

The 1980s and 1990s saw an increase in the effort of households in the provision and financing of education. The Report of the Presidential Working Party on the Second University in Kenya (The Mackay Report, 1981) led to the removal of the Advanced (A) level secondary education and the expansion of other post-secondary training institutions. The Report recommended the establishment of the 8:4:4 system of education. The establishment of 8:4:4 system of education came with increased costs like need for more classrooms, laboratories, workshops and additional instructional materials. This cost large sums of money as many of these resources were non-existent during the inception of the program (The East African Standard 20th January, 2000). The government met administrative and professional costs while parents were left with the burden of providing funds for development and provision of education facilities and personal services (Mackey Report, 1981, Kamunge Report, 1998). With time the increased costs become unbearable to many households who could not afford to enroll their children in school or retain them there due to costs.
The Structural Adjustment Programs (SAPs) propagated by International Monetary Fund (IMF) and World Bank in the 1980s in Kenya occurred against a background of the country's declining economic performance, which increased poverty levels (RoK, 1999a). It was noted that the Government’s scheme for the provision of instructional materials through the National Textbook Scheme was inefficient and therefore adversely affected the quality of teaching and learning. It is against this background that the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond (The Kamunge Report, 1988), focusing on improving education financing, quality and relevance, advised on the introduction of the cost sharing policy. Under the policy the government, parents, and communities were to share on the cost of education. The Government met administrative and professional costs while the parents and the community were left with the burden of providing funds for development and provision of facilities and personal services. The cost sharing policy adversely affected many aspects of education resulting to low enrolment rates, insufficient provision of learning resources and deterioration in the quality of education provision (UNESCO, 1995; World Bank, 1997).

Financing of education is very critical. The government must increase its expenditure on education in order to reduce to bare minimum the household's contribution towards the financing of education so as to eliminate any cost-related exclusion. Financing will be critical to the successful implementation of this program. It will determine the adequacy of physical facilities both in terms of quality and quantity, the availability of adequate teaching/learning resources and remuneration of both teaching and support staff. The FSE program is therefore a
good step to reduce the household's and increase the government's contribution in education financing.

2.5 Rationale for Free Secondary Education

A number of writers have argued for cost sharing on the basis of the disproportionate benefit of education favoring the individual to the society, for instance Psacharopoulus (1988), pointed out that returns on investment in education in Africa indicated the following rates of return: Primary education (26%), Secondary education (14%) and higher education (13%) compared to the individuals rate of return for various levels of education which were estimated at Primary (45%), Secondary (25%) and higher education (32%), indicating a higher return at all levels for the individual than the society. However policy of cost sharing has over led to only children from economically advantaged households enjoying the benefits of education as the poor and marginalized suffer from, poverty induced exclusion.

There has been a growing realization in the recent past that although primary education is important for individual welfare, it however does not equip the individuals graduating from it with adequate knowledge and skills to be economically independent and socially engaged in various activities to facilitate economic growth and poverty reduction. A number of governments have considered extending the minimum basic education from primary to lower secondary, with a view to enable children completing their basic education cycle acquire the requisite skills and knowhow needed for economic productivity and independence.
The first national development plan 1964-1969 highlighted the need to expand education opportunities and noted that education and national development are so closely related in a developing country that it is impossible to talk about one without the other (RoK, 1964 a: 305). Although the provision of UPE was identified as the first of three long term objectives for Kenya's education, the other two were equally stressed, these were; to ensure the availability of enough places at secondary and higher levels to educate those with recognized abilities and to organize the educational system to meet the manpower needs of the country (RoK, 1964a:305). To show the priority placed on secondary education, the government scrapped fees for form IV and V in low cost schools and reduced them in the high cost formerly whites only schools in 1964. This aimed to increase middle level and high level manpower and to respond to increased demand for lower level education.

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). It is generally agreed that secondary education long neglected is now the fastest growing segment of education. (Mulkeen, 2005; World Bank, 2005; UNESCO, 2001). The lack of access to secondary education 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 school enrolment rates in many sub-Saharan Africa countries is the lowest in the world; of 104 million secondary school age children only one in every four (25%) were enrolled in secondary school in 2006 (UNESCO, 2008:1). Free or subsidized 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, 2007a). 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. Kenya officially introduced the Free Secondary Education policy on Monday, 11th February 2008, when President Mwai Kibaki released the initial Kshs. 2.9 billion of the funds for the program. While launching the program the president stated that the program marked an important milestone in his government’s effort to secure a bright future for the children and youth of Kenya. President Kibaki explained that the rationale for the introduction of the policy as follows:
“Primary education is not sufficient to provide the quality of skilled human resource necessary for our country's sustainable development. Primary school children complete eight years of schooling when they are too young to engage in productive activities and contribute meaningfully to nation building. In addition, children from poor families who fail to join secondary school for lack of fees often revert to illiteracy, thus reversing eight years of investment in their primary education. It is for this reason that my government undertook to implement the free secondary education program beginning this year” (East African Standard 2008, 12th February).

The program, the president said will ensure that at least 70% of those completing eight years of primary education join secondary schools. The following are the other initiative the Government has put in place to compliment the policy;

i. Increasing bursary allocation for secondary schools from 547 million in 2002 to 800 million in 2004.

ii. Providing grants to 710 secondary schools for the purchase of science and laboratory equipment.

iii. Capacity building through training of over 20,000 science and mathematics teachers through in-servicing.

iv. Providing grants for infrastructure development to secondary schools

v. Providing training for school managers.

2.6 Challenges of Free Secondary Education

With the official launch of the FSE program the government provided finances to kick start it. However there were no immediate resources put in place to overcome the challenges the policy would face as bedeviled free primary education. The following are some of the challenges to FSE;
i. Inadequate teaching and non-teaching personnel

The most critical element in the education process is the people charged with the task of effecting desirable change in the development of children and the youth (Mbamba, 1992). The government to recruit needs to recruit more teachers as a matter of urgency to be able to effectively handle the increased number of students. To improve the quality of education offered at any level, it is important to have a teaching force that is not only highly qualified but also properly motivated. Teachers with the capacity to understand learner needs and also interpreting the curriculum effectively to be able to facilitate effective teaching learning process (RoK, 1997).

ii. Inadequate instructional materials and resources

Study has shown a positive correlation between availability of books and other instructional materials and education quality and academic achievement. For instance in Nicaragua those students who received mathematics books scored significantly higher on standardized achievement tests than those who received no learning materials (Jamison et al 1981). Effective delivery of the curriculum instruction is possible only with the availability of quality teaching and learning resources, without which classes will always be teacher centered and didactic and pupils will not learn how to work independently or in groups (RoK, 2008). The introduction of FSE has overstretched available resources rendering them inadequate.

iii. Inadequate physical resources

Physical facilities have a bearing on both quantitative growth and quality of education. Crowded classrooms make it difficult for children to write and teachers
find it difficult to move around to help needy learners or to mark student's work (Nguru, 1986). Schools that have the best facilities like libraries, playing fields, electricity, laboratories etc were among the high achieving schools and those that had inadequate facilities performed poorly in K.C.S.E exams. The policy was implemented without an earlier assessment of the adequacy of physical facilities like classrooms, laboratories, libraries etc. This has overstretched the available facilities.

iv. Poverty
The high levels of poverty within many households may force some children to drop out of school to seek employment to support their family's meager resources. Many of these households may also not be able to meet the indirect costs of schooling like food, clothing, medical care, pocket money etc.

v. Retrogressive cultural practices
Certain communities in Kenya still maintain some cultural practices that tend to disfavor girls from getting access to education. For instance, early marriages are common among many Kenyan communities in search of dowry. The World Bank (2008) report confirms this by stating that there is evidence that given the choice of sending a boy or a girl to school, families will prefer to send the boy. Girls are also withheld from school to tend to younger siblings, ailing parents, earn wages, do farm work and household chores. All these are obstacles hindering girl's pursuit of education and further training.
vi. **Inappropriate policy framework and unclear policy guidelines.**

There have been no clear policy guidelines on issues like the roles of the various stakeholders in the implementation process, instilling discipline in schools more so after the ban on corporal punishment.

vii. **Administrative deficiencies and lack of proper in-servicing and orientation**

Most of the head teachers, their deputies and teachers who are the actual implementers of the policy are never adequately prepared to deal with the challenges. Many are appointed to positions of leadership without prior training and orientation and even after that they are never in-serviced.

viii. **Exam oriented curriculum**

Over emphasis on passing of exams tend to encourage malpractices like cheating in exams, drilling of students’ etc. There is great need to sensitize all the stakeholders. This study sought to find out if the major stakeholders were adequately sensitized to understand the policy and also if the implementers are aware of their roles in implementation process.

2.7 **Impact of Free Secondary Education**

A number of countries that have implemented free secondary education have succeeded in enhancing access, ensuring high retention and completion rates and reducing inequalities in the provision of secondary education. Unlike in the past where education was believed to be for those who could afford it, today it is largely perceived to be for those who could benefit from it. It is for this reason that many
governments are opting for free secondary education to meet this ideal. Data from selected countries show that free secondary education positively impacts on access, retention, completion and equity without necessarily compromising on the quality of education.

Having achieved universal access to primary school and a minimum threshold of per capita income, the Korean government shifted emphasis to secondary education, thereby facilitating its economic growth. This same pattern of shifting of investment was seen in the other Asian tigers including Japan, Singapore, Taiwan and China (Paik, 1999).

In Nepal the Interim Constitution (2007) introduced free primary and secondary education, with the Education Act (1971) and Education Regulation (2002) providing the basic legal framework for the overall management and administration of secondary education. The act provided for the provision of free secondary education to all children enrolled in community schools. At lower secondary and secondary level, free education is provided to girls and students from low castes and tribal children whose parents' income falls below the poverty line. The government takes care of teachers' salaries, management and program costs, with the village development committees and district municipality at the decentralized level providing support for education especially in terms of physical facilities, infrastructure and salaries. The schools also collect fees from students from rich households.
2.7.1 Impact of free Secondary Education on Enrollment Levels

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 (Jim, 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 Asankha, P and Yamano, T (2011), 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.

2.7.2 Impact of FSE on Retention and Completion

Enrolment is a necessary condition for obtaining literacy in a formal system but not sufficient to attain literacy. Higher enrolment leads to higher literacy rates provided dropouts do not increase at the same rate. Uganda has made significant development progress over the last two decades. According to the latest Uganda National Household Survey, published late in 2006, the national poverty rate has declined to 31% for 2005/06, from 56% in 1992/93 and 38% in 2002/03 (UBOS, 2006). Prudent macroeconomic policies have generated robust growth, at an average rate of 5.6% over the five years to 2004/05 and forecasted at 6.4% for 2006/07-2008/09. HIV/AIDS adult prevalence has declined significantly from around 18% in the early 1990s to 6.4% in 2005 and primary level net enrolment rates have increased from 62.3% in 1992 to 92% for girls and 94% for boys in 2006 (World Bank, 2007). However, in spite of an enrolment growth during the past 10 years since UPE initiation, UPE has for most countries Uganda inclusive proven to be a very elusive
target. The cost of attaining these objectives has been increased because only a small proportion of the increasing number of children entering school complete the primary cycle (low retention rate). Since most of those who drop out lapse into illiteracy, expenditure on these students is essentially wasted. Eliminating fees in schools is not sufficient to ensure educated populations; education requires keeping children in school. Thus, if the developing countries are to adopt effective policies to reduce dropout rates and thereby improve the efficiency of their school systems, they must understand the school factors which influence the dropout rate. The inadequacy of the school system to attract and keep children is more crucial than household’s economic circumstances for explaining why so many children are not in school. Resource allocations to Universal Primary Education (UPE) have been increasing since its initiation. The substantial increase in the public expenditure on provision of Universal Primary Education seems not matching the retention rates a motivation for this paper. The Public Expenditure Tracking survey in Education (1999) that improved resource flow especially the non-wage and construction of school facilities. Despite the increases in public spending and reduction in resource leakages, it is increasingly becoming difficult to attain high retention as well as reducing inequalities. An effort to increase human resource through UPE, construction of more classrooms among others has not translated into increased retention and reduced inequalities. Inequalities in retention are more complex than achieving increased enrolment in primary schools.

2.7.3 Impact of FSE on Gender Equity

Gender parity is a problem worldwide. The girl child seems to be disadvantaged compared to the boy child, more so in developing countries. Studies by UNESCO,
(2011) indicate that globally, about 39 million girls of lower secondary age are currently not enrolled in either primary or secondary education, while two-thirds of the world’s 796 million illiterate adults are women. Only about one-third of countries have achieved gender parity at secondary level. This means that there is a crisis that should be addressed. The goal of eliminating gender disparity in primary and secondary education by the year 2005 was missed in 122 countries. Gender parity in primary education was achieved in 118 (63%) of 188 more developed countries and 37%. Equity in terms of Gender parity index is an issue worldwide but worst in developing countries and it often more pronounced in secondary, technical and vocational than in primary education. In South and West Asia, along with sub-Saharan Africa, girls accounted for 44% of students in secondary education in 2007, but just 27% and 39%, respectively, in technical and vocational education (UNESCO, 2010). A study carried out by the State University (2002) on equity in education in the United State of America found that there are critics on public education arguing that many children do not have equal opportunities to learn and are not likely to attend a quality school. In fact, critics suggest that the education system perpetuates poverty and disadvantage, providing rich and poor schools with stark contrasts in learning environments and physical surroundings. Impoverished neighborhoods typically house run-down schools with less money and poor conditions, while affluent neighborhoods house newer and safer schools providing better learning environments.

Furthermore, ethnic minority students are more likely to attend the lower-quality urban schools. While there have been many efforts to improve this inequality of opportunity, such efforts are only the first step in achieving equity, even with
millions of dollars invested in federal programs. According to the Educational international response to global monitoring report (2008) only universal access to equitable quality education can be fully achieve human and social development goals. According to their study the data showed that the number of adults who cannot read or write declined by 10.4% from 864 million to 774 million between 1985 and 2004. But what remained unchanged is that 64% of illiterate people worldwide were women.

2.7.4 Impact of FSE on Quality of Education Offered

Increased enrollments following the successful introduction of both FPE and FSE programs have seen increase in enrollment levels. This has led to increased class sizes. With this development, the concerns raised by Abagi and Odipo that the classes may become too large to a point where classroom management and effective teaching become difficult which may in turn affect academic achievement of learners is real (Abagi & Odipo, 1997). This can however be mitigated by borrowing a leaf from The government of Sri Lanka, which has achieved free education due to its widely distributed schooling facilities throughout the Island with the quality of education offered being enhanced by free textbook scheme for all children up to junior secondary, innovative curriculum development and high quality teacher training and in-service programmes, (Colelough and Lewin, 1993).

In Mauritius, Free secondary education was introduced in 1977, Suddho (2001). Prior to 1977, only scholarship winners of primary school-leaving examinations were entitled to free education in state schools. Non-Scholarship winners are allocated a few places with a moderate fee ranging from Rs 10 per month for form
one to Rs 40 per month for form four. The government promoted basic education as part of its social-economic development strategy. The education is tuition free with parents paying for extra tuition, uniform and textbooks, fifty two per cent of the children receive secondary education which takes 7 years. In 1996, the country had 29 state secondary schools and 98 private secondary schools. The pupil/teacher ratio was higher in public than in private due to the wide range of subjects offered in state schools. Although students are free of paying tuition fees in USE schools, they still have to pay boarding fees, scholastic materials, medical care etc. Since this USE policy is relatively new policy, not many surveys or researches have been done evaluating the impacts of the policy. According to ministry of education in Uganda, there are more than half a million secondary school children who are studying under the USE policy in some 1471 schools. This is a vast improvement in terms of access to secondary schools. However, the quality of education provided to Ugandan students still a questionable even as government tries to offer new subsidies to cover the education related costs. Even School head teachers who are one of the important factors to succeed this policy are still confused of their ability and knowledge to implement their role (Chapman et al, 2009).

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 (Moon & Mayes, 1994). 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. Since the World Bank first begun to finance educational investment in 1962, it has contributed to a sustainable increase in
educational provision in developing countries, to an improvement in the geographical and social distribution of education opportunities, and to a raising standards of quality of Education in many countries (Psacharopoulos 1995).

Research on FPE indicated that there were many challenges facing its implementation (Republic of Kenya, 2005). For example, UNESCO (2005) carried out an assessment of the Free Primary Education program in Kenya in 2005. The assessment found out that some of the major challenges facing free primary education initiative were increased student numbers; shortage of teachers; In Zimbabwe, resources are allocated to schools for payment of teachers’ salaries and purchase of school books and equipment on the basis of the number of subjects and topics are rationalized, examinations localized and science teaching improved. The government provides for construction of school buildings, maintenance, salaries of all staff and all other materials and running expenses. The free education program is 80% a success. Despite the relatively large class size and heavy workloads for teachers, secondary school students in Korea show extremely high achievement levels in various international student assessments (Lee et al., 2004).

The monitoring and evaluation of Free Secondary Education (FSE) team of the Ministry of Education in October 2010 reported that enrolment had increased since the inception of subsidized Secondary School funding (MOE, 2010). There was therefore serious congestion in the classrooms, acute shortage of teachers and inadequate infrastructure such as laboratories, libraries and classrooms. The management also lacked knowledge on the implementation of FSE and parents were
overcharged on certain levies and therefore making the initiative burdensome. This has impacted negatively on the quality of education offered.

2.8 Summary of Literature Review

The reviewed literature indicates that FSE policy had led to increase in enrolment to the extent that classrooms were overcrowded (Chabari, 2010). Uganda government implemented universal primary education (UPE) policy in 1997. Government provided free primary education for children in government schools. Also government started to provide school instructional materials, basic physical facilities and teacher’s salaries and training. Ugandan government education budget had to increase considerably with implementing of UPE policy. Moreover, international and multinational agencies provided the fund to implement UPE policy. Although many improvements still have to be done in terms of quality of education, according to various surveys and researches, the impact of UPE policy on primary school enrollments was mainly positive (e.g.: Deininger, 2003; Betegeka, 2005; Nishimura et al, 2008). It has also helped to close the gender gap which is one of the main educational problem in sub-Saharan countries. Uganda started Universal secondary education on 19th February 2007. According to Robinson Nsumba Lyazi, the secondary education commissioners, the Universal Secondary Education (USE) would see enrolment in secondary schools more than double from previously 150,000 to 350,000.

The introduction of free secondary education is expected to result in increased enrolment and retention of students. This has started to be experienced, and is expected to continue over the years as more pupils benefiting from FPE graduate
from primary schools. The implementation of free primary education resulted in increased enrolments in primary education which to date stands at 8 million up from 5.2 million in 2002 (Ngare, 2008). If a similar influx of students is experienced in secondary schools, the resources available would be over-stretched. Even before FSE was introduced, most schools did not have adequate resources, especially classrooms, furniture and textbooks (Nyaga, 2005).

From the above it is evident that for those countries that have committed themselves to the provision of free education have ultimately reaped the benefits of their investments. This is particularly evidenced by the high levels of literacy attained by the various individual countries.

Given the massive enrollments after the introduction of FPE policy, many governments, including those in Africa are now concerned that charging of user fees in secondary schools will hinder those completing their primary cycle of education from transitioning to secondary levels. Such children, mostly from poor households who would not be able to meet the costs of secondary education would miss out on their secondary cycle. As countries move towards achieving universal basic schooling, demand for and focus on education is now shifting to secondary education. The global trend demands that more skills, values and attitudes are necessary to exploit global opportunities (World Bank, 2005). Secondary education provides the vital link between basic education and the world of work and further training. It is vital for the preparation of human resource needed for development and exploitation of life opportunities. It is for this reason that many governments are looking to free secondary education as a strategy to improve access to the poor. It is
therefore necessary to ask against this background whether or not the government’s FSE policy is sustainable. The Government of Kenya spends a relatively high proportion of total public expenditure on education as a percentage of Gross National Product (GNP). In 2006, total public expenditure on education was 6.9 percent of GNP. Despite the relatively high expenditure on education, the GER in secondary education was only 31 percent in 2006 (UNESCO, 2008). However, for the free secondary education to be sustainable there will be need for radical changes in cost structures. Lewin (2007b) suggests that in general to achieve GERs of 110 percent in primary, 100 percent in lower secondary and 50 percent in upper secondary, approximately 8.6 percent of GNP would be required to be spent on education without any cost saving reforms; or 6.3 percent of GNP with cost saving reforms. Lewin further suggests that no country with ratios of secondary to primary unit costs of more than 3:1 succeeds in universalizing secondary education. This is a critical challenge in Kenya, given the fact that the ratios of secondary to primary unit costs were roughly 4:1 in 2004/2005; this suggests that if Kenya were to achieve universal secondary education, the overall public expenditure on education would have to be increased to 8.4 percent of GNP. Of that, at least three percent of GNP would be required for secondary education with cost saving reforms of no more than 3:1 in the ratios of secondary to primary unit costs. Given the fact that the government in its budget for financial year 2010/2011 increased its allocation to education by 9.2 percent to 14.1 percent, making it one of the highest expenditure levels per student out of the GDP in Africa, is a clear indication that the government is likely to achieve sustainable universal secondary education.
The study will therefore document evidence of the sustainability of the program in terms of the provision of adequate physical facilities, teaching/learning resources, the cost incidence to households in terms of income levels, opportunity costs and the direct costs will also look at the efficiency of the government's bursary schemes and timeliness of the funding disbursements to schools.

The need to improve access, increase retention and completion rates and equity without compromising on the quality of education offered in our secondary schools herein cannot be over emphasized. The benefits of secondary education are numerous; it facilitates economic growth, produce individuals who are technologically adept and capable of making informed decisions and choices in their social and political lives. It also provides the vital link between primary education and the world of work and or even further training. A country, in order to have a strong human capital base for its economic development agenda must invest heavily in the education of its citizens. Adequate measures both in policy framework and practice must be instituted by the government to ensure that all those who need secondary education get to benefit from it. It is evident that if left only to the individual consumers of education to meet the costs of education, then only the privileged children from rich families will get to enjoy the benefits that accrue' from education.

To provide quality education to its people the government must continue to increase its budgetary allocation to the education sector. There is also an urgent need to address any challenges that may be noted in the implementation of the free secondary education program. The government should seek to establish closer links
and partnerships with both the private sector and donor community to improve funding and the provision of required resources to schools, with close attention paid to schools in slum, arid and semi-arid and rural areas. This will ensure that children from the poorest households are enrolled in schools and benefit from learning. There is not only the need to increase enrolments but also to strive to maintain quality of education. Raja and Burnett (2004), commenting on free primary education in East Africa say that increased enrolments has resulted to concerns about maintaining quality. This is a risk the government cannot afford to let beset the free secondary education program. There is also the need to expand opportunities for post-secondary education and training access.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter gives the details of methodology used. It describes the procedure adopted to explain the relationships between the variables, the targeted respondents and the general targeted population. It describes the research instruments that were applied in the collection of data, the data collection techniques and finally the method used to analyze the data and the ethical issues of concern.

3.2 Research Design
This study adopted a descriptive survey design to solicit both quantitative and qualitative data. According to Cohen and Lawrence (1995), descriptive research designs gather data at particular point in time with the intention of describing the nature of existing conditions or identifying relationships that exist between specific events. This method was chosen because the researcher was interested in studying things as they were in the field without manipulating the variables. The researcher relied on the following sources of information: physical settings, records, documents objects, materials and people directly involved. Additional data was obtained from published literature.

3.3 Locale of the Study
This study was carried out within Nyakach Sub County of Kisumu county. This locale was chosen because of the following reasons: the district is familiar and accessible. It was therefore cost effective and time saving to researcher who also had other responsibilities as a teacher. Data collection was facilitated by the fact that
being familiar to the setting the researcher was able to easily form rapport with respondents, dispelling their hostility due to suspicion and gained acceptance. It was also appropriate in the sense that there has not been to the best of the researcher’s knowledge any documented research on this topic carried in the locale.

3.4 Target Population

Borg and Gall (1989), define population as all members real or hypothetical of a set of people, events or objects to which an investigator wishes to generalize the result of his study. Defining the population to which the inquiry is addressed is important as it affects decisions that the researcher must take about sampling and resources. The district has a total of 58 public schools. The 58 schools have a population of 58 head teachers, 857 teachers and 5 education officials. These formed a target population of 920 persons. Public schools formed the target population since it is only them that benefit from funding from the free Secondary education program. Head teachers, teachers and education officers were identified as the main sources of information since they are the major overseers of the implementation of the program. Furthermore head teachers have access to school records that were a vital source of information for this study.

3.5 Sampling

A sample is selected within the constraints of certain limiting factors that may not allow the total or whole target population to be dealt with. A sample size of about 10% of the population is considered the minimum, where given the constraints like time and money too large a population may not be practical to work with (Gay, 1992). However as Malusu (1990) writes ‘....for training purposes it is agreed for
statistical purposes that a sample size of about 30 to 50 is acceptable. This study picked a sample size of 30% for the targeted population. The study adopted stratified to select the schools; each strata representing education divisions within the sub county. Simple random sampling method was applied to select 20 schools in total of public secondary schools within Nyakach Sub County. A list of all the teachers in each 20 sampled schools was prepared from where 10 teachers were randomly chosen from each school to give a total of 200 teachers. 20 head teachers were purposively selected from the 20 schools sampled and the education officers were also purposively sampled.

### Table 3.1: Sample Size

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Number picked</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Officials</td>
<td>1 District Education Officer and 4 Divisional Education Officers</td>
<td>5</td>
</tr>
<tr>
<td>Head teachers</td>
<td>1 from each of the 20 schools</td>
<td>20</td>
</tr>
<tr>
<td>Teachers</td>
<td>10 from each of the 20 schools</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>225</td>
</tr>
</tbody>
</table>

#### 3.6 Research Instruments

The following research instruments were applied: questionnaires, interview schedules and observation guidelines. Printed questionnaires were administered to the head teachers, teachers, and Divisional education officers. This was because given their levels of literacy they would be able to read the questionnaires well for themselves. Questionnaires allow for easy compilation of data, quick coding, tabulation and analysis. However due to their limitations of questionnaires like
respondents willingness to respond and ability to conceive the items in them, complimenting information was gathered through the use of observation guidelines schedule. The areas of observation included instructional resources, physical facilities and their use and maintenance. This was used because observation guidelines allow for the collection of data on variables that cannot express themselves. The interview schedule involved the completion of personal interviews with the District Education Officer, an interview was chosen as it gave the researcher to get first hand information from the officer who is the head of educational activities within the region.

3.7 Piloting

The instruments were pre-tested through piloting before their actual administration. The pilot was carried out on selected members of the target population. However those members of the actual sample for the study were not considered so as to do away with the influence of memory on later behavior of the targeted respondents sampled. Two secondary schools were randomly picked from a list of the schools not sampled for the main research for the pilot study. The researcher then visited the two schools to seek permission from their respective head teachers to allow the pilot study to be carried out in their schools. With permission granted appointment was made for the administering of the instruments on the two head teachers, 10 teachers. The piloting was done to help improve face validity of the instruments

3.7.1 Reliability of the Instrument

Testing for reliability sought to determine the degree to which the empirical indicators were consistent across two or more attempts to measure theoretical
concepts (Orodho 2005:183): To test for the reliability of the instruments, piloting was used to assess the clarity of the questionnaires. Inadequate items were discarded and replaced with others while vague items were modified to improve on the quality of the instruments. The test retest method was used to test for reliability. The developed questionnaires were administered to two head teachers and ten teachers from two selected schools, who were asked to give their responses to the questionnaires questions. The completed questionnaire was then scored manually. The same set of questionnaires was again administered to the same respondents after 14 days. The responses were again scored manually and the two sets of responses compared. The Pearson product-moment correlation coefficient (r) formula was applied to compute the correlation. Correlations vary in magnitude from 0 (absence of a relationship) to a high of 1.0 (perfect correlation) according to (Charles: 1998; 345). A correlation coefficient of about 0.84 was established. This was considered by the researcher as high enough to confirm that the instruments were reliable for the study since as Orodho (2009) suggests an instrument is considered reliable if it has a correlation coefficient of 0.75 and above.

3.7.2 Validity of the Instruments

Validity refers to the extent to which a technique actually measures what it was actually intended to measure. According to Orodho, it is the degree to which results obtained from the analysis of data actually represent the phenomena under investigation (Orodho, 2005). Mugenda and Mugenda (1999), also describe it as the degree to which results obtained from data analysis actually represent the phenomena under study. According to Wiërsma (1995), all assessments of validity are subjective opinions based on the judgments of the researcher. The pilot study
helped improve the face validity of the instruments. To improve on content validity the researcher sought the assistance of his supervisors who gave expert judgment on the instruments.

3.8 Data Collection Procedure

The study the researcher was issued with a research Authorization letter from the department of Educational Administration, Policy and Curriculum Studies, Kenyatta University. A research permit was then obtained from the Ministry of Education. Thereafter the office of the DEO, Nyakach Sub County was contacted for permission to carry out the study within Nyakach. With the permission letter the researcher visited the selected schools and asked for permission from their respective head teachers to allow the use of their schools in the study. Appointments were then made for the actual administration of the research instruments. The researcher also took the opportunity to explain the importance of the study and tried to build rapport with the sampled individuals. The researcher also requested the head teachers to avail him lists of both teachers and students in their schools to facilitate the sampling process. The researcher also informed the head teachers of his intention to carry out an observation of the various facilities in their schools. Upon assuring the respondents of the confidentiality in dealing with their responses the instruments were administered. The filled instruments were then collected at the end of the exercise. The researcher also visited the DEO at his offices where a face to face interview was conducted.
3.9 Data Analysis

After the administration of instruments the researcher kept in close contact with the respondents both through visits and through phone calls to check on progress of response. Upon completion the researcher collected the completed instruments for analysis. Data collected was both quantitative and qualitative in nature. The data was classified on the basis of common characteristics. The classified data was subjected to editing to improve the quality of data for coding. The data was subjected to coding as a prelude to tabulation. Coding refers to the process of assigning numerals or other symbols to answers so that responses can be put in to limited number of categories or classes (Kothari, 1990). After coding the data was tabulated for analysis. Data from the interviews were analyzed using the statistical package for social sciences (SPSS) program using descriptive statistics. Mean average of students enrolment and teacher establishment were computed for each year under study to determine the center of the distribution. The ratio between students, physical facilities and material resources were computed. Range was used to show the change of enrolment since the introduction of the free secondary education.

The researcher used the SPSS program to analyze the data and represented the findings through the use of descriptive statistics of frequencies, percentages, mean, and standard deviation. The following methods of data presentation were used; pie charts, histograms and frequency polygons and graphs were used to illustrate students’ enrolments rate for the years under study. It was also depicted in percentages. Histograms and frequency were used to present data on total student enrolment, physical facilities and materials resources and presented in the form of tables, pie charts as well as bar graphs. The Likert scale was used to analyze the qualitative aspects of the responses.
CHAPTER FOUR

RESEARCH FINDINGS, ANALYSIS AND DISCUSSIONS

4.1 Introduction

This chapter contains the data analysis and presentation of the findings of the study. The purpose of this study was to determine the effects of the introduction of the governments’ subsidized secondary education under the FSE program in Nyakach district, Kisumu County. The objectives of the study were to assess the effects of the program on access by analyzing student enrolment trends, to assess its influence on retention and completion rates by documenting dropout rates within the sampled public secondary schools, to find out the effects of the program on equity by documenting enrolment trends by gender and to assess the effect of the program on quality. The following research questions therefore guided this study; what are the current enrollment trends within the sampled schools? How has the program affected retention and completion rates? Has the implementation of the program resulted to gender equity in terms of access? How has the program impacted on the quality of the education offered?

The target population included 58 head teachers, 857 teachers, the district education officer (DEO) and 4 divisional education officers. A total 224 questionnaires were administered. Out of these, 10 respondents accounting for 4.46% of the sampled respondents did not fill in their questionnaires within the agreed time. 10 other questionnaires accounting for a further 4.67% were annulled due to errors identified in the data cleaning process, leaving a total of 204 usable questionnaires representing a response rate of 91.07%. A face to face interview was conducted with the District education officer and 20 observation guidelines were filled by the
researcher. These formed the basis for the analysis and the findings presented in this study. The data collected was coded and entered in SPSS package where analysis was done. The data was presented using bar graphs, pie charts, percentages, frequency tables upon which interpretations and recommendations were made.

The researcher started by outlining the background information of the respondents to develop a picture of the context in which the research was carried out.

The following report is based on the research questions indicated here:

i) What are the current enrollment levels within the sampled schools?
ii) How has the policy affected retention and completion rates within the schools?
iii) How has the implementation of the program affected gender equity within the sampled schools?
iv) How has the policy impacted on the quality of education within the schools?

4.2 Background Information on the Respondents

4.2.1 Respondents by Gender

The researcher sought to establish the demographic characteristics of the respondents in terms of gender. There were 18 head teachers, 182 teachers and 5 educational officials.
<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>78.95</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>21.05</td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>149</td>
<td>81.87</td>
</tr>
<tr>
<td>Female</td>
<td>33</td>
<td>18.13</td>
</tr>
<tr>
<td>Education Officers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>20</td>
</tr>
</tbody>
</table>

Figure 4.1: Respondents by Gender
The female gender represented by 21.05% (3) for Head teachers, 18.13%(33) for Teachers and 20%(1) for Education officers are far less than their male counterparts 78.95%(15) for Head teachers, 81.87%(149) for Teachers and 80%(4) for Education Officers. With such low representation of female respondents could be due to certain factors that hinder girls’ access to education. The study therefore sought to find out if the implementation of the FSE program helped improve girls’ access to education at the secondary level by improving on gender equity within the sampled schools.

4.2.2 Respondents by Years of Experience in Work

The researcher sought to document the respondents work experience. This was captured in table 4.2.

<table>
<thead>
<tr>
<th>Category</th>
<th>0-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16 and above</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head teacher</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Teachers</td>
<td>20</td>
<td>112</td>
<td>45</td>
<td>5</td>
<td>182</td>
</tr>
<tr>
<td>Education officers</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Percentage</td>
<td>11.71</td>
<td>60.98</td>
<td>23.9</td>
<td>3.41</td>
<td>100</td>
</tr>
</tbody>
</table>

53
The results indicate that most of the targeted respondents had experience of between 6 to 10 years. For the head teachers this shows they have the relevant exposure and experience in school administration and supervision of curriculum implementation. The teachers have good experience in curriculum implementation. Most of the education officials also had adequate years of experience in their jobs. Such levels of experience are important since these are the major implementers of the policy.

4.2.3: Respondents by Level of Education

The researcher also documented the respondent’s level of education.
Table 4.3: Respondents Highest Level of Education

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diploma</td>
<td>61</td>
<td>29.76</td>
</tr>
<tr>
<td>Graduate</td>
<td>123</td>
<td>60</td>
</tr>
<tr>
<td>Masters</td>
<td>21</td>
<td>10.24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>205</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Figure 4.3: Respondents by Level of Education

The findings on table 4.2 and figure 4.3 indicate that majority of the targeted respondents were either holders of graduate degrees or master’s degrees as indicated by the cumulative percentage and numbers of 70.24% (144). The successful implementation of the FSE policy, require that head teachers and teachers as the primary implementers to have enhanced competencies in terms of human, technical and conceptual skills to be able to manage educational and instructional resources,
implement curriculum using appropriate techniques and to manage work and work groups effectively. Such skills are attained through formal education and training.

4.3 Effect on Access within the Sampled Schools

The first objective of this study was to find out the effect of the program on access. To achieve this, the researcher sought to establish the enrolment trends within the sampled schools. The head teachers provided data on school enrolment figures from 2006 to 2012. To contextualize the effects on enrollments, 2006 was taken as the base year with enrollment figures of 2446 students enrolled in the sampled schools. The data was analyzed and the results presented in table 4.2.1 below.

4.3.1 Student Enrolment from 2007 to 2012

The figures and percentages presented in table 4.4 below relate to data on student enrollment trends within the sampled schools.

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrolment</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2606</td>
<td>6.5</td>
</tr>
<tr>
<td>2008</td>
<td>2847</td>
<td>9.2</td>
</tr>
<tr>
<td>2009</td>
<td>3306</td>
<td>16.2</td>
</tr>
<tr>
<td>2010</td>
<td>4113</td>
<td>24.4</td>
</tr>
<tr>
<td>2011</td>
<td>5910</td>
<td>43.7</td>
</tr>
<tr>
<td>2012</td>
<td>8523</td>
<td>44.2</td>
</tr>
</tbody>
</table>
The findings in Table 4.4 indicate an increase in enrolment rates, from 6.5% (2606) between 2006 and 2007 to 44.2% (8523) between 2011 and 2012. There were noted greater increases from 2009 onwards, from 24.4% (4113) to 44.2% (8523). This increasing trend was assuming other factors remained constant, ascribed to the introduction of the subsidized secondary education program in 2008 that ensured that majority of student completing their KCPE examinations increasingly got opportunity for admission into secondary schools. The implementation of the program improved opportunity for access by expanding opportunity for transition. This confirms the MoEHRD and KEDI (2007) findings of increased enrollment rates in secondary schools in Korea following the government’s implementation of free secondary education. Both Chile and Japan also experienced increased enrollments following their successful implementation of free secondary education. Chile recorded increased enrollments of up to 72% with literacy levels rising to 95.7% in 2000 while Japan also recorded increased enrollment levels of 80% in secondary schools, with literacy levels at 90.8% in 2002 (Jim, 2007).

4.4 Effects on Retention and Completion

To assess how the policy has influenced both retention and completion rates within the sampled schools, an analysis was made of the student dropout rates between 2007 and 2012.

Table 4.5: Student Dropout Rates between 2007 and 2012 in the Sub County
Table 4.5 represents information on the number of students who dropped out before completing their secondary cycle of their education as captured by data obtained from head teachers of the sampled schools.
<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
<th>Dropout</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2606</td>
<td>604</td>
<td>23.18</td>
</tr>
<tr>
<td>2008</td>
<td>2847</td>
<td>465</td>
<td>16.33</td>
</tr>
<tr>
<td>2009</td>
<td>3306</td>
<td>126</td>
<td>3.81</td>
</tr>
<tr>
<td>2010</td>
<td>4113</td>
<td>60</td>
<td>1.46</td>
</tr>
<tr>
<td>2011</td>
<td>5910</td>
<td>31</td>
<td>0.52</td>
</tr>
<tr>
<td>2012</td>
<td>8523</td>
<td>24</td>
<td>0.28</td>
</tr>
<tr>
<td>Total</td>
<td>27305</td>
<td>1290</td>
<td></td>
</tr>
</tbody>
</table>

The findings in table 4.5 as also represented in figure 4.4 indicate that the student dropout rates reduced tremendously within the sampled schools from a high of 23.18% (604) in 2007 to only 0.28% (24) in 2012. This decrease was attributed to the government support through the subsidized secondary education program that ensured that cost related exclusion was almost eliminated. These findings agree with
findings of another study by Pallegedera and Yamano (2007) which recorded reduced levels of dropouts following the Uganda government’s implementation of its Universal Secondary Education (USE) Policy. The Korean government also attained increased enrollments without any disparities in retention and advancement rates. This indicates success in attaining high retention and completion rates (MoEFTRD & KEDI (2007)).

4.5 Effects on Quality

The third objective of the study was to establish the immediate effects of the implementation on quality. To do this, the researcher sought to outline the impact of the program on selected performance variables and on available human, physical and instructional resources.

4.5.1 Effect on Performance within the Sampled Schools

To determine this, the head teachers and teachers sampled were asked to give their opinion on how they felt the implementation of the policy had impacted negatively on key performance variables within their schools on a scale of zero to five. A five point Likert scale was applied as the measure where by the mean and standard deviation of key variables were computed and assessed on the basis of the following scale: A mean score of between 4.5 to 5 was ranked as to a very great extent, a score of between 3.5 to 4.5 was ranked as to a large extent, a score of between 2.5 to 3.5 was ranked as neutral, a score of between 1.5 to 2.5 was ranked as minimal and a score of between 1.0 to 1.5 was ranked as no effect at all. The responses for above were interpreted and findings are presented in Table 4.6.
Table 4.6: Effect on various selected performance indicators

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>200</td>
<td>4.15</td>
</tr>
<tr>
<td>Assessment and Exams</td>
<td>200</td>
<td>3.80</td>
</tr>
<tr>
<td>Guidance and counseling</td>
<td>200</td>
<td>4.08</td>
</tr>
<tr>
<td>Health care</td>
<td>200</td>
<td>3.20</td>
</tr>
<tr>
<td>Discipline</td>
<td>200</td>
<td>3.50</td>
</tr>
</tbody>
</table>

The findings in table 4.6 show that teaching, discipline, assessment and exams as well as guidance and counseling were ranked the most affected to a large extent by majority of the respondents. This is accounted for by a mean of 4.15, 3.51, 3.80 and 4.08 respectively. However, most respondents remained neutral on health care services as accounted for by a mean of 3.20. This indicates that teaching, discipline, assessment in exams and guidance and counseling services were negatively affected by the introduction of the program. This implies a negative effect on quality of education as these are some of the most important variables that affect the quality of education offered. This concurs with findings of Verspoor (2008), that increase in public spending by governments will not generate increases in educational attainment and learning achievement unless the same is accompanied by reforms that aim at more efficiency and additional funding. Increased enrollments without corresponding increase in physical resources and teacher numbers will adversely affect the quality of education offered.

4.5.2 Effects on Human and Instructional Resources

To establish the effects of the FSE program on human and instructional resources and by consequence quality, the researcher asked the head teachers to record their
perceptions on the effects of the policy on human and instructional resources. A five point Likert scale comprising strongly agree, agree, neutral, disagree and strongly disagree was applied to analyze the respondents opinions on the following outcomes. The findings were presented in Table 4.7.

Table 4.7: Effects on human and instructional resources within the schools sampled

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Strained physical facilities</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Inadequate teaching staff</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High teacher student ratios</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High student textbook ratio</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Inadequate non-teaching staff</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

The findings show that the following negative outcomes were found, strained physical facilities (94.41 %), inadequate teaching staff (100%), high teacher student ratio (100%) and inadequate non-teaching staff (88.9%) respectively as was indicated by the agree and strongly agree cumulative response. These findings bring to light the concerns raised by Nyaga (2008), that even before the introduction of FSE policy, most schools did not have adequate physical resources, especially classrooms, text books and furniture.
4.5.3 **Effects on Physical Infrastructure**

To establish the effects of the FSE Program on the use of available physical resources the head teachers and teachers were asked to rate the extent to which they felt the introduction of the program negatively affected the use of the available physical and instructional resources on the basis of a five point Likert scale of very great extent, great extent, neutral, minimal and no effect.

**Table 4.8: Effect of FSE Program on Physical Facilities**

<table>
<thead>
<tr>
<th>Facility</th>
<th>No Effect</th>
<th>Minimal</th>
<th>Neutral</th>
<th>Great Extent</th>
<th>Very Great Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>5</td>
<td>9</td>
<td>4.5</td>
<td>20</td>
<td>94</td>
</tr>
<tr>
<td>Toilet</td>
<td>3</td>
<td>7</td>
<td>3.5</td>
<td>15</td>
<td>7.5</td>
</tr>
<tr>
<td>Laboratory</td>
<td>5</td>
<td>17</td>
<td>8.5</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td>Administration Block</td>
<td>21</td>
<td>90</td>
<td>45</td>
<td>59</td>
<td>29.5</td>
</tr>
<tr>
<td>Dining Hall</td>
<td>5</td>
<td>36</td>
<td>18</td>
<td>17</td>
<td>8.5</td>
</tr>
<tr>
<td>Kitchen</td>
<td>55</td>
<td>27.5</td>
<td>17.5</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Library</td>
<td>15</td>
<td>7.5</td>
<td>20</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

The findings on table 4.8 show that majority of the respondents agreed that the use of classrooms 83%(166), laboratories 82.5%(165), library 72.5%(145), dining hall 71%(142) and toilets 87.5%(175) was negatively affected by the introduction of the program as accounted for by the large numbers of respondents who indicated great extent and very great extent cumulative response.

The researcher further completed an observation guideline to document the condition of the existing physical facilities. The analyses indicate that 75% of the schools had clean compounds. About 35% of the sampled schools had small
compounds relative to enrollment numbers. Most of the schools had permanent and semi-permanent buildings. However about 13% of the sampled schools had temporary make shift structures made of iron sheets. Such rooms are generally too hot during hot weather for studies or too cold during the cold season. About 93% of the structures were in good condition with only 7% lacking doors and windows. 57% of the classrooms observed had inadequate space. The toilet facilities for the teachers were adequate in most of the schools. However about 52% of the sampled schools recorded inadequate toilet facilities for students. 69% of the sampled schools relied on rain harvesting for water while 24% had sank boreholes with only 7% having access to tap water.

The findings above indicate a negative effect on quality of education provided under the program, since as Kuthemba (2000) argued in his findings, the larger the number of learners per classroom, the number of learners per teacher, the number of learners per text book, the poorer the quality of education. Large number of learners per classroom show there is inadequate room to accommodate all learners. Similar findings were also recorded by Nguru (1986) that crowded classrooms make it difficult for children to learn, teachers also find it hard to move around to help needy students or mark class work. Schools that have inadequate facilities like libraries, laboratory and classrooms performed poorly in KCSE examinations. Similar studies done in Uganda also indicated similar findings. According to Chapman et al (2009), Uganda one of the first East African countries to offer free Universal Secondary Education (USE) in 2007, is still grappling with quality. The quality of education provided to Ugandan students is still questionable even as enrollments improve. The
Kenyan government therefore needs to address these issues that negatively affect quality of education offered.

The program has however improved quality in terms of ensuring reduced dropout meaning that the program has reduced wastage associated with dropping out among learners.

4.6 Effects of the Program on Equity

The last objective of the program was to assess the effects of the program on equity. There are two aspects of equity, the ability to provide equal access to educational resources and gender equity. Equity in terms of access is normal assessed on the basis of rural and urban schools. Nyakach being a rural set up, the researcher concentrated on gender equity. The researcher documented enrollment trends within the sampled schools on the basis of gender. The findings were documented in table 4.9

<table>
<thead>
<tr>
<th>Year</th>
<th>Male Number</th>
<th>Male %</th>
<th>Female Number</th>
<th>Female %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1314</td>
<td>54.25</td>
<td>1292</td>
<td>45.75</td>
<td>2602</td>
</tr>
<tr>
<td>2008</td>
<td>1538</td>
<td>54.04</td>
<td>1309</td>
<td>45.96</td>
<td>2847</td>
</tr>
<tr>
<td>2009</td>
<td>1773</td>
<td>53.63</td>
<td>1533</td>
<td>46.37</td>
<td>3306</td>
</tr>
<tr>
<td>2010</td>
<td>2346</td>
<td>57.04</td>
<td>1677</td>
<td>42.96</td>
<td>4113</td>
</tr>
<tr>
<td>2011</td>
<td>3464</td>
<td>58.61</td>
<td>2446</td>
<td>41.28</td>
<td>5910</td>
</tr>
<tr>
<td>2012</td>
<td>5574</td>
<td>60.69</td>
<td>3550</td>
<td>39.31</td>
<td>8523</td>
</tr>
</tbody>
</table>
The findings on table 4.9 show that the proportion of girls to boys is skewed in favor of boys. Although there has been increased enrollment of both girls and boys, the proportion of girls to boys has been declining. This indicates the program has not been very successful in ensuring gender equity. This can be attributed to what Chimombo (2005), says that there are some factors that affect the education of girls more than boys. Some of such factors are external, originating outside the school system like early marriages, unwanted pregnancies and family responsibility.

4.7 Discussion of the Findings

The government’s subsidized secondary education program under the FSE Policy was introduced in 2008 with the main aim of ensuring expanded access for those completing their standard eight level of education to transition to their secondary school level. Under the policy costs are supposed to be shared between the community and the government. The community is to bear the responsibility of providing land for the expansion and the physical development of the school while the government covers the cost of tuition and teacher salaries. The study has however shown that in most of the sampled schools the existing physical infrastructure has been overstretched resulting to crowding. Some of the facilities affected include classrooms, laboratories, toilet facilities, dinning halls etc.

The findings also show that the cases of student dropout have greatly reduced. This has ensured that more students enrolling in secondary schools are now retained to complete their secondary education cycle. This can be directly attributed to the increased government funding support to secondary schools through the FSE policy.
To help facilitate the smooth implementation of the policy, the government needs to institute intervention measures to counter the identified challenges. Such intervention measures should include; releasing of the funds in time to avoid schools operating on debt, facilitating effective budgetary controls in schools through the ministry and its field offices. To increase its support through the other government agency funding like Constituency Development Fund (CDF), Local Authorities Transfer Fund (LATF) and support from Non-government organizations supplement the apparently inadequate funding from the policy. There is need to increase the capacity and competencies of the key implementers through introduction of workshops seminars and other training programs.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study was to find out the effects of the introduction of the government’s subsidized secondary education program in Nyakach District of Kisumu County. This chapter outlines the concluding elements that are organized in the following sub-sections; introduction, summary, recommendations and suggestions for further research.

To establish the effects of the governments subsidized secondary education policy in Nyakach District of Kisumu County, the study sought to find out the effects of the program on access by analyzing the enrolment trends within the sampled schools between 2007 and 2012, that is before and after the implementation of the policy, to find out how the program has affected retention and completion rates by documenting dropout rate trends, to establish its effect on quality by outlining its effect on performance and on available physical and instructional resources and finally to establish its effects on gender equity.

The target population included secondary school head teachers, teachers and education officers within the District. The study accounted a 91.1% response rate which formed the basis of the results of the study. The head teachers and teachers were the major informants for this study.
5.2 Summary of the Findings

5.2.1 Access

The first objective of the study was to establish the effects of the policy on access. To do this enrolment trends was documented.

Enrolment Trends

The enrolment trends were documented within the sampled schools covering the periods immediately before and after the start of the policy i.e. 2007 to 2012 was documented. The findings show that enrolment levels increased between 2007 and 2011 65% to 44.2%. This huge increase in enrolments can be directly attributed to the implementation of the FSE policy that was introduced in 2008.

5.2.2 Effects on Retention and Completion Rates

The second objective was to establish the effects of the program on retention and completion rates. To do this trend in dropout rates was documented.

Dropout Rates

There was evidence of a fall in dropout rates for the targeted schools. The prevalence of dropout cases reduced from a high of 46.82% in 2007 to a low of 1.86 in 2013. This indicates a huge fall in the dropout rates which is equivalent to a very high retention and completion rates. This can be directly attributed to the increased government support to secondary schools through the policy.
5.2.3 Effects on Quality

The third objective was to establish the effects of the program on quality. To do this the researcher documented the effects of the program on performance and on available physical and instructional resources. The following limitations were identified as regards physical and instructional resources; they were largely inadequate, with many of them needing renovation and proper repairs. This indicates a need to address the issue of adequacy of resources and to increase space and capacity of existing facilities. On quality the program has had a negative effect on quality of education offered as indicated by increase in number of students per classroom leading to crowding, increased number of students per teacher, increased number of students per textbook. The researcher documented strained physical resources, under staffing in most schools leading to low teacher student ratios and incapacity of many schools to employ enough teaching support staff. This calls on the government to increase its budgetary allocation to cater for infrastructure and more instructional resources. The government also needs to partner with other stakeholders including communities to help establish more physical infrastructure and provide other resources necessary.

5.2.4 Effects on Equity

The fourth objective was to assess the effects of the program on equity. The researcher looked into gender equity. The findings indicate that the program has not been successful in enhancing gender equity in enrollment. The girls have not been getting equal opportunities for access as compared to the boys. These calls on the government to look into possible remedies to the factors that make girls not enroll or complete school.
5.3 Conclusion

The purpose of the study was to establish the effects of the implementation of government’s subsidized secondary education within Nyakach District of Kisumu County. The researcher’s makes the following conclusions based on the findings of the study.

1. The implementation of the program has improved access by increasing enrollment levels within the sampled schools.
2. The program has improved retention and completion rates as evidenced by the reduced rates of dropouts.
3. The program has not succeeded in improving gender based equity as evidenced by the low proportion of girls enrolled compared to boys.
4. The study also found out the following as the most adversely affected by the implementation of the policy; the teaching-learning process, assessment in exams as well as the capacity of the schools to provide adequate instructional resources and physical infrastructure. This has negatively affected the quality of education offered by the program.

5.4 Recommendations

1. Need for support from other government agencies like CDF, School Infrastructure Funds (MoE), Economic stimulus package, bursary schemes and increased cooperation between the government and NGOs to supplement funds for physical infrastructure development so as to help improve on quality.
2. The government through the Teacher Service Commission (TSC) to employ more teachers to help handle the increased number of enrolments so as not to affect the quality of education offered negatively.
3. There is need to expand opportunities for access to girls by expanding the capacity of existing day schools and also establishing more girls boarding schools in rural areas like Nyakach to help improve on gender equity.

5.5 Suggestions for Further Research

1. The study found out that gender equity is still skewed in favor of boys. There is need to carry out further research to help identify the reasons responsible for the failure of the program to achieve gender parity within schools.

2. Another critical observation made in this study is that the quality of education offered under the FSE program has been negatively affected. There is need to document the actual extent of this effect and find out the best intervention measures that may be implemented to reverse the negative trend.

3. The study observed increased enrollments within the schools. However the researcher acknowledges that there are other factors that could contribute to the increased enrollments like population increase, the researcher therefore suggests further research on any other factors that may contribute to the increased enrollment.
REFERENCES


APPENDICES

APPENDIX I

Principals Questionnaire

The aim of this questionnaire is to establish the impact of the government's free secondary education on enrolments, quality and equity. It also seeks assess its sustainability. Kindly complete the questionnaire by filling in the appropriate answers in the space provides. Tick \( \surd \) where necessary

SECTION A

1. Indicate your gender
   
   Male \( {} \) \; Female \( {} \)

2. What is your academic qualification?
   
   KCE/EACE/KCSE \( {} \); Graduate \( {} \)
   Masters \( {} \)
   Any Other (Specify) ...........................................

3. What is your highest professional qualification?
   
   SI \( {} \); Diploma \( {} \); B Ed \( {} \)
   BSc \( {} \); M Ed \( {} \); MSc \( {} \)
   PhD \( {} \)
   Others (Specify) ...........................................

4. Indicate your teaching experience in years
   
   0 - 5 \( {} \); 6 - 10 \( {} \)
   11 –15 \( {} \); 16 and above \( {} \)

5. How old is your school?
   
   0 – 20 \( {} \); 21-40 \( {} \); 41 and above \( {} \)
SECTION B

6. Please complete the table below by filling in the number of students who sat for KCSE in the respective years shown.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Candidates</th>
<th>School's Mean Score</th>
<th>Position in the Division</th>
<th>Position in the District</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. The table below shows points scored by candidates in various years. Fill in as appropriate

<table>
<thead>
<tr>
<th>Points</th>
<th>year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td></td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-17</td>
<td>D -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-31</td>
<td>D+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32-38</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39-45</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46-52</td>
<td>C+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53-59</td>
<td>B -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-66</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67-73</td>
<td>B +</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74-80</td>
<td>A -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81-84</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Following the above exams how many candidates were admitted to the following categories of colleges?

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Universities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma Colleges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Training Colleges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. In your opinion what has contributed to the performance shown above .......... 

10. Please indicate the number of your teaching staff on the basis of the following categories.

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TSC</td>
<td>BOG</td>
<td>TSC</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. On average, what have been your schools CBE? ..................................................

12. What is the average teacher workload per week? ..............................................

13. How often do your teachers attend in-service courses?
   Always [ ] Several times [ ] Not at all [ ]
14. Do you consider the number of your teaching to be adequate?
   Yes [ ]  No [ ]
   If No, what strategies have been employed in your school to counter the problem?

15. In your opinion does availability of teachers influence students' performance in KCSE? Explain your answer.

16. In your opinion how do you think the policy has affected quality of the following activities aspects of education?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>A very great extent</th>
<th>A great extent</th>
<th>Neutral</th>
<th>Minimal</th>
<th>No effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment and Exams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance and Counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION D**

17. Do your students have enough text books in all the subject areas?
   Yes [ ]  No [ ]

18. On average what is the student's textbook ratio?
   Mathematics  Languages
   Sciences  Applied Subjects

19. Do you have a school library?
   Yes [ ]  No [ ]
If No, where are your textbooks kept? ................................................................. .................................................................

20. Do your students lose textbooks?
   Yes   [   ]  No   [   ]

   a) If yes how are they replaced? ........................................................................

   b) Is the method effective? ................................................................................

21. Indicate your opinion whether you agree or not with the following as some of the challenges facing the implementation process.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay in disbursement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over enrolment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate of the funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate training or orientation of the implementers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hurried implementation of the policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misuse of the funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22. In your opinion do you agree with the following as the immediate outcomes of the policy?

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strained physical facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High student teacher Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High student textbook Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate teaching staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate non-teaching staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

23. To what extent do you think the policy has negatively affected the use of the following physical infrastructure?

<table>
<thead>
<tr>
<th>Facility</th>
<th>No effect at all</th>
<th>Minimal</th>
<th>Neutral</th>
<th>Great extent</th>
<th>Very Great Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adm. block</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining Hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX II

Teachers Questionnaire

This questionnaire is intended to establish the impact of the government's free education program on student enrolments, equity and quality. It further seeks to assess its sustainability. Kindly answer all the questions provided below, to the best of your ability.

PART A

1. What is your workload per week?

2. Do you have adequate facilities and resources for teaching?
   
   Yes [ ]  No [ ]

3. Are you effectively coordinating your activities to ensure success of the FSE program?
   
   Yes [ ]  No [ ]

4. What problem do you encounter most in implementing the curriculum at your school?
   
   ........................................................................................................................................................
   ........................................................................................................................................................

5. In your opinion what is the attitude of the community served by school on education
   
   Very good [ ]  Good [ ]
   Average [ ]  Poor [ ]  Very poor [ ]

6. What is the textbook ratio in your subject area?

<table>
<thead>
<tr>
<th>Subject</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td></td>
</tr>
<tr>
<td>Minor</td>
<td></td>
</tr>
</tbody>
</table>

83
7. Do you have adequate physical and material resources for teaching your subjects?
   Yes [ ]  No [ ]

   If NO, state the problem...................................................................................................................

8. Were you in-serviced or orientated in readiness for effective implementation of
   FSE policy in your school.
   Yes [ ]  No [ ]

   If yes, what preparation did you undergo? ........................................................................................

9. Are you effectively coordinating your activities to ensure successful
   implementation of the FSE program?
   Yes [ ]  No [ ]

10. What problems do you encounter most in the management of FSE in your school?
    i. ......................................................................................................................................................
    ii. ......................................................................................................................................................
    iii. ......................................................................................................................................................

11. What do you think is the most serious problem in the implementation of the FSE
    in your school? Rank them in order of seriousness.
    That teaching-learning resources are not availed in time [ ]
    Inadequacy of teaching-learning resources [ ]
    Inadequacy of classrooms leading to overcrowding [ ]
    Problems of discipline from over age students [ ]

    Others specify ....................................................................................................................................
12. In your opinion, how do you think the policy has affected quality of the following activities aspects of education?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>A very great extent</th>
<th>A great extent</th>
<th>Neutral</th>
<th>Minimal</th>
<th>No effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment and Exams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance and counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. To what extent do you think the policy has negatively affected the use of the following physical infrastructure?

<table>
<thead>
<tr>
<th>Facility</th>
<th>No effect at all</th>
<th>Minimal</th>
<th>Neutral</th>
<th>Great extent</th>
<th>Very Great Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adm. block</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining Hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX III

Observation Guideline Schedule

This observation guideline will be used to collect data on school physical facilities to assess their impact on the successful implementation of the FSE program.

1. Describe the following school facilities
   a) Classrooms Number [  ]
   b) Are they
      Permanent [  ]
      Temporary [  ]
      No doors/windows [  ]
      Open air teaching [  ]

      Classroom in venue outside the school compound
      Yes [  ]   No [  ]

      Lockable doors,
      Yes [  ]   No [  ]

c) Are there adequate furniture [desks, chairs and lockers]?
   Yes [  ]   No [  ]

d) Do the classrooms have adequate space?
   Yes [  ]   No [  ]

e) How many toilet facilities?

<table>
<thead>
<tr>
<th></th>
<th>Teachers</th>
<th></th>
<th>Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status- Clean or Dirty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
f) What is the general condition of the buildings?
   - Some need major repairs [   ]
   - Most need major repairs [   ]
   - All in good condition [   ]
   - Need complete rebuilding [   ]

g) How does the school get its water?
   - Rain harvesting [   ]
   - Bore hole [   ]
   - Tap water [   ]

h) Physical facilities and equipment the school may be having. Tick as appropriate.

<table>
<thead>
<tr>
<th>Facilities/equipment</th>
<th>Available</th>
<th>Unavailable</th>
<th>Adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration block</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff room</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental offices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers’ desks and chairs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class cupboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Aid Kit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play ground</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School bus/van</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX IV

District Education Officer’s Interview Schedule

1. District

2. Numbers of secondary schools

3. Number of students enrolled

   Male [   ]      Female [   ]

4. KCSE performance in the district in the following years?

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Grade &amp; Points</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. In your opinion what has contributed to the above performance?

   ................................................................................................................................................................

6. Do schools in your district receive funds for instructional resources?

   Yes [   ]      No [   ]

   If yes, how do schools acquire them? ...........................................................................................................

7. What are the challenges the schools face in acquiring instructional materials?

   ...................................................................................................................................................................

8. What is the total number of teachers in the district?

   a) Is the number adequate? ...........................................................................................................................

   b) Does your office organize refresher courses for them?

      Yes [   ]      No [   ]

      If yes, how frequent? .................................................................................................................................

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9. What is the teacher student ratio in the district? ...........................................................
........................................................................................................................................

10. What is the source of funding for the FSE policy? ...........................................................
........................................................................................................................................

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td></td>
</tr>
<tr>
<td>Donor Community</td>
<td></td>
</tr>
<tr>
<td>World Bank</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
</tbody>
</table>

11. In your opinion do you think the program is financially sustainable?

Yes [ ]    No [ ]

Explain your answer..............................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
APPENDIX V

Letter of Introduction

Edward Odhiambo Gura,
Department of Educational Management,
Policy and Curriculum studies,
Kenyatta University,
P.O. Box 43844 – 00100, Nairobi.

To The Head teacher,

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL

I am a post-graduate student at Kenyatta University currently out on research. The research is on the effects of the Governments Subsidized Education Program on access, retention and completion rates, Quality and Equity within Public schools in Nyakach Sub County of Kisumu County. I humbly request you to allow me to involve you and your teachers in the study.

I assure you that all the information given will be used solely for this research purpose and will be confidential.

Yours faithfully,

Edward Odhiambo Gura
APPENDIX VI

Research Permit

[Image of Research Permit]

THIS IS TO CERTIFY THAT:

Prof. Dr. Mr. Mrs. Miss / Institution
Edward Odhiambo Gura
of (Address) Kenyatta University
P.O.Box 43944 00100, Nairobi

has been permitted to conduct research in

Location
Nakach
District
Nyanza
Province

on the topic: The effect of Kenya’s subsidized
secondary education programme: A case of
Nyakach District, Kisumu County

for a period ending: 31st March, 2013

Applicant’s Signature
National Council for Science & Technology