

**EFFECTS OF SUBSIDIZED SECONDARY EDUCATION ON
ACCESS TO PUBLIC SECONDARY SCHOOLS IN NYAMACHE
DIVISION, KISII COUNTY, KENYA**

BY

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DECLARATION

This research project is my original work and has not been submitted to any other institution for award of degree or any other award.

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DEDICATION

This project is dedicated to my father Isaac Aroni Mayaka who encouraged me to pursue a master's degree course.

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ABBREVIATIONS

AEO- Area Education Officer

BOG- Board of Governors

DEO- District Education Officer

EFA - Education for All

FPE – Free Primary Education

KSSHA – Kenya Secondary Schools Heads Association

PPPs - Public-Private Partnerships

MoE – Ministry of Education

SSE – Subsidized Secondary Education

TSC- Teachers Service Commission

UN –United Nations

UNESCO – United Nations Educational, Scientific and Cultural Organization

USE - Universal Secondary Education

ABSTRACT

The subsidized secondary education was introduced in 2008 as a result of Kenya's effort to attain Education for All (EFA) by 2015 as indicated in the Sessional Paper no. 1 of 2005. The subsidized secondary education was implemented in February, 2008 by the Coalition Government. This was to reduce cost of education for parents, increase access to education and to increase transition rates from primary to secondary transition rates in coping with the United Nations aim to achieve Millennium Development Goals by 2030. The Kenya Government announced the release of 2.9 billion for subsidized secondary education and allocated Ksh. 10,265 to every child to cater for tuition and operational costs annually. The purpose of the study was to assess the effects of subsidized secondary education in Nyamache Division, Kisii County. The following were the specific objectives of the study; to determine the gross enrolment rates in public secondary schools in Nyamache Division in the last five years, to determine the impacts of subsidized secondary education on access to the existing educational resources in public secondary schools in Nyamache Division, to determine how access has been achieved by the subsidized secondary education in relation to teaching and learning resources in public secondary schools and to propose solutions to the problems of subsidized secondary education in relation to access on the educational resources in public secondary schools in Nyamache Division. The study adopted the descriptive survey design to investigate the various effects of subsidized secondary education in Kenya. The target population comprised of 28 public secondary schools in Nyamache Division with 2,536 students who are under the Subsidized Secondary Education Programme from which a sample size of 14 Head Teachers and 48 class teacher were used which made a total of 62 respondents. Data was collected, coded and entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS). The collected data was analyzed using both inferential and descriptive statistics such as frequency tables, bar graphs, pie charts and measures of central tendency using SPSS. From this research it was found out that there is scarcity of learning resources, there was also delay in disbursement of funds to schools by the government and there was shortage of teachers in the public schools in Nyamache Division. The enrollment trend was also on the upward trend hence there was need to make early plans to cater for the expected learners seeking secondary education. The study recommends that the Kenya government disburses SSE funds promptly and posts more teachers to these schools in order to improve the provision of Subsidized Secondary Education in the country.

CHAPTER ONE

1.0 INTRODUCTION

This chapter presents: the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, assumptions, limitations, delimitations, significance, theoretical framework, conceptual framework and operational definition of central terms.

1.1 Background of the study

The introduction of free primary education and subsidized secondary education in Kenya has seen the demand for higher education triple. The two programs, which were started in 2003 and 2008 respectively, to increase access of education particularly to the poor, has led to an increase in graduates seeking higher education in the country. Kenya's Ministry of Education notes that there has been massive improvement in secondary school enrollment over the years. In 2007 for instance, records from the education ministry show there were 1.02 million students in secondary schools across the country. The number increased tremendously to 1.7 million in 2010 in a span of three years. Out of the 1.7 million in secondary schools, about 360,000 students sat for Kenya Certificate of Secondary Education (KCSE) exams in 2010, representing a significant increase from the previous year's 337,404. While releasing the 2010 KCSE results, Kenya's Education Minister said candidates had performed better than the previous years. "The number of candidates who attained a minimum university entry qualification, C+ and above, increased to 97, 134," he said. The increase was from 2009's 81,048. On the other hand, 257, 207 candidates scored grade C and below.

Sadly, while Kenya celebrates these achievements in its education sector, the improved performance and increase in numbers from secondary school level has not corresponded with the development of higher education. Many of the candidates cannot access higher education because of limited tertiary institutions. Kenya has only seven public universities, which admit a paltry 10,000 students annually into subsidized government degree programs. The institutions, which are scattered in various parts of the country, also offer parallel degree programs, beside regular programs. The programs were introduced about ten years ago in response to continuous demand for higher education in the country. However, students who undertake the programs pay as high as 2500 U.S. dollars a year. This is because the parallel degree programs have become income-generating ventures for varsities as government financial support dwindles. Because of high fees charged, they remain out of reach for many students.

World Bank (1995) acknowledges the important role education plays in society. Education helps to reduce poverty by developing productive skills of the citizens and by equipping people with the skills they need to fully participate in the economy and society. Education creates self-awareness in an individual, gives him skills and attributes to cope intelligently with the fast-changing society and to improve his quality of life. Education promotes health and nutritional status of families. Education also contributes to national development by equipping people with the skills with which they can participate in planning for development, providing managerial skills and promoting positive community image for national and societal unity. Secondary Education plays an important role of developing a country's human resource base. UNESCO (2007) noted that the United Nations Declared education as a human right by saying that everyone has

the right to education. It also noted that Education shall be free at least in the elementary and the fundamental stages i.e. Elementary Education shall be compulsory while Technical and Professional education shall be generally available to all on the basis of merit.

The subsidized secondary education was implemented in February, 2008 by the Coalition Government. This was aimed at reducing the cost of learning as well as increase transition rates from primary to secondary. The Kenya Government announced the release of 2.9 billion for subsidized secondary education and allocated Kshs. 10,265 to every child to cater for tuition and operational costs annually.

Table 1.1 Distributions of SSE funds by MoE (2009)

Vote head	Amount in Kshs.
Tuition	3600
Repairs, maintenance and improvement	400
Local Transport and Travel	400
Electricity, Water and Conservancies	500
Activity	600
Personal Emoluments	3965
Medical	300
Total	10265

Source: Ministry of Education (2009) on Distribution of SSE Funds.

This amount does not however cater for the examination fees and the development of the physical facilities hence the parents are expected to meet the cost of development.

Education being the cornerstone of the economic and social development improves the productive capacity of societies and their political economic and scientific institution. It helps to reduce poverty by mitigating its effects on population, health and nutrition. Education reform efforts in African countries have aimed at making education effective vehicle for national development, (UNESCO, 2005). Developing countries have always recognized the importance of education as a means of helping bring about fast modernization of their economies. This has been accompanied by high budgetary allocations to education by these countries' governments, individual and families who have had to dig deep into their resources to meet their educational aspiration. To justify its claims to national resources with completion with other social services like health and investment to physical capital and experience has shown that balanced growth require an integral of all aspects of economic and social life. It has however not been easy for developing countries including Kenya to put a controlling check in the escalated demand for education. Kenya is currently spending more than 33% of its annual budget on education alone. At present, the education sector takes about 115.6 billion in 2009/2010 financial year (Ministry of Education Strategic Plan, 2011). Education is the key to development and has equalizing effects. It has important economic returns which justify high investment by both the government and individuals. There is a strong relationship between education and fertility, education and agriculture, education and manpower development, education and family background, education and intergenerational mobility.

Even with the introduction of Subsidized Secondary Education, both parents and the school administration have been left wondering how free it is! Abagi (2008) urges the

government to explain to the parents how free Secondary Education is. Parents expect a lot from this program in terms of quality education, which means adequate supply of learning resources like more teachers, physical facilities and instructional materials. The subsidized secondary education in Kenya has led to increase in students seeking secondary education. Based on the experience on the implementation of FPE, it would be expected that implementation of free secondary education was to be faced with a myriad problems.

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 programme 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; lack of clear guidelines on admission; lack of consultation with teachers and parents; delay in disbursement of funds by the government; and expanded roles for head teachers. It was however not clear about the challenges that were being faced in the implementation of subsidized secondary education on availability of resources in public secondary schools. This was the concern that the study sought to investigate and also suggest possible remedies.

1.2 Statement of the problem

The subsidized secondary education was introduced in 2008 as a result of Kenya's effort to attain Education for All (EFA) by 2015 as indicated in the Sessional Paper No. 1 of 2005. This was to reduce cost of education to parents, increase access to education and to increase transition rates in line with the United Nations aim to achieve Millennium Development Goals by 2030. Despite the Kenya Government's effort to expand

education opportunities for all, through the introduction of Subsidized Secondary Education and the high government expenditure to sustain the programme, no empirical studies had been undertaken to assess the effects of SSE programme on access to the educational resources in public secondary schools in Kenya. Therefore this research was done to find out how SSE has affected access to secondary education in Nyamache Division.

1.3 Purpose of the study

The purpose of this study was to determine whether SSE has enabled more students to access secondary education. The research also determined the availability of sufficient educational resources in public secondary schools in Nyamache Division.

1.4 Objectives of the Study

The following were the specific objectives of the study;

- i) To find out the gross enrolment rate in public secondary schools in Nyamache Division in the last five years
- ii) To identify the impacts of subsidized secondary education on access to the existing educational resources in public secondary schools in Nyamache Division.
- iii) To determine how access has been achieved by the subsidized secondary education in relation to teaching and learning resources in public secondary schools.
- iv) To propose solutions to the problems of subsidized secondary education in relation to access on the educational resources in public secondary schools in Nyamache Division.

1.5 Research Questions

The study was guided by the following questions:

- i) What are the enrolment rates in public secondary schools for the last five years?
- ii) What are the impacts of subsidized secondary education on access to the existing educational resources in public secondary schools in Nyamache Division?
- iii) Has access been achieved by the subsidized secondary education in relation to the teaching and learning resources in public secondary schools in Nyamache Division?
- iv) What are the solutions to the problems of subsidized secondary education in relation to access on the educational resources in public secondary schools in Nyamache Division?

1.6 Assumptions of the study

For this study it was assumed that the respondents would be co-operative and honest in their responses and the sampled schools will be a fair representation of the public secondary schools in Nyamache division.

1.7 Significance of the study

The findings of this study are expected to help the government to know the effects of subsidized secondary education on the available resources in public secondary schools and hence the government can use the findings to improve on the weak areas of the subsidized secondary education. The research also provided useful findings on Subsidized Secondary Education that would be useful to the researchers for further research.

1.8 Limitations of the study

This study targeted all Secondary schools in Nyamache division. However due to financial and time constraints it was not possible to cover all the schools.

1.9 Delimitations of the study

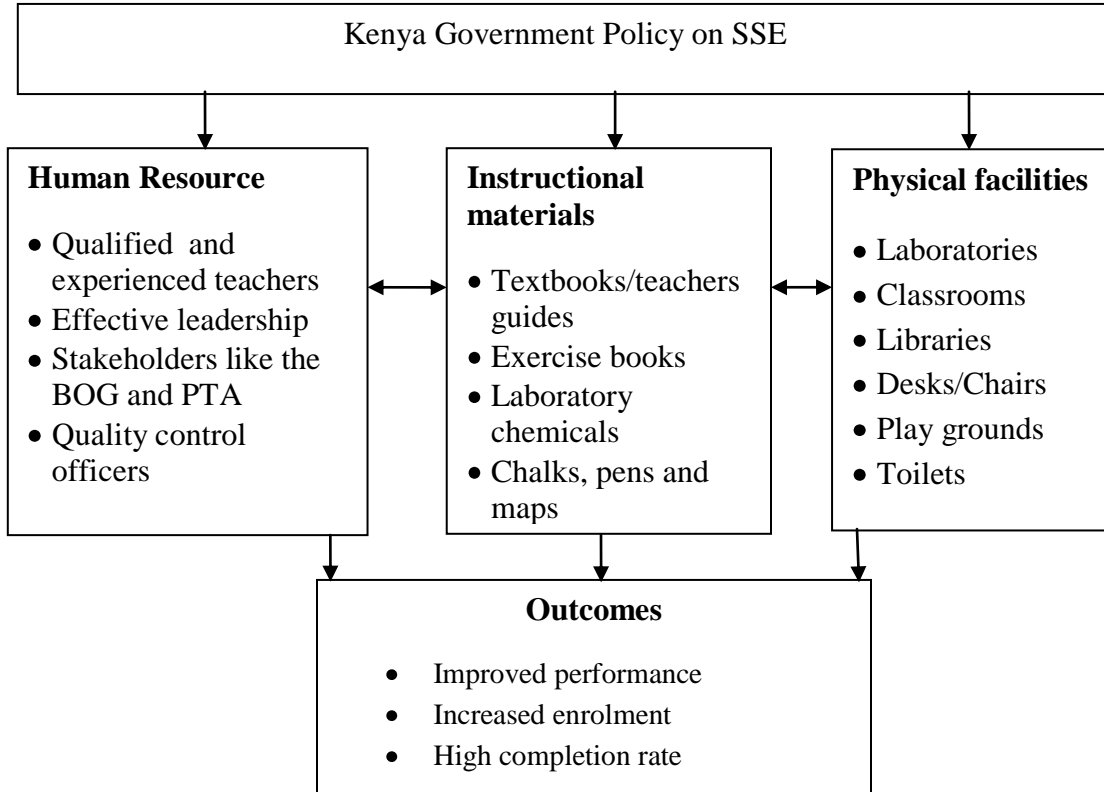
The study used a sample size of 370 respondents out of 2,763 respondents in Nyamache Division which forms 13.39% as shown in table 3.1 hence this only forms a sample representative of Nyamache Division.

1.10 Theoretical framework

The study was based on Rousseau's (1772-1778) Classical Liberal Theory of Equal Opportunity. The theory states that social mobility will be promoted by equal opportunity to education. The theory holds the view that all human beings are created equal and hence the social institutions such as education should in some sense treat people equally hence this reveals why the government of Kenya decided to introduce subsidized secondary education so that even the poor will have an equal opportunity to education. Education systems are looked at as the principal of equality. Education systems should be designed to remove barriers of any nature that can prevent bright students from lower economic backgrounds from developing their own talents. In relation to this theory the provision of SSE is aimed at ensuring that every child has an equal opportunity to access secondary education regardless of his/her socio-economic status. Without the Subsidized Secondary Education in Kenya, then many parents will not be able pay for their children school fees and this will actually led to low transition rates from primary to secondary since the fees will discriminate poor families from access to secondary education.

1.11 Conceptual framework

Figure 1.1: A conceptual framework on the effects of SSE



Source: The Researcher

According to Orodho (2009), a conceptual framework is a model of presentation where a researcher conceptualizes or represents the relationships between variables in the study and shows the relationship graphically or diagrammatically. The figure 1.1 above shows the interaction between the Kenya Government policy on SSE for the provision of educational resources and the outcomes as a result of these educational resources.

The SSE policy is a decision to enhance access to secondary education by cost reduction to parents through tuition waiver. The Kenyan government provides funds to schools to improve instructional materials and equipment. These funds if well-managed would

ensure provision of learning resources in order to achieve the objectives of the program. Learners need to access qualified teachers, experienced, well-motivated with positive attitudes and morale to provide the necessary instruction. Physical facilities like adequate and well-furnished classrooms, adequate desks and chairs, adequate and well-equipped laboratories and libraries among others also need to be provided. Buildings such as classrooms, laboratories and libraries should be rehabilitated to ensure a better environment for learning. The tuition should provide for necessary instructional materials such as relevant and adequate textbooks, exercise books, maps, and chalk and laboratory chemicals to enable both learners and the teachers to achieve the teaching and learning objectives. The availability and adequacy of educational resources in school will led to increased enrolment rate, improved performance and reduced dropout rates thus improving the quality of life of the young people in the country and developing the country's human resource base.

1.12 Definitions of operational terms

Access- An availability of opportunities at secondary school level of education for students.

Cost sharing- A state where the parents meet some cost of educating their children as the government meets the remaining part of the cost.

Free Secondary Education: Refers to the waiver of tuition fees by the government for secondary school level. The parents are expected to meet other requirements like lunch, transport and boarding fees for those in boarding schools, besides development projects

Human Resource- the people who organize and impart knowledge on the learners like the teachers.

Secondary Education- Post primary education which is covered from form one to four

Student- These are the learners at secondary school level from forms one to form four.

Subsidized Secondary Education- A situation where children who have completed primary school education are given an opportunity to receive secondary education without paying for tuition costs.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the literature related to Subsidized Secondary Education in the developing countries, Subsidized Secondary Education in Africa, Subsidized Secondary Education in Kenya, Education as an investment and the challenges related to introduction of Subsidized Secondary Education.

2.2 Subsidized Secondary Education in the developed countries

Since the World Bank first began 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). Poor families will certainly find it difficult to pay fees, out- of pocket expenses for cloths, travel, books or materials. Moreover, poor families on average tend to have more school age children than higher income families hence the person will even have to look after the many children in the family (Psacharopoulos 1995). Students' access to textbooks is an important factor in what and how much they learn. In many developing countries, the availability of textbooks and other reading materials is severely limited. UNESCO (2007) observes that while the student textbook ratio is a significance measure of education quality, many classrooms in developing countries especially in poor and rural areas possess only one textbook, typically possessed by the teacher. In Liberia, for

example, the government estimated the student textbook ratio at 27:1 (Liberia MoE, 2007) which is clearly inadequate for proper learning.

In the 20th century both U.S. and Soviet education policies led to secondary education models aimed at the creation of massive systems that emphasized open access and universal coverage. After 1945, what were later called comprehensive secondary schools began to spread from Northern to Southern Europe. In comprehensive schools all students receive secondary education in a single institution, based on a common curriculum, and may be streamed through elective subjects. This is in contrast to students being tracked and grouped either by academic ability or by choice on entering secondary education. Meanwhile, the vocational approach to secondary schooling developed rapidly in Eastern Europe. By the 1960s and 1970s secondary education was linked more to primary than to tertiary education. The extension of compulsory education had entirely changed the concept, as well as the duration, of basic education, to the point that basic education usually included lower secondary schooling. Arising average level of schooling was seen as an important objective and as a measure of the success of education reforms. Many other countries have embraced the goal of extending and expanding the notion of basic education to encompass much of what used to be restricted-access, elitist secondary schooling. In Kenya the introduction of both the free primary education and subsidized secondary education are government initiatives toward creating open access to education for all citizens.

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. This enables parents to carry out their legal duty. Parents are seen as the school's prime legal clients until the child is 16 years of age. Section 36 of the Act states that it shall be the duty of the parent of every child of compulsory school going age to cause him to receive full-time education suitable to his age, ability, and aptitude, either by regular attendance at school or otherwise (Moon & Mayes, 1994).

In Japan, the government fiscal policies provide for free education up to secondary school level. Those of school going age have no option other than attend school to acquire education that is fully funded by the government (Nyaga, 2005). In the United States of America, the Federal Government supports public education. The government is empowered by the Constitution Welfare Clause, Article 1 Section 8, to levy taxes and collect revenues for the support of education. However, the Congress decides the extent of such support (Nyaga, 2005). The situation in Kenya is not different from that of Japan and America as the government and the community participates in the provision of education. What were not clear are the challenges likely to be encountered in the implementation of subsidized secondary education in Kenya.

In Canada, school fees are an integral part of education system. Parents are asked to contribute to their children's education through payment of fees (Nyaga, 2005). However, the government recognizes that some parents are sincerely not in a position to pay so the government makes provisions to ensure that a child is not denied access to education because of an honest inability to pay fees. The department of education in Canada works with school boards, parents, teachers, and other partners to ensure that policies governing

school fees are implemented consistently in all the provinces (Nyaga, 2005). In Kenya, poverty has been a major barrier to education access for many children, and this led to the government introducing subsidized secondary education. However, it was not clear whether the funds allocated by the government for SSE was adequate to meet the needs of the schools, which the study sought to establish.

2.3 Subsidized Secondary Education in Africa

Uganda started Universal secondary education on 19th February 2007. According to Robinson Nsumba Lyazi, the secondary education commissioner, the Universal Secondary Education (USE) would see enrolment in secondary schools more than double from previously 150,000 to 350,000. Colelough and Lewin (1993) note that the achievement of schooling for all, is not merely a matter of securing sufficient formal attendance at school but also ensuring that material and human resources available in schools are sufficient to allow for minimal acceptable learning to proceed.

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.

In Sri Lanka, has achieved free education due to its widely distributed schooling facilities throughout the Island. The quality of education has been 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 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 programme is 80% a success.

Financing of education in Egypt depends mainly on the state budget. The Egyptian constitution article number 20 stipulates that education in state schools is free on all different levels, while pre-university education as stipulated in the education law number 139 article 2 of 1981 education is a right to all citizens to be obtained in state schools for free. Students should not be asked to pay fees unless they are provided with educational or learning services. Secondary education in Egypt comprises academic and technical education. Fees are collected in return for additional services provided to the students. Parents provide for uniforms and copybooks, external books and references.

Longer periods of compulsory education are becoming a worldwide norm. Lower secondary education is almost universally compulsory in Asia, North America, Europe, and Australasia. In Mali, basic education is going from six to nine years, in Senegal and Zambia, basic education lasts for eight years. Longer basic education allows more time

for the consolidation of learning (Holsinger & Cowell, 2000). The introduction of SSE in Kenya appears to be a move toward the extension of compulsory education to the secondary school level.

In South Africa, user fees are identified as a barrier to education (Veriava, 2002). While school budgets are funded by allocations from state revenue, school fees are required to supplement these budgets so that schools are able to run smoothly. The South Africa School Act provides that a majority of parents at a public school may determine whether or not school fees are charged and the amount to be paid. There was however exemptions from paying school fees for parents who could afford to meet the cost. Exemption is extended to parents whose income is less than 30 times, but not more than 10 times the amount of fees (Veriava, 2002). In Kenya the government has a uniform allocation criterion for secondary tuition, meaning that education is accessible to every qualifying student graduating from primary school. The study sought to find out whether government allocations to public schools were adequate to meet enough educational resources for the increasing number of students in the public secondary schools.

2.4 Subsidized Secondary Education in Kenya

Before the cost sharing policy by the government, secondary schools used to be provided with funds from the central government. MoE (2007) observes that parents spent over Kshs. 25,000 per student per year, while the government spent Kshs. 22,000. It costs a parent Kshs. 30,000 to educate a child in boarding school and Kshs. 20,000 in a day school. According to Onsomu *etal.*, (2006) observes that the provision and expansion of quality secondary education continued to escalate as resources dwindled and that

majority of parents were unable to meet the cost of secondary education by unnecessary high indirect costs required by schools.

Government of Kenya (2005) outlines some of the policies adopted by the Kenyan Government in order to reduce the fees burden which included:

- Integrating Secondary education as part of basic education.
- Promoting development of day schools to expand access and reduce costs to parents.
- Providing targeted instructional materials to needy public secondary schools while encouraging parents to provide infrastructure and operational costs.

The Ministry of Education (2007) adopted the above policies through provision of teachers, issue of bursary funds and promotion of development of day schools to expand access and reducing the cost to parents. The government has been providing instructional materials to needy public secondary schools while encouraging parents and communities to provide infrastructure and operational costs. Bursary funds are also provided to support the needy and bright children.

According to the MOE (2003), the Gross Enrolment Rate for secondary schools declined from 29.4% to 22.2% between 1990 and 2000. This is attributed to high cost of teaching materials, school uniforms, transport and development levies and extra expenses for private tuition, unfriendly school environment and poverty at the household level, HIV/AIDS pandemic, among others. The enrolment increased from 851,836 in 2002 to 1,180,267 in 2007, an increase of 328431 (38.6%). In 2008, the enrolment increased

substantially by 15.0% to reach 1,382,211. The enrolment in public schools grew from 841,608 students in 2004 to 1,211,114 in 2008, an increase of 369506 (43.9%). The enrolment increased by 184350 (18.0%) in 2008 from 123718 (13.7%) in 2007.

Table 2.1: Public Secondary Enrolment 2004-2008

Year	2004	2005	2006	2007	2008
Number of Students	841,608	845,544	903,046	1,026,764	1,211,114

Source: Ministry of Education (2009).

In a speech delivered at an annual Heads' Conference on 27 June 2007, the then KSSHA Chairman, disclosed that the secondary institutions in the country were owed over Kshs. 15 billion in unpaid fees by parents. He revealed that 90% of the parents who had failed to clear their debts were genuinely poor but insisted that head teachers had nothing better to do to help out but to send the students home.

Education according to human Rights declaration in Addis Ababa in 1960 has been regarded as a basic good. In the Kenya's development plan of (2003-2008), has listed education as one of the basic needs for the Kenyan population together with health, and nutrition, housing social services and water. Education is therefore, a basic consumer good just like food, clothing and shelter, water and sex. Education is the main key to overall development of any nation. The Kenya government's main intention is that all children access secondary education without discrimination in accordance with the United Nation's charter of 1947 where every child has a right to education. The UN has initiated concerned efforts towards the achievement of this endeavor by its member countries through various conferences, principle 7 of the 1959. Declaration of the Rights of the Child states that; "the child is entitled to education which shall be free and

compulsory at least in the elementary stages’’. The provision of subsidized secondary education is an attempt to fulfill the Jomtien Declaration of 1990 (EFA) in which citizens are given an opportunity to explore their abilities to ensure equitable distribution of development. The initiatives saw two conferences being held in 1990, the Jomtien, Thailand followed by another in 2000 in Dakar Senegal. These both advocated for suitable access to education as a development strategy and considered a literate population the key to overall development to any nation. The declarations gave the impetus to education in many countries to ensure that learning of all young adults were met through equitable access to appropriate learning and life skills programme (MoEST, 2003). To implement the declaration of education as a basic human right, the United Nations established UNESCO and UNICEF. The two United Nation’s agencies have over the years conducted conferences and workshops to promote awareness. The Convention on the Rights of the Child reaffirms the right to free and compulsory basic education and access to higher levels of education by saying that secondary education in its different forms including technical and vocational secondary education shall be made generally available and accessible to all by every appropriate means, and in particular by the progressive introduction of free education. Njeru and Orodho (2003) observe that availability and adequacy of learning resources such as teaching force, physical facilities and instructional materials influence quality of education.

The Kenya Education Sector Support Programme (KESSP, 2005-2010), observes that the massive increase in enrolment in primary schools with the introduction of FPE is already putting pressure on the demand for access to secondary education. The immediate challenge therefore, is how access to secondary can be expanded at a relatively low cost

while improving the quality of education at the same time. MoEST, (2007) observes the need to put in place an equitable system with resource allocation to ensure 70% transition rate from primary to secondary in 2008 with a target of 80% in five years. The transition rate from primary to secondary increased from (45.8%) in 2003 to (64.1%) in 2008. The SSE targets a transition rate of over 70%.

Table 2.2: Transition Rate, Primary to Secondary in Kenya (2005-2009)

Year in Std 8	Year in Form 1	Enrolment in Std 8 (in 000)	Enrolment in Form 1 (in 000)	Transition Rate (in %)
2004	2005	657.7	368.3	56.0
2005	2006	643.5	368.7	57.3
2006	2007	666.4	397.0	59.6
2007	2008	704.7	421.9	59.9
2008	2009	695.7	445.9	64.1

Source: Ministry of Education (2009)

The launch of Subsidized Secondary Education in February 2008 was therefore a bold move by the coalition government in Kenya as it can be justified by the continued increase in the transition rate from primary level to secondary school level. Secondary Education plays a very important role in providing the youth with opportunities to acquire human capital that will enable them to pursue higher education and to improve their skills, leading to higher labor market productivity. Despite the Subsidized learning programme, the cost of education still remains high due to boarding expenses, thus more than half of the school age population do not access secondary education.

UNESCO (2007) observes that the quantity, quality and distribution of the teaching workforce are critical factors for reaching the EFA goals. The Minister for Planning,

Hon. Oparanya, while delivering his report of the economic Survey (GoK, 2009) observed the need for recruiting more teachers since the number of teachers in secondary schools had declined by 2.9 per cent from 44,305 in 2007 to 43016 in 2008 due to the rising of the number of students in secondary schools. The ratio of students to teachers had moved from 23:1 in 2007 to 28:1 in 2008. A total number of 4,700 secondary school teachers were recruited in 2008 as compared to 3,500 in 2007.

Oketch and Asiachi (1992), observe that there is no curriculum that can achieve its objectives without good teachers. Human interaction between the teacher and the learner is invaluable for motivation in learning. Government of Kenya (1997) recognizes the importance of well qualified and highly motivated teaching force who understands the needs of learners and the curriculum in order to effectively implement it. Okumbe (1998) asserts that the staff needs to be professionally motivated and satisfied and not just a matter of having all staff positions filled in an educational organization. There is need to invest in staff training and remuneration to ensure that quality education remains a priority. The teacher needs to be motivated and dedicated in his/her work. The attitudes of the teacher, towards their work and students, classroom management and interaction with students affect their work. A well-qualified and highly motivated teaching force is capable of understanding the needs of the learners and the curriculum. Abagi (1997), notes that an effective teacher should be available and willing to participate in curriculum development. The teacher is more important than the curriculum and that a teacher's ability, enthusiasm and care for students determine the degree to which the students become educated adults.

A study carried out by Mbaabu (1983) revealed that lack of physical facilities, materials, equipment and tools were among the major problems that primary school head teachers are faced with in Kenya. The study found out that in most schools classes had over 50 children. This study revealed that free education at the primary level brought about problems related to over-enrolment, lack of physical facilities, and inadequate teachers. The researcher will find out whether, with the introduction of subsidized secondary education, similar challenges are experienced in general and in particular Nyamache Division.

2.5 The provision of the instructional materials

Lockhead (1990) said that the intended curriculum cannot be easily implemented without the necessary materials. The quality and adequacy of resources affect the quality of education and how effectively the curriculum is implemented. These materials provide information, organize the scope of coverage and the sequence of information presented and provide opportunities for students to use what they have learnt. Such materials include textbooks, teachers' guides, computers, maps, chalk and exercise books among other teaching and learning aids. Mbiti (2007) alludes that teachers cannot teach well without such supporting materials, no matter how qualified they are. Both the quantity and quality of books should be improved.

2.6 Education as an investment

Education, like other forms of investment in human capital, can contribute to economic development and raise the incomes of the poor just as much as investment in physical capital such as transport, communications, power and irrigation. The World Bank, which provides financial and technical help for the development of poor countries, has long

recognized the importance of investment in Education and has been active in this field since 1962. Since resources are limited, some opportunities have to be sacrificed when investment decisions are finally made. These lost opportunities can be regarded as part of the cost of the investment in health, industry or agriculture (psacharopoulos 1995). This means that investment choices must be based both on cost- benefit analysis, which is concerned with external efficiency and the cost effectiveness analysis, which measures internal efficiency.

2.7 Challenges Related to Introduction of Subsidized Secondary Education

Onyango (2001) states that planning for material resources involves the identification of the resource requirements, assessing quality in terms of the needs, establishing criteria for standards, determining the cost per unit and the use of the materials whether by individuals or groups. With the introduction of SSE, schools could have registered over-enrolment, which means that the resources available in schools are constrained. The headteacher is also responsible for the school facilities. The management of material resources entails planning, acquisition, allocation, distribution and controlling the use and maintenance of the materials. Bell and Rhodes (1996) noted that school facilities include the administrative office, staff rooms and offices, classrooms, laboratories, workshops, equipment, stores libraries, hostels, staff houses and the school grounds. In order for a school to advance the learning opportunities offered to the students, it has to adequately utilize the facilities available. It is the responsibility of the headteacher to ensure that there is adequate classroom space to enable the teaching-learning process take place without any hitches. He should ensure that the facilities are used efficiently and effectively. The school grounds e.g. play grounds should be safe and well maintained.

Verspoor (2008) argues that increases in public spending will be inadequate to generate increases in education attainment and learning achievement unless accompanied by reforms that aim at a more efficient use of available resources and find sources of additional funding. He advises that well structured Public-Private Partnerships can help diversify the sources of financing and provision. Mbugua (1997) says that one of the duties of the head teachers in Kenya is to develop the school's physical facilities. She argues that in dealing with physical facilities, a headteacher has to bear in mind where to house the educational program, the population to be served by the facility and ensure that financial resources are readily available for the school expansions.

Onyango (2001) emphasizes that human resource is the most important resource in a school organization. He adds that teachers comprise the most important staff in the school. However, the contribution made by other staff members such as secretaries, bursars, accounts clerk, matron, nurses, messengers and watchmen is also important. With the implementation of SSE, teachers are expected to have heavy workloads that could negatively impact on curriculum implementation. A recent study by Gatheru (2008) on challenges related to the implementation of FPE in Narok District established that due to the rising number of pupils enrolling in schools, teachers were sometimes overwhelmed and not able to give individualized attention to pupils. Teachers could not mark pupils' assignments and this contributed to a decline in academic performance. This study was to find out whether similar challenges were being experienced at the secondary school level.

2.8 Summary

From the literature reviewed above related to Subsidized Secondary Education in Kenya it is evident that since it was introduced in February, 2008 as a result of Kenya's effort to attain Education for All (EFA) by 2015, it has brought a lot of effects in the Education system in Kenya. According to Edward (2010), there is need for a well-qualified and highly motivated teaching force to understand the needs of the learners who are continuously increasing since the introduction of Subsidized Secondary Education. In developed countries, education beyond the compulsory level was usually financed in part and sometimes wholly by the state. In Sri Lanka, has achieved free education due to its widely distributed schooling facilities throughout the Island. The quality of education has been 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 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. The Kenya government's main intention is that all children access secondary education without discrimination in accordance with the United Nation's charter of 1947 where every child has a right to education. In Japan, the government fiscal policies provide for free education up to secondary school level. Those of school going age have no option other than attend school to acquire education that is fully funded by the government (Nyaga, 2005). It was against this background that the study was aimed at assessing the effects of SSE on access to educational resources in public secondary schools in Nyamache Division.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This section describes the research design, location of the study, target population, sample and sampling techniques, research instruments, data collection techniques and data analytical techniques.

3.2 Research Design

The study used a descriptive survey design. According to Mugenda and Mugenda (1999), descriptive survey is a method of collecting data in order to answer questions concerning the current status of the study under study. Coopers and Emory (1995) highly recommend this type of research design where several respondents give answers to specific questions at one pointing time survey. Descriptive studies are primarily concerned with determining and reporting the way things are, Orodho (2004) says that a survey research deals with questions of 'what is' and 'is'. Descriptive survey is useful since it does not manipulate the variables or arrange for the events to happen. The design was most appropriate in this study as it provided a systematic representative and reliable information. It was very suitable because views were collected from a group of people. The study adopted the descriptive survey research design to explore the various impacts of the Subsidized Secondary Education in Nyamache Division.

3.3 Location of the study

The study was conducted at Nyamache Division in Kisii County. It borders the following other divisions; Nyacheiki, Sameta and Kenyenia divisions. Nyamache division is among

the 8 divisions of the larger Gucha District and it has a population of about 56,424 people. The Division is relatively new and experiencing a lot of challenges in supplementing government policies on improving academic performance. The researcher chose the locale because it is easily accessible and that no similar study, to the best knowledge of the researcher, had been conducted in the same Division.

3.4 Target population

In this study, the target population comprised of all the 28 secondary schools in Nyamache division. The target population also comprised of all school head teachers, 168 class teachers, 2,536 students, one District Education Officer and two Area Education officers. Borg and Gall (1998) defines population as all members of a real set of people, events and objects to which the researcher wishes to generalize the results of the research.

3.5 The Study Sample and Sampling Procedure

The schools were first divided into three strata; boys' school, girls' school and mixed secondary schools. Table 3.1 shows the category of public secondary schools in Nyamache Division.

Table 3.1: The category of schools

school category	Number	Sample
Boys schools	1	1
Girls schools	1	1
Mixed schools	26	12
Total	28	14

Source: Researcher

There was only one boys' school and one girls' school both of which were involved in the study. Simple random sampling was used to pick twelve mixed schools from the twenty six available mixed secondary schools. A sample of 14 schools was used for this study. From the 14 Secondary Schools in the sample, 14 Head Teachers, 40 Class teachers, 300 students; one District Education Officer and one Area Education Officer were interviewed. Table 3.2 shows a summary of population and sample that was used in this study.

Table 3.2: Summary of Population and Sample

RESPONDENTS	POPULATION	SAMPLE	PERCENTAGE
Head Teachers	28	14	50%
Class teachers	168	48	28.57%
Totals	196	62	31.63%

Source: Researcher

3.6 Research Instruments

Questionnaires, Interviews and observation methods were used to collect data.

3.6.1 Questionnaires for Principals and Class Teachers under SSE Programme

A questionnaire is an instrument used to gather data, which allows measurement for or against a particular viewpoint (Orodho, 2009). He adds that a questionnaire has the ability to collect a large amount of information in a reasonably quick space of time. Mugenda (2003) recommends the use of questionnaires as the most commonly used instruments in social science research. They add that well organized questionnaires are

advantageous because the respondents can find their way around with ease and that they are easy to code.

3.6.2 Interview Schedules for the Field Officers

Orodho (2009) defines an interview schedule as a set of questions that an interviewer asks when interviewing respondents. He adds that an interview schedule makes it possible to obtain the data required to meet the specific objectives of the study and that they are used to standardize the interview situation so that interviewers can ask the same question in the same manner. He further argues that semi- structured interviews are based on the use of an interview guide and notes that “However the exact order and wording of the questions may vary from respondent to respondent. The interview schedule for the Field Officers was used to find out whether all the students in the Division were entitled to the SSE Programme.

3.6.3 Analysis of documents

Analysis of documents was used by the researcher to supplement the information that was obtained from the questionnaires. It involved examining and recording the available resources in each school which included classrooms, laboratories, libraries, latrines, textbooks, laboratory equipment and general maintenance of the school buildings, among others. Nachmias and Nachimias (1996) indicate that observational methods of data collection are suitable for investigating phenomena that the researcher can observe directly.

3.7 Piloting

Before the actual study was conducted, piloting was done at two schools so that the researcher was able to detect any problem(s) which were remedied before the actual study was conducted. Therefore, the purpose of piloting research instruments was to find whether the respondent will find them clear, precise and comprehensive enough. It also helps to determine the validity and reliability of the research instruments. According to Bell (2005), Piloting assists the researcher to check the length of the time taken to fill the questionnaires, clarity of the instructions and the difficulties in data analysis.

3.7.1 Validity of Research Instruments

According to Mugenda and Mugenda (2003), validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. Validity is the extent to which the instrument measures what it was designed to measure (Weirisma, 1995). Questionnaires enabled the researcher to obtain first-hand information, the respondents were also interviewed to obtain clarity where needed. Observation method enabled the researcher to confirm the information obtained from the questionnaires.

3.7.2 Reliability of the instrument

Reliability refers to consistence or measurement thus the extent to which the results are similar over different forms of the same instrument or occasions of data collection and the extent to which measures are free from error (McMillan & Schumacher, 2001). Berthoud (2000), states that a reliability index of a minimum of 0.6 is satisfactory for any instrument. The researcher used the test-re-test method to determine the reliability of the instruments. The scores of each administration were recorded separately. The two sets of

scores that were collected during piloting exercise were correlated using Spearman (rho) and the results were evaluated using the formula:

$$r = 1 - \frac{6\sum d^2}{n(n^2-1)}$$

Where r = Spearman's coefficient of correlation

n = number of pairs of observation

d = the difference between the ranks of pairs of the two variables

This yielded a correlation coefficient of 0.76, thus the instruments were found to be highly reliable.

3.8 Data Collection Techniques

After approval of the research proposal by the supervisors, the researcher had to seek permission from Kenyatta University, Graduate School in order to obtain a research permit from the permanent secretary, Ministry of Education Science and Technology before conducting the research. The respondents were requested to fill the questionnaires and the researcher then collected them after they had finished filling the questionnaires.

3.9 Data Analysis and presentation

Data that was collected was both qualitative and quantitative data. The collected data was coded and entered into the computer for analysis using the statistical package for social sciences (SPSS). Bell (2002) maintains that when making the results known to a variety of readers, simple descriptive statistics such as percentages have a considerable

advantage over more complex statistics, since they are easily understood. Borg and Gall (1998) also hold that the most widely used and understood standard proportion is the percentage. As such data was analyzed using simple descriptive statistics, including frequency counts and percentages. Analysis was done using SPSS. The results of the data analysis were presented in frequency tables, bar graphs and pie charts.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION OF FINDINGS AND DISCUSSION

4.0 Introduction

This study sought to investigate the effects of subsidized secondary education on access to educational resources in public secondary schools in Nyamache Division, Kisii County. Data was collected through questionnaires which were administered to the respondents using hard copies. The responses were received from 14 head teachers and 48 class teachers.

The related literature review on the effects of subsidized secondary education on access to educational resources in public schools was studied in the world, in African countries like Mauritius, Zimbabwe, Egypt and finally in Kenya. The following discussion in Nyamache Division, Kisii County will inform us of any variation in effects of subsidized secondary education.

4.1 Demographic Characteristics

The findings and discussion welcome and supports the idea of subsidized secondary education in Nyamache Division, Kisii County. Included in the demographic characteristics is the respondents' gender composition, respondents' level of education, duration of service in the current institution and the type of school. This data is solicited to enable the researcher to get the background information on the schools in the study sample. The background information assists the researcher in generalizing the study findings to the sample population. Respondents' demographic characteristics are presented in the following figures.

Figure 4.1 Respondents' Distribution across Gender

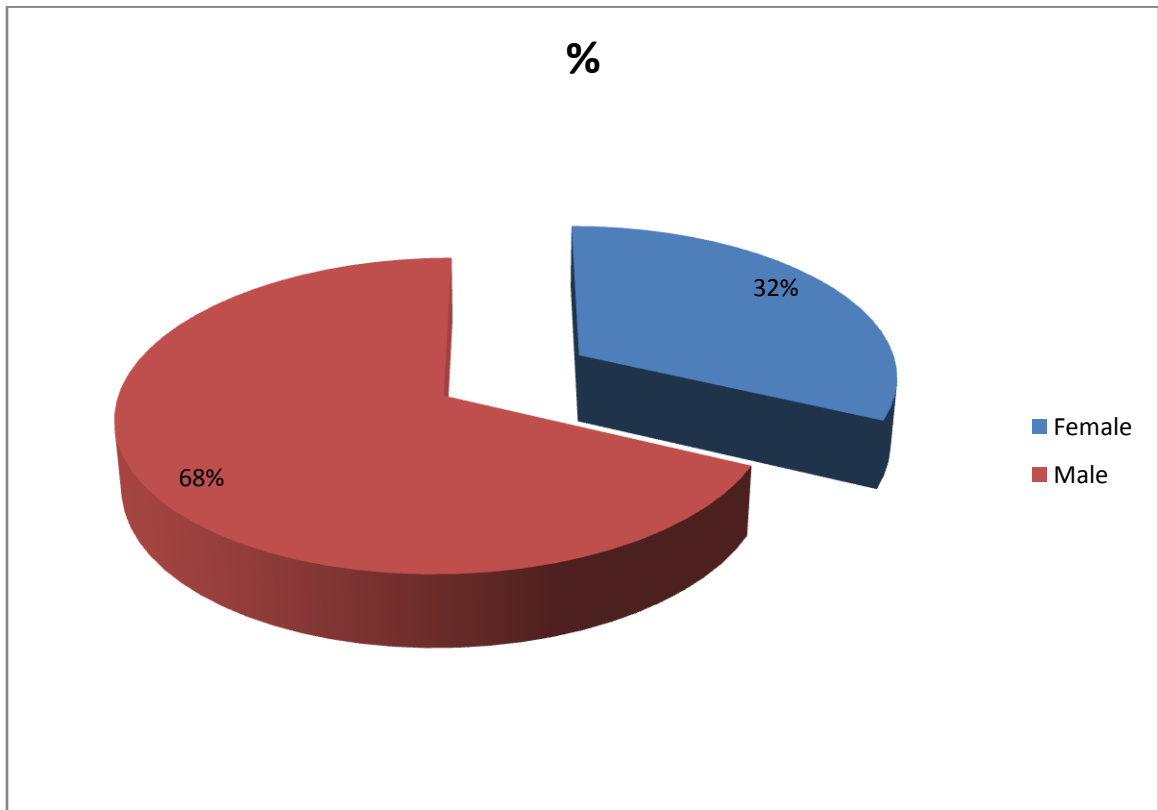


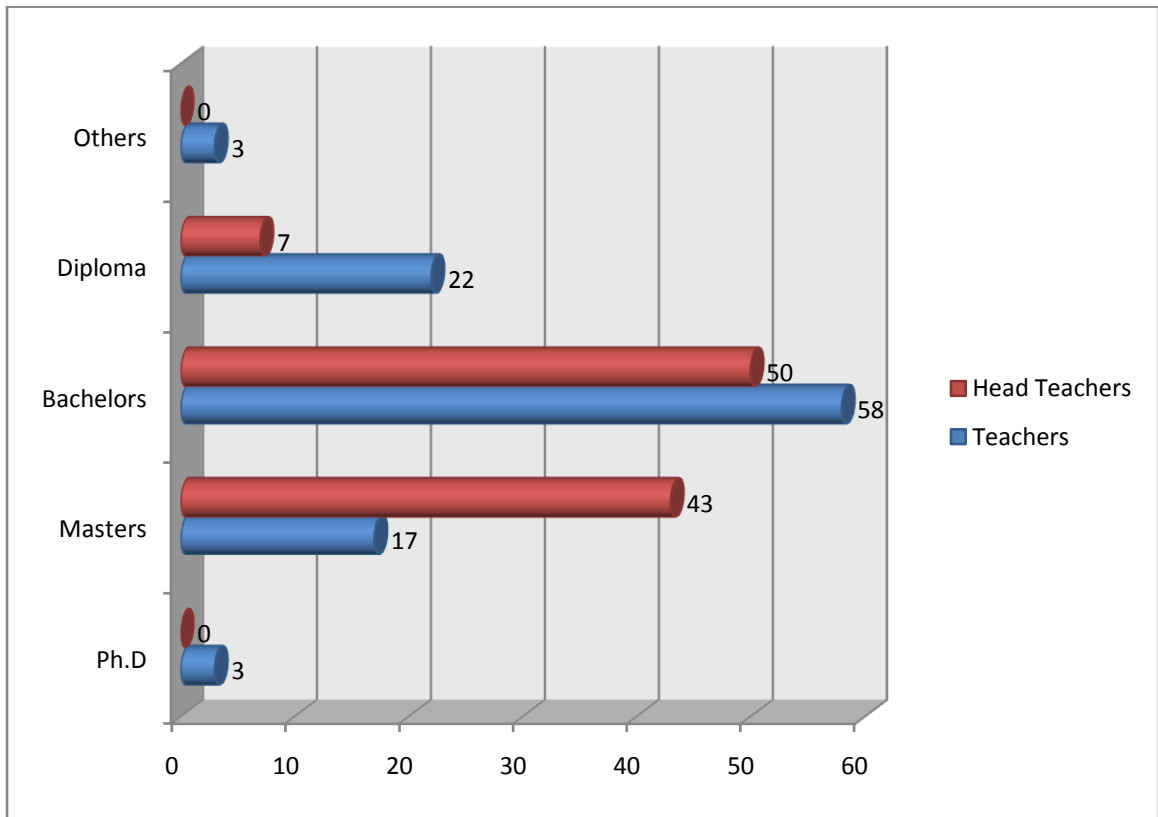
Figure 4.1 indicates that majority of the respondents who took part in this project were male at 42(68%) while 20(32%) were female. Thus the findings of the study gave a good representative sample of gender.

Table 4.1 Distribution of Sampled Respondents Age

Age bracket	Class teachers	Head teachers
Less than 25 years	5	0
26 – 30	30	0
31 – 35	32	0
36 – 40	13	7
41 – 45	12	50
46 – 50	5	29
51 – 55	5	14
56 & above	0	0

Table 4.1 shows that majority of the head teachers' respondents 7(50%) were between the age bracket of 41 years – 45 years while most class teachers 15(32%) were between 31 and 35 years. Age is associated with experience which helps one build him/herself and thus avoids trial and error approach especially in financial management.

Figure 4.2 Respondents Level of Education in Sampled Schools



Majority of the head teacher respondents 7(50%) were holders of bachelors’ degree followed by 6(43%) holders of masters’ degree. Most teacher respondents 28(58%) had bachelors’ degree while 11(22%) were diploma holders.

Figure 4.3 Respondents Work Experience in Sampled Schools

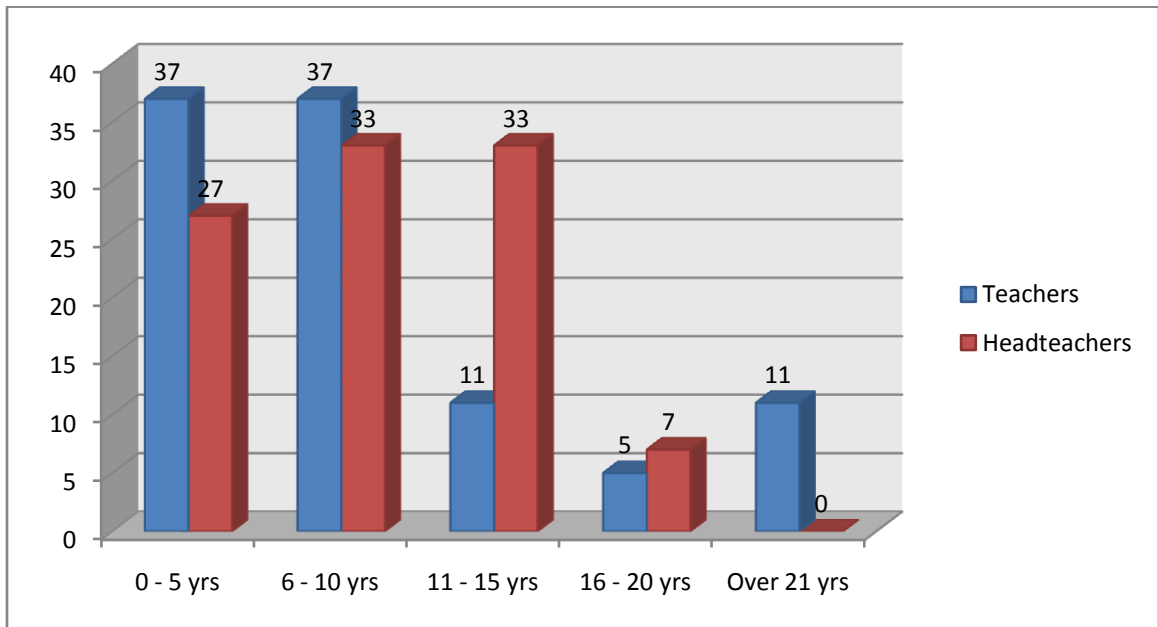
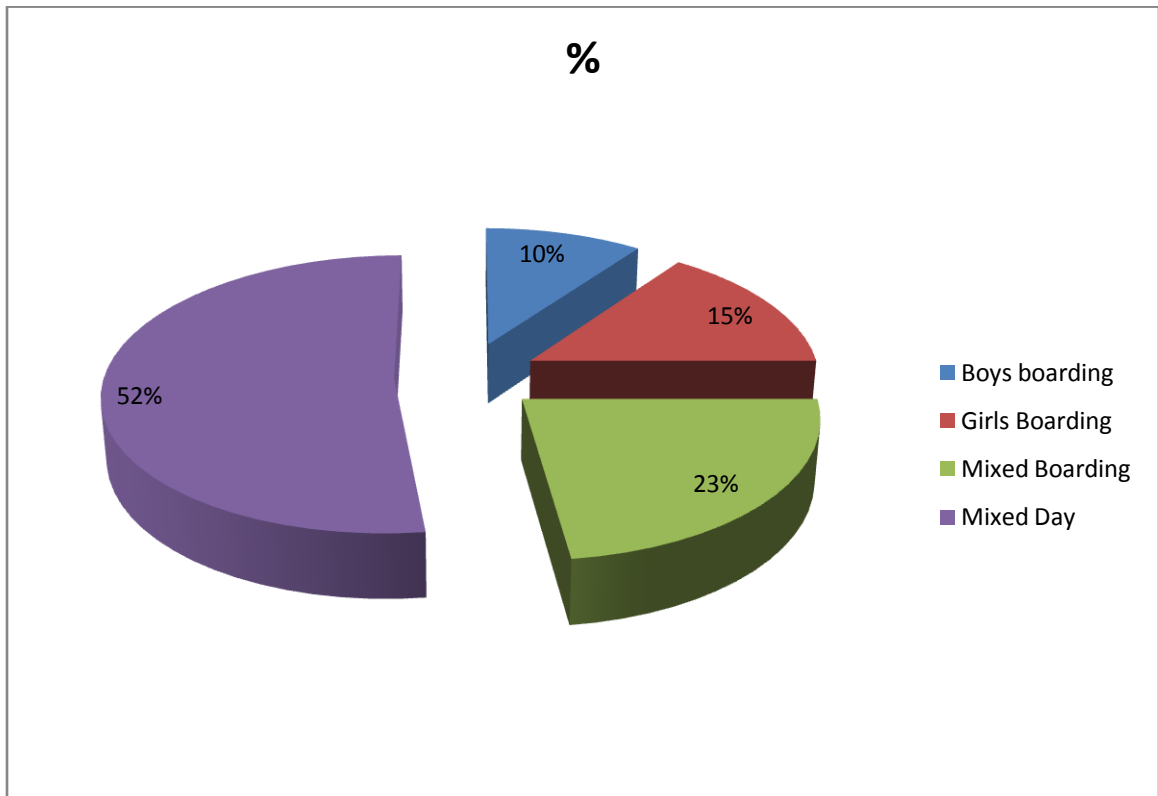


Figure 4.3 indicates that majority of the teachers 36(74%) had work experience of 0 – 10 years while 9(66%) of the head teachers had work experience of between 6 – 15 years. Only 5(11%) of the teachers had worked for over 21 years, none of the school head teacher had an experience of over 21 years.

Figure 4.4 Categories of Sampled Secondary Schools



Of the schools that took part in this study, majority 32(52%) were mixed day school, followed by 14(23%) mixed boarding schools as indicated in Figure 4.4. the total number of girls and boys boarding's in the sample were 9(15%) and 6(10%) respectively.

4.2 Analysis of Research Questions

Each research question was analyzed by summarizing the responses that relates to what it sought to answer. The summaries are presented in form of figures, tables and text.

4.2.1 Research Question one: What are the enrolment rates in public secondary schools for the last five years?

Table 4.2 Schools Enrolments in the Last 5 years

School	2008	2009	2010	2011	2012	% increase
Serial No.	(2008 -2012)					
1	280	268	300	360	384	37
2	359	385	414	444	460	28
3	360	380	350	302	354	-2
4	274	281	285	311	331	21
5	177	228	256	298	367	107
6	194	224	286	352	421	117
7	170	182	210	228	234	37
8	335	360	368	377	379	13
9	273	284	281	294	269	-1
10	352	357	359	404	443	26
11	280	300	301	311	355	27
12	158	172	187	221	254	61
13	224	258	278	301	328	46
14	145	165	181	179	181	25

Figures in Table 4.2 show school's enrolment trend in a period of five years in each school. The percentage increase of students has increased until some schools have recorded 117% increase. Students' enrolment has increased due to free primary education and subsidized secondary education in Kenya which has seen the demand for higher education triple. The two programs, which were started in 2003 and 2008 respectively, to

increase access of education particularly to the poor, has led to an increase in graduates seeking higher education in the country. Kenya's Ministry of Education notes that there has been massive improvement in secondary school enrollment over the years. In 2007 for instance, records from the education ministry show there were 1.02 million students in secondary schools across the country.

Figure 4.5 Enrolment Rates in Sampled Secondary Schools

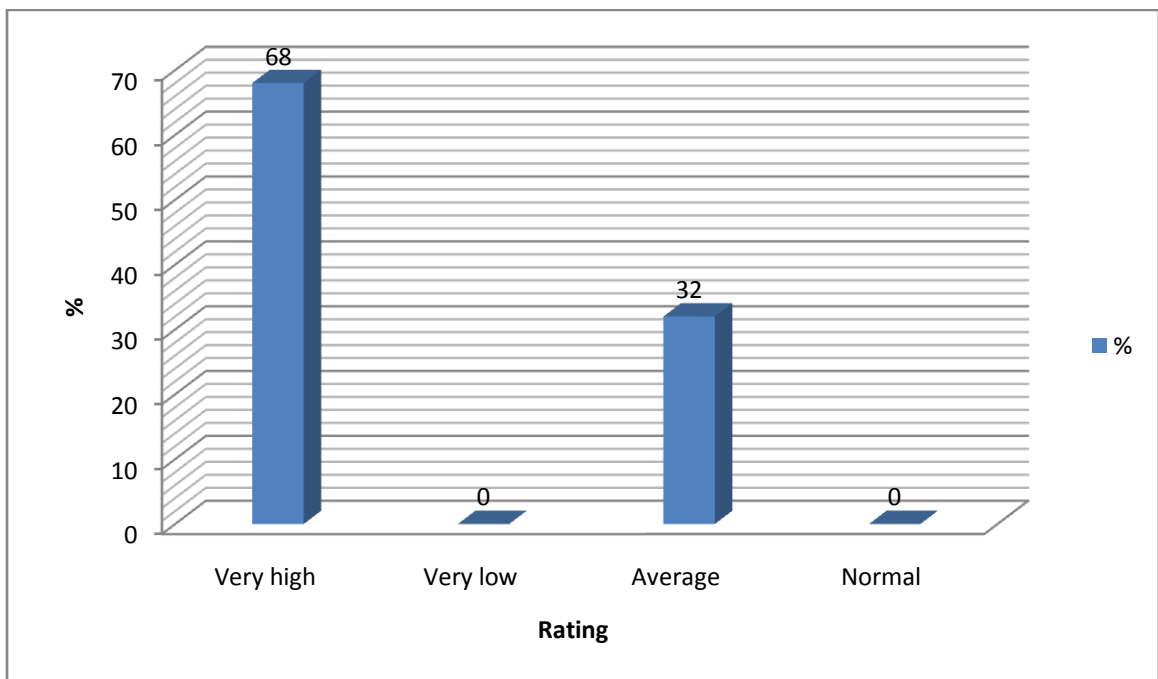


Figure 4.5 indicates that majority of the respondents 42(68%) said that enrolment rates in sampled schools was very high while 20(32%) said the enrolments were average. This shows that most of the schools have high enrolments of students due to the free primary and subsidized secondary education which has led to high demand for higher education.

4.2.2 Impacts of subsidized secondary education on access to the existing educational resources in public secondary schools

Table 4.3 Enrolment of students versus teachers

School Serial No.	No. of students (2012)	No. of Teachers
1	384	15
2	460	24
3	354	16
4	331	17
5	367	13
6	421	13
7	234	10
8	379	21
9	269	12
10	443	14
11	355	15
12	254	16
13	328	15
14	181	12

Table 4.3 shows that some school though with more students than others had fewer teachers. A school with 421 had only 13 teachers while another with 331 had 17 teachers. This is an indication that the teaching staff is not well balanced and that some schools were understaffed. This is also an indication that the number of students increase as the

number of teachers does not increase leading to poor delivery of teachers to the students in the secondary schools.

Figure 4.6 Numbers of Teachers in Sampled Schools

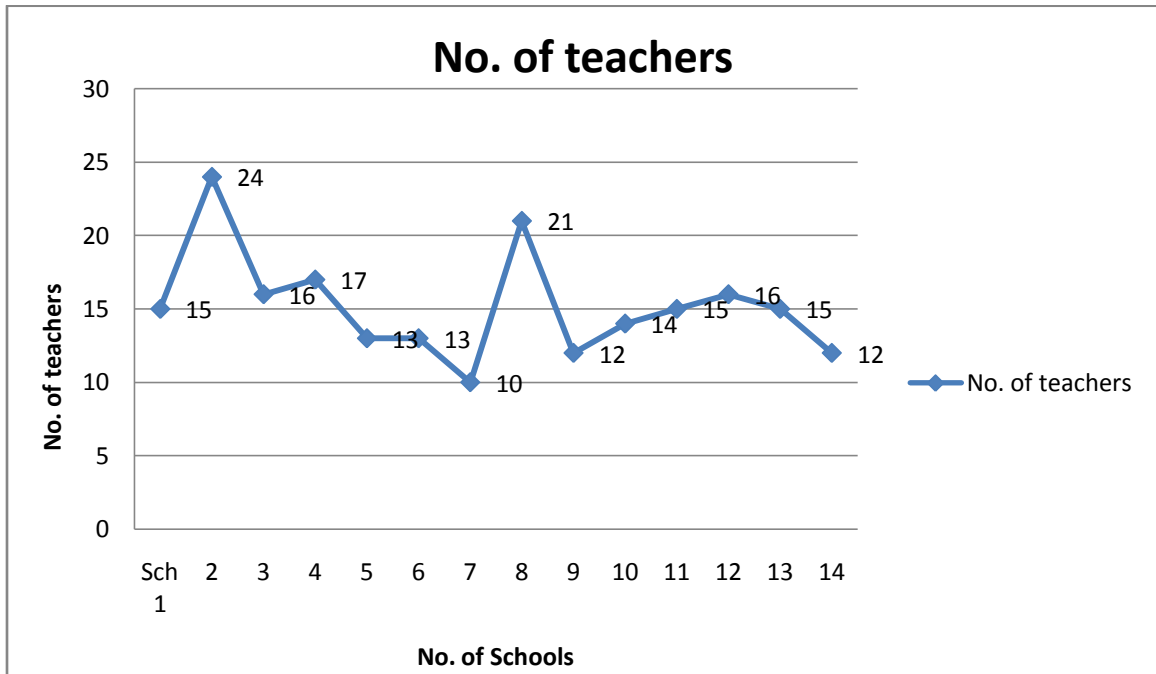
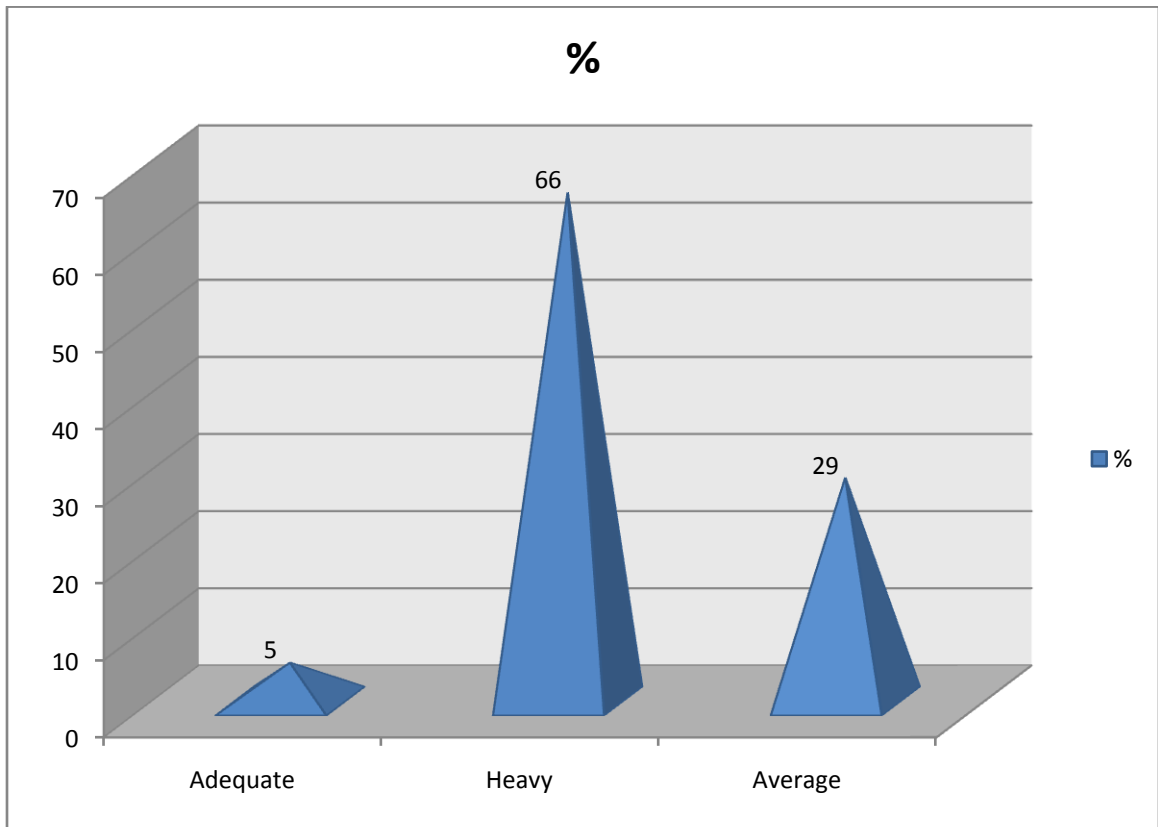


Figure 4.6 indicates the number of teachers in the school that respondents were drawn from. On average, the schools had 15.20 teachers.

Figure 4.7 Ratio of Teacher to Students



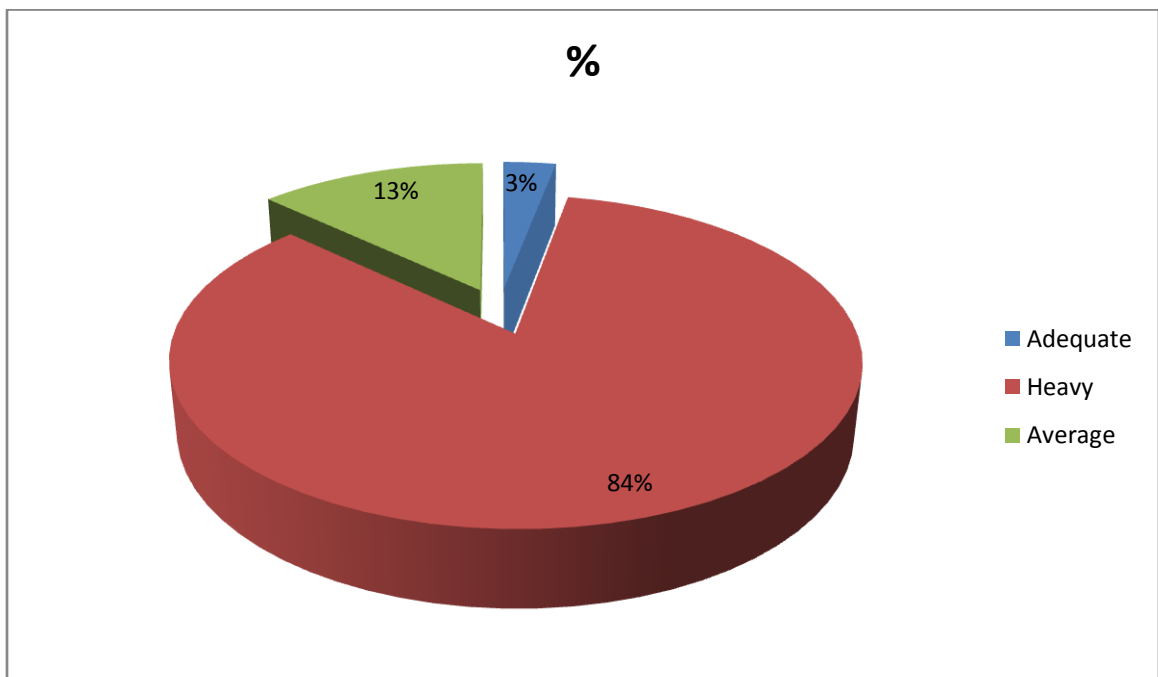
On teacher – student ratio, majority of the respondents 41(66%) said it was heavy while 18(29%) said it was average. Only 3(5%) said it adequate. This means that the student’s needs and weaknesses are not attended well by their teachers due to the high number of students against the teachers meaning that the students’ performance will be low.

Table 4.4 Categories of Teachers in Sampled Secondary Schools

Category	Adequate	Not adequate
TSC	0	100%
BOG	7	93
Volunteers	0	21

Table 4.4 shows that all the respondents 62(100%) said TSC teachers were not adequate. On BOG teachers 45(93%) said they were not adequate while 3(7%) said they were adequate. On teacher volunteers, 10(21%) said they were not adequate while 37(78%) of the respondents said the issue of volunteer teachers did not apply their schools. This implies that if the teachers are not adequate then the delivery of content to the students is not done well because one teacher will have to attend many students.

Figure 4.8 Sampled Teachers' Workload per Week



In Figure 4.8, majority of the respondents 40(84%) indicated that teachers' workload per week was heavy while 6(13%) said it was average. Only 1(3%) indicated that the workload was adequate. Oketch (1991) observed that human interaction between the teacher and the learner is invaluable for motivation of learning. This means that with this high workload then the teachers will not be able to interact with their learners.

Table 4.5 Availability of Facilities in Sampled Secondary Schools

Facilities	Yes (%)	No (%)
Library	53	47
Laboratory	63	37
Administration block	73	27
Enough desks/chairs	64	36
Enough classrooms	59	41
Playground	67	33
Dormitories	35	65
Teachers houses	24	76
Spacious staffroom	46	54
Enough latrines	41	59

Assessment of facilities availability in sampled schools indicates that 45(73%) respondents said the administration block was available followed by playground and desks and chairs at 42(67%) and 40(64%) respectively. Teachers' houses 47(76%) and dormitories 40(65%) were not adequate. This could have been attributed to the fact that 32(52%) of the sampled schools were day as indicated in Figure 4.4. Mbugua (1997) says that one of the duties of the head teachers in Kenya is to develop the school's physical facilities. She argues that in dealing with physical facilities, a head teacher has to bear in mind where to house the educational program, the population to be served by the facility and ensure that financial resources are readily available for the school expansions.

Others not adequately supplied were safety equipments like fire extinguishers, first aid kits, office furniture, co-curriculum activities resources/Games i.e. indoor games and

dining hall. Though some facilities were available, some facilities like the library, laboratory and classrooms were still too small for use compared to the number of students. Other facilities like the school laboratory were incomplete with no preparation tables; no gas fillings and they lacked fume chambers.

Suggestions made on areas which needed additional facilities in case the schools needs to increase its population of students ranged from building a bigger library and laboratory, constructing a modern tuition block and a school dining hall. Further suggestions were on stocking more text books and reading materials for students in the school library and increasing the number for desks and chairs in the class rooms as well as improving the office furniture. Water and electricity supplies needed improvement to curb water shortages and limited power supply. A study carried out by Mbaabu (1983) revealed that lack of physical facilities, materials, equipment and tools were among the major problems that primary school head teachers are faced with in Kenya. This study revealed that free education at the primary level brought about problems related to over-enrolment, lack of physical facilities, and inadequate teachers. This study also reveals the same that the SSE has brought over-enrolment, lack of physical facilities and inadequate teachers.

Table 4.6 Sufficient Supply of Instructional Materials

Instructional Materials	Adequate	Not Adequate	None
Textbooks	10	82	8
Library	11	72	17
Exercise Books	62	35	3
Stationary	13	84	3
Laboratory Apparatus	8	78	14
Laboratory Chemicals	2	84	14

Table 4.6 show most instructional materials were not adequate. These ranged from stationary 52(84%), laboratory chemicals 52(84%) textbooks 51(82%), laboratory apparatus 48(78%) and library 45(72%). Other schools had none of these instructional materials. From the study, only exercise books 38(62%) were adequate. This means that due to subsidized secondary education it has led to inadequate of facilities such as textbooks, stationary, laboratory apparatus and equipments among others due to increased enrolment rates in the secondary schools.

Figure 4.9 Textbooks Ratio in Sampled Secondary Schools

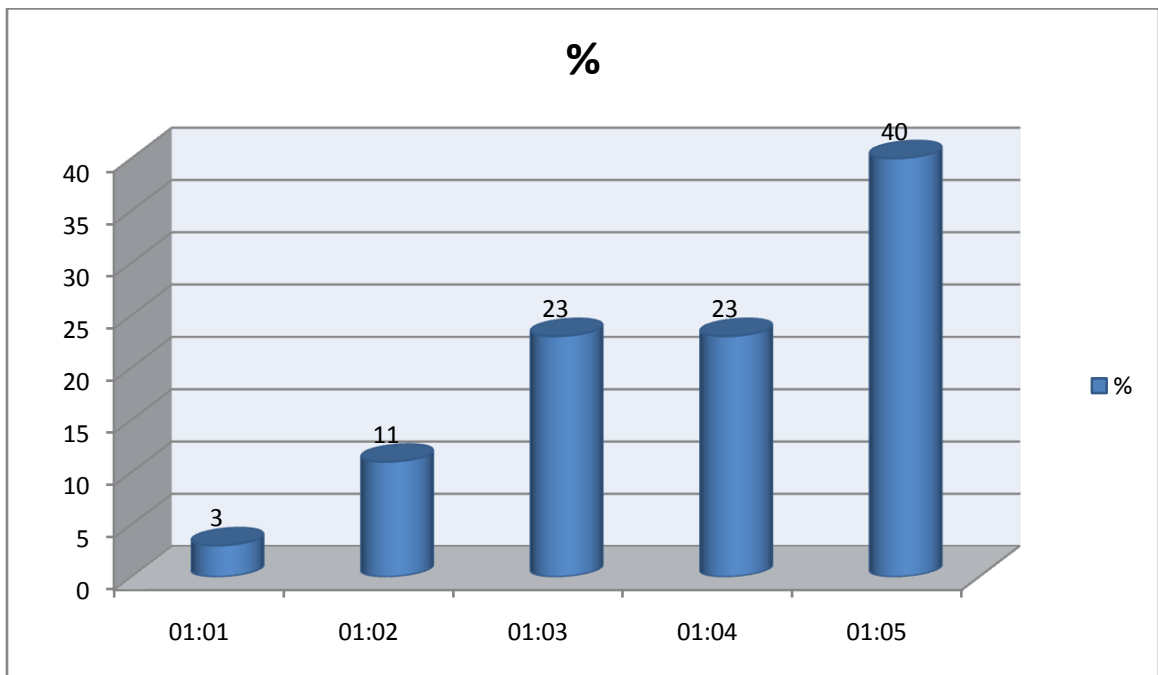


Figure 4.9 indicates that majority of the respondents 25(40%) revealed that the most common textbooks ratio was 1:5 students followed by a 14(23%) each indicating that text books ratios were 1:3 and 1:4 students, 7(11%) saying they were 1:2 and only 2(3%) indicating that the textbooks were 1:1 students. Other respondents indicated that textbooks were 1:10 while in some schools it was 1:20. Students' access to textbooks is

an important factor in what and how much they learn. In many developing countries, the availability of textbooks and other reading materials is severely limited. UNESCO (2007) observes that while the student textbook ratio is a significance measure of education quality, many classrooms in developing countries especially in poor and rural areas possess only one textbook, typically possessed by the teacher.

Table 4.7 Rating Availability and Status of Physical Facilities

Facility	Adequate	Inadequate
Classrooms	79	21
Library	0	100
Laboratory	0	100
Dining Hall	43	57
Dormitories	20	80
School Bus	0	100
Staffroom	57	43
Toilets	71	29
Electricity Supply	64	36
Staff Houses	0	100

Table 4.7 which rates the availability and status of physical facilities indicates that 62(100%) of the respondents said that facilities like laboratory, library, school bus and staff houses were inadequate. Classrooms were 49(79%) adequate followed by toilets and electricity supply at 42(71%) and 40(64%) respectively. Njeru and Orodho (2003) observe that availability and adequacy of learning resources such as teaching force, physical facilities and instructional materials influence quality of education.

Figure 4.10 Rating Instructional Materials in Sampled Secondary Schools

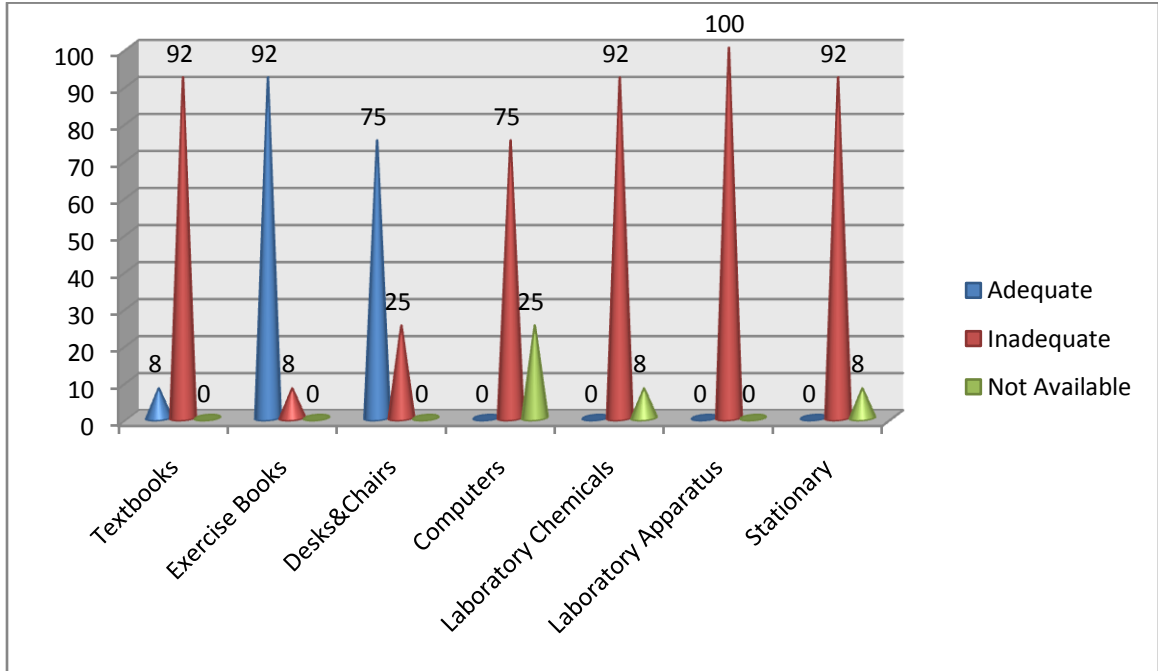


Figure 4.10 rated instructional materials in the sampled schools and majority of the respondents 62(100%) indicated that laboratory apparatus were inadequate followed by 57(92%) each indicating that stationary, laboratory chemicals and text books were also inadequate. Exercise books were 57(92%) adequate followed by desks and chairs which were 47(75%). Government of Kenya (2005) outlines some of the policies adopted by the Kenyan Government in order to reduce the fees burden which included integrating Secondary education as part of basic education, promoting development of day schools to expand access and reduce costs to parents and providing targeted instructional materials to needy public secondary schools while encouraging parents to provide infrastructure and operational costs.

According to head teachers some of the main constraints that they encounter in relation to the implementation of the subsidized secondary education were delayed disbursement of

funds by the Ministry of Education. Sometimes schools receive these funds late when schools are in session. Most parents do not want to pay anything as they argue that secondary education is free. This poses a challenge to the schools administration as they try to collect other funds such as lunch in case of day schools, boarding fee in boarding schools, activity and building funds. Asayo (2009) urges the government to explain to the parents how free Secondary Education is. Parents expect a lot from this program in terms of quality education, which means adequate supply of learning resources like more teachers, physical facilities and instructional materials. The subsidized secondary education in Kenya has led to increase in students seeking secondary education. According to class teachers some of the main constraints that they encounter in relation to the implementation of the subsidized secondary education were lack of infrastructural facilities at school/stretched physical resources, lack of enough educational resources, large populations in schools which translated to high workloads as admissions were too high against the available resources. Because of the overcrowded classes individual attention of students was not taken care of due to high enrolments. They raised other issues like inadequate funds, mismanagement of available fund, embezzlements of funds by school managers. Most school lack tendering committees hence lacked transparency in expenditures. Lack of proper planning on how to spent school funds was another constraint and times government funds are diverted to other purposes like paying supplies for food stuff supplied to schools. Some schools had uncooperative parents who thought that government pays all funds needed in running schools. Others thought that the subsidy made education a free program hence being reluctant to pay other school

levies. Students from challenged families (orphans, physical and poverty) cannot access the education because they cannot afford to buy uniform and pay lunch.

4.2.3 Level of achievement by the subsidized secondary education in relation to the teaching and learning resources in public secondary schools

Figure 4.11 Adequacies of Teachers in Sampled Secondary Schools

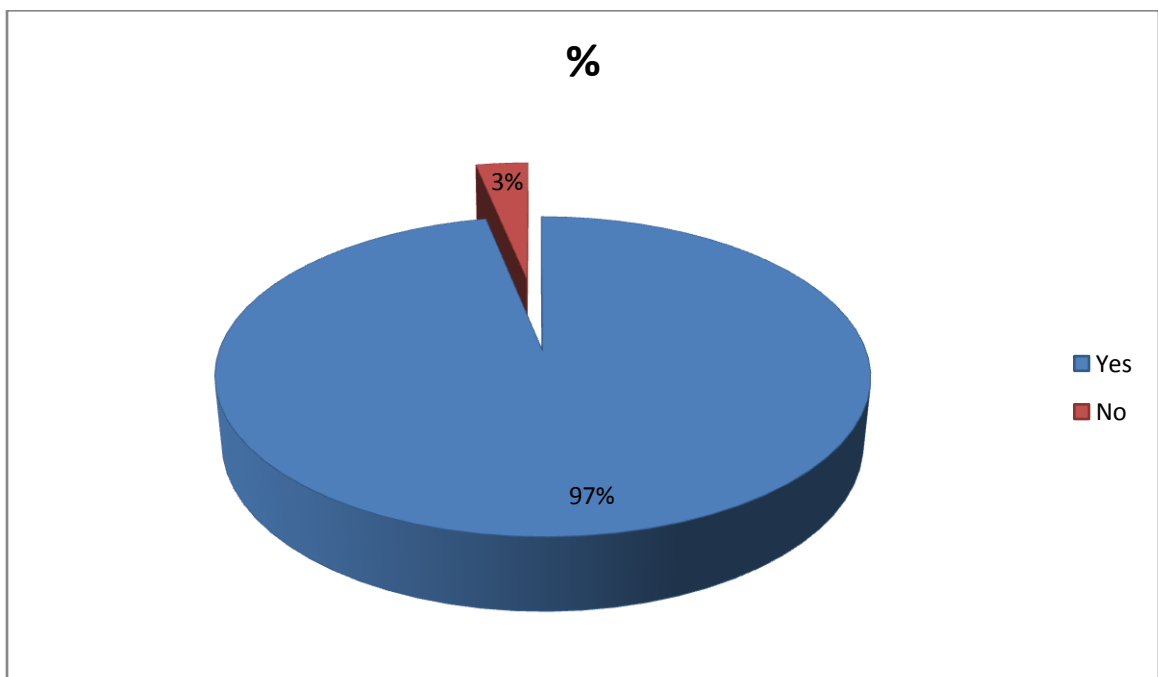


Figure 4.11 indicates that majority of the respondents 60(97%) agreed that teachers were adequate in the sampled schools while 2(3%) said they were not adequate.

Table 4.8 Sources of Finance in Sampled Secondary Schools

Category	Ranking
Fees	1
Bursary	2
CDF	3
NGO's	4
Churches	5
Well wishers	6
Projects	7

On ranking sources of funds in the sampled secondary schools, top in the list were funds collected through fees paid by students, followed by bursary given to students, CDF funds for school development, NGO's, Churches, well wishers and finally projects. This means that the schools greatly depend on the fees paid by the parents meaning that still the subsidized secondary funds is not enough to run the schools hence the poor students are not able to access secondary education.

Figure 4.12 Support Subsidized Secondary Education

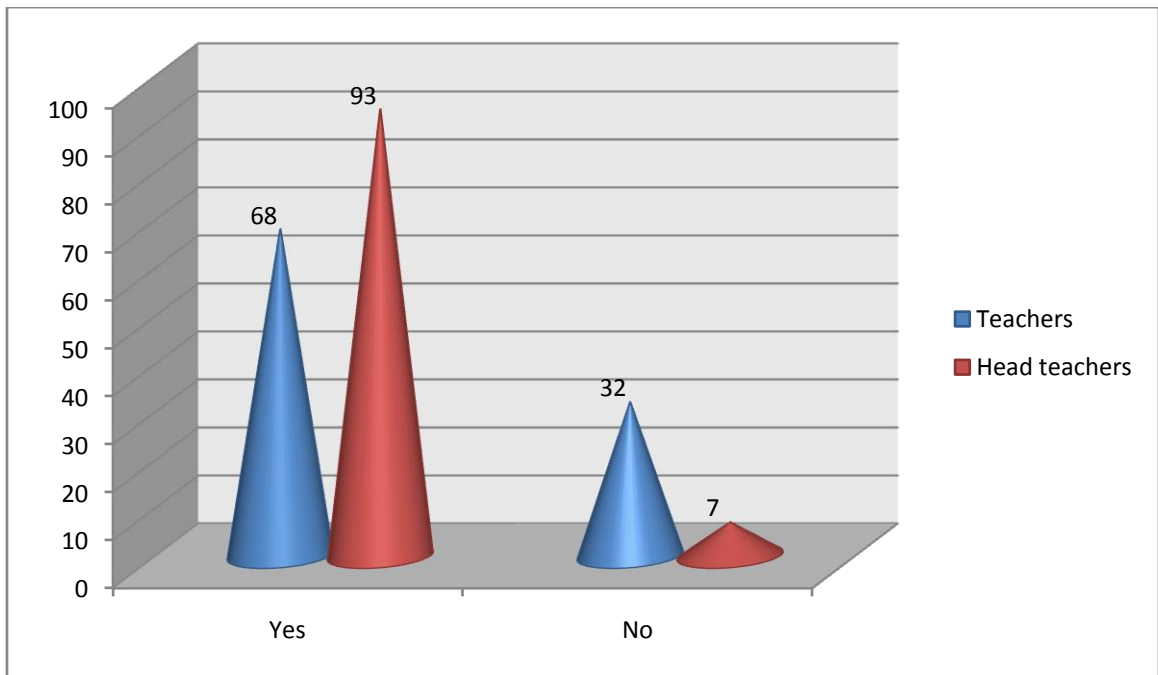


Figure 4.12 indicates that majority of the head teachers' respondents 13(93%) and teachers 33(68%) supported subsidized secondary while 15(32%) and 1(7%) of teachers and head teachers respectively did not support subsidized secondary education. Reasons advanced for supporting subsidized secondary were increased enrolments of students which have enabled poor parents educate their children especially in day schools and high transition rates. Many children of school going age are able to access education. The completion rates are high due to the high retention rate in public schools.

Table 4.9 Administrative Responses

Category	Good		Very Slow		Not Good	
	Teacher	H/T	Teacher	H/T	Teacher	H/T
Additional teachers	0	0	42	29	58	71
Additional teaching & reading materials	0	7	69	86	31	7
Additional classrooms	6	29	63	50	31	21

Table 4.9 indicates administrative responses to additional teachers, additional teaching and reading materials and additional classrooms. 10(71%) head teachers and 28(58%) teachers indicated that response to additional teachers was not good. 12(86%) of the head teachers indicated that response to additional teaching and reading materials was very slow.

4.2.4 Suggested solutions to the problems of subsidized secondary education in relation to access on the educational resources in public secondary schools.

Respondents gave some solutions to these problems. They said that the government needed to disburse funds in time. They called on the government to increase the allocation of the funds per student as the funds allocated were not enough. It should also source for more funds from well wishers and donors. Some school head teachers felt that parents needed to pay more if schools were to realize their objectives. To avoid burdening schools with wage payment for BOG teachers, TSC should ensure adequate staffing in all schools to avoid teacher shortage. There was need to sensitize parents on subsidized secondary education so that they understand that secondary education it is not

totally free secondary education. Sensitize parents on what subsidized secondary education caters for and what parents are supposed to pay as lunch fees and boarding fees/ government should take the initiative to sensitize parents that it is just but a subsidy and not full payment of fees. As a solution to funds scarcity in learning institutions, PTA should be more actively involved in looking for extra sources of income including funds drive for infrastructure improvement. Income generating projects should be prioritized in all schools. Schools should set special provision for orphans, challenged students and poor children by giving the more money than others. Proper planning and allocation of funds for each vote head in regard to the needs was essential as class teachers called on proper audit of the same. Government should carry out students head count because many schools have ghost students to ensure that schools receive exact funds for the number of students in session.

4.3 Report on the Researcher's Observation Checklist

The following was the report by the researcher from the observation checklist. The number of teachers from the school's timetable was averagely fifteen teachers comprising of the Board of Governors and Teachers Service Commission Employees. All the schools had standard sizable classrooms which are permanent but most of them were crowded by the students. On the availability of laboratories only three schools of the fourteen schools had no laboratories and eleven of them had laboratories. Two schools had no library at all while twelve schools had library at the same time only three schools had their library well stocked with books while eleven schools had not well stocked their library. Only one school had a semi permanent latrine while thirteen schools had permanent latrines and most of them were maintained accept two schools which their latrines were poorly

maintained. All the schools had permanent offices and their staffroom was also permanent but eight schools had a crowded office and staffroom while only six of them were not crowded. Only four schools had their offices and staffroom well furnished with furniture while ten of them had their offices and the staffroom not well furnished. On the side of instructional materials, only four schools had adequate textbooks while ten schools had inadequate textbooks. Only one of the schools had inadequate exercise books while thirteen had adequate exercise books. Six schools had adequate furniture (desks, tables and chairs) while eight schools had inadequate furniture (desks, tables and chairs). Seven schools had teachers' houses while seven schools had no teachers' houses but the houses were not adequate to host all the available teachers. It is only one school that its compound was not fenced of the fourteen schools. Eight schools had their compound well maintained while six schools had their compound not maintained. In terms of the general maintenance of the buildings, most of the schools had fairly maintained buildings.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the results of the study were discussed and recommendations made.

5.1 Summary of the Findings

The purpose of this study was to investigate the effects of subsidized secondary education on educational resources of public secondary schools at Nyamache division. Research done by others had shown that there was increase in enrollment in primary schools in Kenya since the introduction of free primary education (Gatheru, 2008). It is for this reason that it was assumed that there is an increase in students at secondary schools in Kenya. The increase in student population without corresponding expansion of school resources would result in the available resources being insufficient. This research was done to investigate the availability of sufficient learning resources in public secondary schools in Nyamache Division. The research objectives were; to find out the gross enrolment rate in public secondary schools in Nyamache Division in the last five years, to identify the impacts of subsidized secondary education on access to the existing educational resources in public secondary schools in Nyamache Division and to determine how access has been achieved by the subsidized secondary education in relation to teaching and learning resources in public secondary schools.

The findings of the analyzed indicated that school's enrolment trend in these sampled secondary schools in Nyamache Division, Kisii County over a period of five years has increased. This is due to free primary education and subsidized secondary education in

Kenya which has seen the demand for higher education triple. The two programs, which were started in 2003 and 2008 respectively, to increase access of education particularly to the poor, has led to an increase in graduates seeking higher education in the country. Kenya's Ministry of Education notes that there has been massive improvement in secondary school enrollment over the years.

On teacher – student ratio, majority of the respondents 41(66%) said it was heavy while 18(29%) said it was average. Only 3(5%) said it adequate. All the respondents 62(100%) said TSC teachers were not adequate. Majority of the respondents 40(84%) indicated that teachers' workload per week was heavy while 6(13%) said it was average. Assessment of facilities availability in sampled schools indicates that 45(73%) respondents said the administration block was available followed by playground and desks and chairs at 42(67%) and 40(64%) respectively. Teachers' houses 47(76%) and dormitories 40(65%) were not adequate. This could have been attributed to the fact that 32(52%) of the sampled schools were day.

Instructional materials were not adequate. These ranged from stationary 52(84%), laboratory chemicals 52(84%) textbooks 51(82%), laboratory apparatus 48(78%) and library 45(72%). Other schools had none of these instructional materials. From the study, only exercise books 38(62%) were adequate. Textbooks ratio in sampled schools were analyzed and the results indicated that majority of the respondents 25(40%) revealed that the most common textbooks ratio was 1:5 students followed by a 14(23%) each indicating that text books ratios were 1:3 and 1:4 students. Other respondents indicated that textbooks were 1:10 while in some schools it was 1:20.

5.2 Conclusions

The following conclusions were drawn from these findings; the free primary education and subsidized secondary education has enabled more Kenyan children to access primary and secondary education in Nyamache Division. The average number of students per class has been increasing over the years. The results show that there has been an increase in the total number of students per school from 224 to 328, an increase of 104 students. However the available learning facilities cannot carter for the high number of students in secondary schools in the division. There is no enough space for expansion of these schools due to high population in this region.

5.3 Recommendations

From the questionnaires and observations made by the researcher, the following are the recommendations made; Measures should be put in place to ensure school resources are used well. The ministry should disburse SSE funds early enough to avoid financial crisis when schools are in session. The government should allocate more funds to schools to enable them expand their facilities to accommodate the high number of students seeking secondary education. The government should employ more teachers to reduce the workload and ease the burden on parents paying for B.O.G teachers. The school administration should find other ways of getting funds like projects that will bring money to help them employ BOG teachers to help the TSC teachers in terms of the heavy workload they are burdened with in delivering to the students. Parents should also find ways of income so as to support the school administration to run the school smoothly as the enrolment of students is high like buying books for their children.

5.4 Suggestions for Further Research

Based on my findings and gaps that I was not able to fill because of limitation of time, financial constrains and geographical vastness of the county, the following is suggested for further research.

- 5.4.1 A major study could be done on assessing potential income generating activities to all public learning institutions all over the country.
- 5.4.2 Study can be done in analyzing strategies to reduce education costs in public secondary school.
- 5.4.3 A study to determine the effects of subsidized secondary education on drop rate in public secondary schools.

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Appendix A: Principals’ questionnaire on the effects of SSE

Instructions

You were identified and selected as one of the respondents to provide information required for this study concerning subsidized secondary education. Your responses will be treated with utmost confidentiality and anonymity. To ensure the same you are not required to write your name. The findings of this study will be used to meet the requirements for an M.Ed course. Answer the questions by filling in the Blank spaces or by ticking (√) where necessary.

1) Please indicate your gender in the space provided below:

Male () Female ()

2) Please indicate your age bracket

Less than 25 years () 26-30 years () 31-35 years ()

36-40 years () 41-45 years () 46-50 years ()

51-55 years () 56 and above years ()

3) Level of Education

PhD Holder () Masters Degree () Bachelors Degree ()

Diploma ()

Other (Specify)

4) Period served as Head Teacher

Category	Tick
0 – 5	
6 – 10 years	
11 – 15 years	
16 – 20 years	
Over 21 years	

5) Type of School

Boys Boarding ()

Boys Day ()

Girls Boarding ()

Girls Day ()

Mixed Boarding ()

Mixed Day ()

Other (specify)

6. Research Question One: What are the enrolment rates in public secondary schools for the last five years?

a) What has been the enrolment of students in your school for the last five years

Class	2008		2009		2010		2011		2012	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Form 1										
Form 2										
Form 3										
Form 4										
Total										

b) What is the total number of teachers in your school?.....

7. Research Question Two: What is the impact of subsidized secondary education on access to the existing educational resources in the public secondary schools in Nyamache Division?

a) Please tick the categories of teachers that you have

Category	Adequate	Not Adequate
TSC		
BOG		
Volunteers		

b) What is the teacher's workload per week? (Tick)

Category	Adequate	Heavy	Average
Teacher			

c) List down the main constraints that you encounter in relation to the implementation of the Subsidized Secondary Education?

.....

.....

.....

.....

d) Kindly rate the availability and status of the following physical facilities. (Tick)

Facility	Adequate	Inadequate
Classrooms		
Library		
Laboratory		
Dining Hall		
Dormitory		
School bus		
Staff room		
Toilets		
Electricity supply		
Staff houses		

e) Kindly rate the following instructional materials. (Tick)

Material	Adequate	Inadequate	Not available
Text books			
Exercise books			
Desks and chairs			
Computers			
Laboratory Chemicals			
Laboratory apparatus			
Stationary			

Research Question Three: Has access been achieved by the subsidized secondary education in relation to teaching and learning resources in public secondary schools in Nyamache Division?

8 a) What are the sources of finance for running your school?

	Category	Indicate using 1 – 7 from very important to less important
1	Fees	
2	Projects	
3	Bursary	
4	CDF	
5	NGOs	
6	Churches	
7	Well wishers	

a) Indicate any other source?

.....

b) Do you have enough teachers? Yes () No ()

c) Do you support subsidized secondary education? Yes () No ()

Give reasons for your answer

.....

.....

.....

9. What is the response in terms of requesting the following?

Category	Good	Very slow	Not good
Additional Teachers			
Additional teaching and reading materials			
Additional Classrooms			

Research Question Four: What are the solutions to the problems of subsidized secondary education in relation to access on the educational resources in public secondary schools in Nyamache Division?

10. Suggest possible solutions to the problems of subsidized secondary education

.....

.....

Appendix B: Class teachers' questionnaire on the effects of SSE

Instructions

You were identified and selected as one of the respondents to provide information required for this study concerning subsidized secondary education. Your responses will be treated with utmost confidentiality and anonymity. To ensure the same you are not required to write your name. The findings of this study will be used to meet the requirements for an M.Ed course. Answer the questions by filling in the Blank spaces or by ticking (√) where necessary.

1) Please indicate your gender in the space provided below:

Male () Female ()

2) Please indicate your age bracket

Less than 25 years () 26-30 years () 31-35 years ()

36-40 years () 41-45 years () 46-50 years ()

51-55 years () 56 and above years ()

3) Level of Education

PhD Holder () Masters Degree () Bachelors Degree ()

Diploma ()

Other (Specify)

4. Period served as Teacher

Category	Tick
0 - 5	
6 – 10 years	
11 – 15 years	
16 – 20 years	
Over 21 years	

4) Type of School

Boys Boarding ()

Boys Day ()

Girls Boarding ()

Girls Day ()

Mixed Boarding ()

Mixed Day ()

Other (specify)

Research Question One: What are the enrolment rates in public secondary schools for the last five years?

5. What are the enrolment rates as per your selection below?

Category	TICK
Very high	
Very low	
Average	
Normal	

Research Question Two: What is the impact of subsidized secondary education on access to the existing educational resources in the public secondary schools in Nyamache Division?

5) Describe the ratio of teacher to students (Tick)

Category	Tick
Adequate	
Heavy	
Average	

7) What is the teacher's workload per week (Tick)

Category	Tick
Adequate	
Heavy	
Average	

(b) Suggest some possible solutions to the constraints in (a) above.

11) Does your school have the following facilities?

- | | | |
|----------------------|---------|--------|
| Library | Yes () | No () |
| Laboratory | Yes () | No () |
| Administration block | Yes () | No () |
| Enough desk/chairs | Yes () | No () |
| Enough classrooms | Yes () | No () |
| Playground | Yes () | No () |
| Dormitories | Yes () | No () |
| Teachers' houses | Yes () | No () |
| Specious Staffroom | Yes () | No () |
| Enough Latrines | Yes () | No () |

12) Among the above mentioned and any other not listed, which ones are not adequately supplied?

.....

.....

.....

.....

Research Question Three: Has access been achieved by the subsidized secondary education in relation to the teaching and learning resources in public secondary schools in Nyamache Division?

18) Do you have enough teachers?

Yes ()

No ()

19) (a) Do you support subsidized secondary Education?

Yes ()

No ()

(b) Give reasons for any answer

Research Question Four: What are the solutions to the problems of subsidized secondary education in relation to access on the educational resources in public secondary schools in Nyamache Division?

20) Suggest some possible solutions to subsidized secondary education

.....

.....

.....

.....

Appendix C; Interview Guide for District Education & Field officers on SSE

Instructions

You were identified and selected as one of the respondents to provide information required for this study on the above mentioned topic. Your responses will be treated with utmost confidentiality and anonymity. To ensure the same you are not required to write your name. The findings of this study will be used to meet the requirements for an M.Ed course. Answer the questions by filling in the Blank spaces or by ticking (✓) where necessary.

- 1) How are the schools equipped?
- 2) How is the staff establishment (teachers) in Nyamache Division?
- 3) (a) What are the main constraints that the Division encounters in relation to the implementation of the Subsidized Secondary Education?
- 4) What are some of the effects of Subsidized Secondary Education since it was implemented in your Division?
- 5) Suggest some possible solutions to the constraints in relation to Subsidized Secondary Education.

8. Teachers houses

i) Availability Available () Not available ()

ii) Adequacy Adequate () Not-adequate ()

9. School compound

i) Fencing Yes () No ()

i) General maintenance of building

Well maintained () Fairly maintained ()

Poorly maintained ()

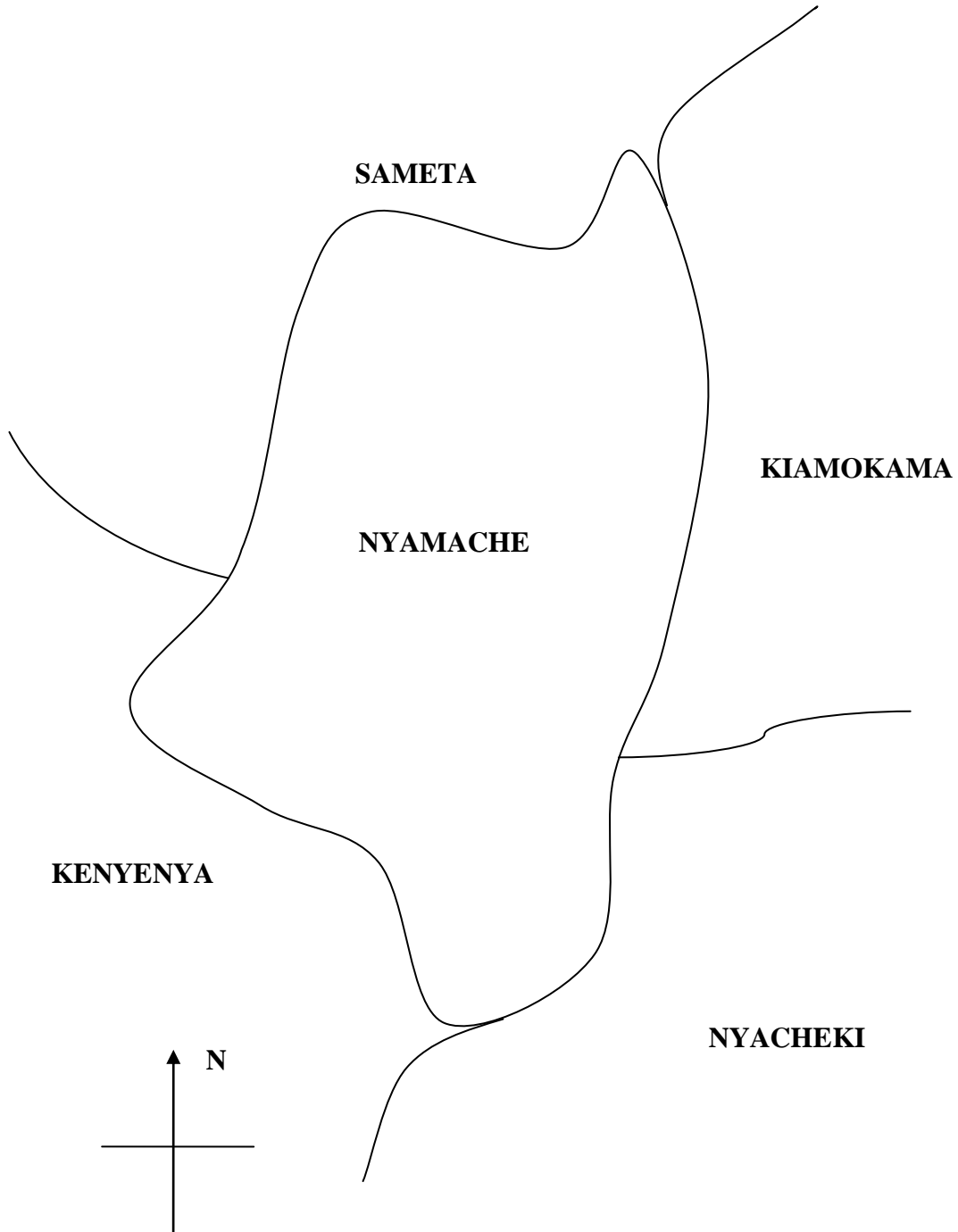
Appendix E: Budget Estimate

Transport Expenses	Ksh. 20,000
Airtime	Kshs 2,500
Internet	Kshs 3,000
Typing	Kshs 10,000
Binding	Kshs 3,000
Photocopying	Kshs 10,000
Subsistence	Kshs 10,000
Data Analysis	Kshs 30,000
Stationery	Kshs 5,000
TOTAL	Kshs. 92,500

Appendix F: Research Timetable

Concept paper	August, 2011
Proposal development	September, 2011
Chapter 1	October, 2011
Chapter 2	November, 2011
Chapter 3	December, 2011
Data collection	May, 2012
DATA ANALYSIS	June, 2012
Report writing	July, 2012

Appendix G: Sketch map of Nyamache Division



Source: www.krb.go.ke/downloads/Gucha.pdf