ADEQUACY OF SUBSIDIZED DAY SECONDARY EDUCATION FUNDS IN NYANDARUA COUNTY, KENYA

KAIRU JOHNSON MUTHIORA

E55/CE/11718/07

A RESEARCH PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL MANAGEMENT, POLICY AND CURRICULUM STUDIES, SCHOOL OF EDUCATION, IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE AWARD OF THE DEGREE OF MASTER OF EDUCATION.

KENYATTA UNIVERSITY

DECEMBER 2015
DECLARATION

This project report is my original work and has not been presented for the award of a degree in any other University.

KAIRU JOHNSON MUTHIORA  DATE
E55/CE/11718/07

This project report has been submitted with our approval as the university supervisors.

DR. WILFRIDAH ITOLONDO  DATE
Lecturer,
Department of Educational Management,
Policy and Curriculum Studies,
Kenyatta University

DR. LEVI LIBESE  DATE
Senior Lecturer,
Department of Educational Management,
Policy and Curriculum Studies,
Kenyatta University
DEDICATION

This study is dedicated to all my family members for their support and encouragement throughout the study
ACKNOWLEDGEMENTS

I would like to recognize the support I have received from various individuals throughout the research process. First I wish to express gratitude to my supervisors Dr. Libese and Dr. (Sister) Itolondo W. for their professional assistance and support throughout the study. I would also wish to express my gratitude to all my professors and lecturers at Kenyatta University who took me through the course work phase of my studies.

Sincere gratitude goes to all those who helped in typesetting and editing of this work. May God reward you all.
# TABLE OF CONTENTS

DECLARATION ........................................................................................................ ii  
DEDICATION ........................................................................................................ iii  
ACKNOWLEDGEMENTS ....................................................................................... iv  
TABLE OF CONTENTS ......................................................................................... v  
LIST OF TABLES .................................................................................................... viii  
LIST OF FIGURES ................................................................................................... ix  
ABBREVIATIONS AND ACRONYMS .................................................................. x  
ABSTRACT ............................................................................................................. xi  

## CHAPTER ONE: INTRODUCTION ................................................................. 1  
1.1 Introduction .................................................................................................... 1  
1.2 Background to the Study .............................................................................. 1  
1.3 Statement of the Problem ............................................................................ 5  
1.4 Purpose of the Study ................................................................................... 6  
1.5 Research Objectives .................................................................................... 6  
1.6 Research Questions ..................................................................................... 6  
1.7 Significance of the Study ............................................................................ 7  
1.8 Scope of the Study ....................................................................................... 8  
1.9 Limitations ................................................................................................... 8  
1.10 Assumptions of the Study .......................................................................... 8  
1.11 Theoretical Framework ............................................................................. 9  
1.12 Conceptual Framework ............................................................................ 11  
1.13 Definition of Terms ................................................................................... 12  

## CHAPTER TWO: LITERATURE REVIEW .................................................. 13  
2.1 Introduction .................................................................................................. 13  
2.2 Background to Subsidized Secondary Education ....................................... 13  
  2.2.1 Secondary Education in Developed Countries ...................................... 17  
  2.2.3 Secondary Education in Kenya .............................................................. 20  
2.3 Adequacy of Funds for Infrastructure, Teaching/Learning Resources, Tuition and Operations .......................................................... 21  
2.4 Disbursement of Funds for Subsidized Secondary Education ..................... 27
5.2.1 Adequacy of Funds for Infrastructure, Teaching/Learning Resources, Tuition and Operations .................................................................56
5.2.2 Identify the Timeliness of Disbursement of FSE Funds .........56
5.2.3 Effects of FSE funds on academics performance and completion rate ..........................................................................................57
5.3 Conclusion .........................................................................................................................58
5.4 Recommendations of the Study ................................................................................58
5.5 Areas for Further Research ...........................................................................................59

REFERENCES ........................................................................................................................................60

APPENDICE .....................................................................................................................................65
APPENDIX I: Letter of Introduction .............................................................................................65
APPENDIX 2: Questionnaire for Headteachers ..........................................................................66
APPENDIX 3: Questionnaire for Teachers ..................................................................................69
APPENDIX 4: Interview Schedule for DEO ................................................................................72
LIST OF TABLES

Table 3.1: Nyandarua North subcounty KCSE Mean Scores 2009-2012...........32
Table 3.2: Sampling Frame ........................................................................33
Table 4.1: Headteachers’ and Teachers’ responses on sufficiency of funds provided in schools in satisfying school needs ..................................................39
Table 4.2: Headteachers’ responses on adequacy of school facilities (Multiple responses).................................................................................................40
Table 4.3: Teachers’ responses on adequacy of school facilities (Multiple responses).................................................................................................41
Table 4.4: Effects of inadequate funds on the quality of education as reported by teachers ........................................................................................................46
Table 4.5: Effects of inadequate funds on the quality of Education as reported by headteachers ............................................................................................47
Table 4.6: Ways of ensuring students are retained in school after delayed disbursement of funds ............................................................................................50
Table 4.7: Effects of timeliness of disbursement of funds on quality education ...51
Table 4.8: Impact of FSE funds on students’ academic performance (Multiple responses)..........................................................................................................54
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1</td>
<td>Conceptual Framework</td>
<td>11</td>
</tr>
<tr>
<td>Figure 4.1</td>
<td>Adequacy of FSE funds for acquisition of land and maintenance of school facilities</td>
<td>44</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Headteachers’ and teachers’ responses on adequacy of FSE funds for tuition fee</td>
<td>45</td>
</tr>
<tr>
<td>Figure 4.3</td>
<td>Disbursement of FSE funds</td>
<td>49</td>
</tr>
<tr>
<td>Figure 4.4</td>
<td>Extent of FSE funds in achieving its objectives on students academic performance</td>
<td>52</td>
</tr>
<tr>
<td>Figure 4.5</td>
<td>Headteachers’ and teachers views in relation to the impact of FSE funds on students’ academic performance</td>
<td>53</td>
</tr>
</tbody>
</table>
ABBREVIATIONS AND ACRONYMS

BOG - Board of Governors
DEO - District Education Officer
EFA - Education for All
GDP - Gross Domestic Product
HoDs - Heads of Departments
KANU - Kenya African National Union
KCSE - Kenya Certificate of Secondary Education
KIPPPRA - Kenya Institute of Public Policy Research and Analysis
KNUT - Kenya National Union of Teachers
MDG - Millennium Development Goals
NARC - National Alliance Rainbow Coalition
PTA - Parents Teachers Associations
SASA - South Africa School Act
SEPU - School Equipment Programme Unit
SPSS - Statistical Package for Social Sciences
SSA - Sub-Saharan Africa
UPE - Universal Primary Education
The rationale of this research study was to evaluate the success of financing of subsidized day secondary school education in Nyandarua County. The research aimed at realizing the following objectives: to assess the adequacy of funds for infrastructure, teaching/learning resources, tuition and operations; to establish the timeliness of disbursement of FSE funds. The study was based on Dixon’s (1991), Systems Theory. In this study the, descriptive survey design was employed to collect information from all the 19 headteachers and 228 teachers from the 19 public secondary schools in Nyandarua North Sub county. Stratified random sampling was used in selecting 14 out of 19 secondary schools. Each stratum represented 1 boys’ only school, 3 girls’ only school and 10 mixed secondary schools. Purposive sampling was employed in order to select all the 14 headteachers and the area Sub county Education Officer. Two teachers from each of the participating schools were randomly selected to take part, giving rise to a total of 43 participants. Questionnaires for headteachers and teachers and an interview schedule for the Sub county Education Officer were developed for data collection. Prior to data collection, a pilot study was carried out in two schools in Nyandarua North District to test the reliability and validity of the instruments. To test reliability, test-retest technique was employed and reliability was established at 0.6853. Content validity was enhanced through expert decision. Data was both quantitative and qualitative. Descriptive statistics were employed in order to analyze the quantitative data collected in the study. The findings were presented as means, frequency counts, and percentages. On the other hand, qualitative analysis considered the inferences that were made from the opinions of the participants. Qualitative data was analyzed qualitatively using content analysis based on analysis of meanings and implications emanating from respondents’ information. The analysis was presented thematically in narrative form and, where applicable, in form of quantitative tables. Bar graphs, frequency tables and pie charts were used in presenting the results of data analysis. The study found out that FSE funds allocated by the government to schools in Nyandarua North Sub County were not adequate to cater for all the educational needs. It was established that funds were not disbursed in schools on time, leading to inconveniences like late supply of learning/teaching materials and insufficient provision of resources. The study also revealed that the FSE programme had a positive improvement on access, retention and completion rates. The study suggested that: it is important for the government to give additional funds to the education sector so as to provide the basic infrastructures such as libraries, workshops, dormitories, administration blocks, classrooms and other necessary teaching/learning materials; the Government also needs to attempt to make sure that the FSE resources are in school accounts before the commencement of the school term in order to enable accurate procurement procedures and planning, among other recommendations.
CHAPTER ONE
INTRODUCTION

1.1 Introduction
This chapter presents the study’s background, the purpose, statement of the problem, objectives of the study, research questions, rationale for the study, scope of the study, limitations and delimitations of the study, assumptions of the study, conceptual and theoretical frameworks, and definition of terms.

1.2 Background to the Study
Psacharopoulos and Patrinos (2004) observe that in all countries of the world, a huge quota of national resources, both private and public, are dedicated to education. A quality education, starting from the basic education, is important since it provides awareness and skills, attitudes and values required to contribute efficiently to the social, economic, and political growth of their communities. Education not only encourages people to live a healthier life, but also makes a contribution to the growth and development of a nation by, among other things, decreasing illiteracy, fertility and poverty. According to the World Bank (1998), education also improves nutrition and health of the people, and results in an efficient workforce.

These benefits of investing in education have led governments to invest heavily on education. Saavedra (2002) notes that even though there is no a priori sufficient amount of wealth that a nation should dedicate to education, the level of wealth a nation allocates to education assists in ascertaining the quality and quantity of education offered to the students in that nation. A decent education support system creates an adequate level of funding while stimulating productivity and impartiality
aimed at improving the dissemination of quality education and its importance among the population in the community (Saavedra, 2002). Acceptable levels of outlay results to, all other things held constant, optimal educational results and outcomes, while taking into consideration a balanced search of other, conflicting social goals (Saavedra, 2002).

The World Bank (2005) notes that education in developed nations is usually funded by the state, partly and sometimes entirely. Moon and Mayes (1994) observe that education in Britain from primary to secondary school level is totally financed by the national government. The key responsibility of parents is ensuring that children go to school. Similarly, Nyaga (2005) notes that in Japan, the government’s financial policies take care of free education from elementary level to secondary level of education. Individuals who have attained a school going age have no choice than to attend school to gain education that is entirely supported by the national government. The Federal Government in the U.S finances public education. Constitution Welfare Clause, Section 8 of Article 1, empowers the government to collect revenues and charge taxes in order to support education in the country. However, the World Bank (2005) confirms that the Congress in the U.S decides the extent of such support.

Education acquired in secondary school is a first step to the benefits and opportunities of social and economic growth. World Bank (2009) emphasises that there has been dramatic increase in the demand of higher education as nations approach universal primary education, whereas the effort of the global Education for All (EFA) effort offers added impetus for the development of education in secondary schools. Additionally, globalization and the rising need for a more refined
labour force, together with the development of skilled and knowledge-centred nation, provides a sense of necessity to the increasing desire to acquire secondary education.

The World Bank (2000) maintains that secondary education has a very important duty in the current world - one which unites the guidelines of being simultaneously preparatory and terminal, general and vocational, uniform and diverse, compulsory and post-compulsory. Secondary education is considered the basis of educational arrangements in the 21st century. High quality secondary education is crucial in attaining a bright future for people and nations alike.

Verspoor (2008) maintains that between the years 1999 and 2005, admission in primary school rose by about 40% in sub-Saharan Africa. Although survival rates have continued to be in a constant state up to now, this still indicates a very huge improvement in the number of graduates from primary schools that are looking a vacancy in secondary schools. Verspoor (2008) further notes that with growing rates of completion, the number of pupils graduating from primary school could triple by the year 2020 in many nations in sub-Saharan Africa. This creates an enormous challenge for secondary education policies which require to be designed in order to meet inevitable fast rise in demand and also to offer the quality of teaching needed to guarantee the supply of workforce with advanced levels of education and teaching required by the rising and modernizing economy.

In South Africa, user charges are known to be a key challenge to education (Veriava, 2002). Although school financial plans are sponsored by allocations from government income, school fees are needed in order to complement these budgets
with the intention of ensuring that schools have the capacity to run efficiently. The South Africa School Act (SASA) ensures that most of parents and guardians at a public school may decide whether or not there are fees charged in school and the sum to be paid. Exceptions are extended to parents whose earnings are below 30 times, but not in excess of 10 times the sum of fees.

Since Kenya gained independence in the 1963, the government has invested heavily in education. The education sector in Kenya receives the biggest (and rising) share of public payments. According to KIPPRA (2009), the total education support as the percentage of GDP increased from 6.2% in 2002/03 to 6.5% in 2007/08. Nevertheless, the bulk of the resources go to recurring expenditure, mostly payment of wages and salaries. In the 2007/08 financial years, for instance, about 96.5% of the total spending was on recurrent items, up from 91% in the preceding year. On average, the overall wage bill is about 85% of the entirety education budget.

Provision of FSE is viewed as a positive move in the direction of realizing fair play in the provision of secondary education, however, a lot of concern about the impact of the plan on quality of education has been witnessed. For instance, UNESCO (2005), from the evaluation of the FPE programme in Kenya in the year 2005, observed that some of the main challenges affecting FPE were growing numbers of students; lack of adequate teachers; shortage of clear guiding principal on admission; interruptions in the release of resources by the government; and stretched responsibilities for principals and headteachers. If these results by UNESCO are accurate, then we may anticipate that the operation of FSE is to be hindered by similar key issues that have a direct effect on quality.
According to the FSE policy, the government has the responsibility of funding the tuition fees in public schools while guardians and parents have the responsibility of meeting other needs such as lunch, boarding fees in boarding schools, and transport. This corresponds to the government’s obligation to make sure that all special needs and gender discrepancy in all regions are dealt with. According to Kenya Vision 2030 these efforts are intended to help in the attainment of the Education for All (Republic of Kenya, 2007), Millennium Development Goals (MDG) and international development commitments.

In Nyandarua North District, just like the rest of the country, the introduction of subsidized secondary education led to an increase in enrolment in secondary schools. However, the government did not expand existing schools to accommodate the rising number of students enrolling in the schools. This means that learning and teaching resources were insufficient in most schools, teacher-students ratio rose, and classrooms and sanitation facilities were overstretched. Reports from the District Education Office, Nyandarua North, indicate that some schools in the district are experiencing a shortage of teachers. These factors could have unconstructive effect on the quality of education.

1.3 Statement of the Problem

Education plays an imperative role in the national growth and development of any nation. Due to lack of finances by a majority of Kenyans, EFA faced challenges like less access and low completion rates which compromised the quality of education. The Government works with other development associates in order to provide facilities and services for the attainment of subsidized secondary education. However, there have been concerns over the implementation of the programme. This
study therefore seeks to assess the status of financing subsidized day secondary education in relation to intended access and retention in Nyandarua North Sub County.

1.4 Purpose of the Study

The objective of this research study was to evaluate the adequacy and timeliness of disbursement of FSE funds in achieving the intended outcomes in Nyandarua North Sub County.

1.5 Research Objectives

The study aims are to:

i. Ascertain the adequacy of funds for infrastructure, learning/teaching resources, tuition and operations

ii. Identify the timeliness of disbursement of FSE funds

iii. Ascertain the impacts of FSE on enrolment and completion rates.

1.6 Research Questions

The study was guided by the following research questions:-

How adequate are subsidized secondary education funds for;

i. Infrastructure development.

ii. Teaching/learning resources.

iii. Tuition.

iv. Operations.
1.7 Significance of the Study

The research findings could be of significance to the Government, the Ministry of Education, teachers, principals, students and the society in a number of ways. To the government, the study could provide data on how subsidized secondary education is being implemented at the school level, and unearth the factors that could compromise quality of education, hence come up with strategies needed to ensure effective implementation of quality secondary school education to Kenyans.

The study could also provide valuable data to headteachers and teachers on the influence of various school-based factors on school management. Such factors include adequacy of teaching/learning resources, adequacy and qualifications of teachers, students-teacher ratio, and financial management issues. By identifying the impact of such factors, the researcher will be in a position to recommend measures that headteachers and teachers could take to cope with the problems.

The study could also be of significance to students and community members, in that the study will show how their involvement in implementation of FSE, or lack of it, impacts on quality of education. When quality of education improves, students perform well and proceed with education at the tertiary level, leading to economic benefits both at the personal and community level.

The study can also improve the body of information and awareness of changes in education administration and quality of secondary school education. The study can also fill loop holes in research and could encourage other researchers to carry out related studies in other areas or levels of education.
1.8 **Scope of the Study**

The study sought to assess the status of financing subsidized day secondary education in achieving the intended objectives in Nyandarua North District. The factors considered include adequacy of funds for teaching/learning resources, infrastructure, tuition and operations, and timeliness of funds disbursed to schools by the government. The study was conducted in day secondary schools in Nyandarua North Sub County.

1.9 **Limitations**

The research study was limited to public schools in Nyandarua North Sub County, and may possibly not be applicable to other areas. There are many other factors which impact on financing of education which may affect access and completion rates in day Secondary schools but which were not investigated. Some of these key factors include the school uniforms, development levies, lunch feeding programs, the incomes of the parents, prudent financial management by the school administrators and in some cases cultural practices just to mention a few. Due to shortage of time, the study did not investigate such factors.

1.10 **Assumptions of the Study**

The research study was centred on the assumptions that:

i. Implementation of subsidized secondary education faces challenges that could have undesirable effects on quality of education.

ii. The school principals keep up to date and accurate enrolment data.

iii. The respondents will be in a position to identify the factors that impact on the success of FSE in their schools.
iv. All participants will give truthful, genuine, and authentic responses to the questionnaire.

1.11 Theoretical Framework

The study was based on Dixon’s Systems Theory of 1991. The theory attempts to explain and predicts behaviour of the complete organization. The success of a system depends on the smooth working of its parts. According to Schemerhorn (1993), a system is a collection of interconnected sections that function together in order to realize a common goal. Owens (1981) views a school as an open system that receives resources (inputs) from the environment and transforms them into products (outputs). As an open system, the school receives inputs from its environment in form of people, finances and raw materials, which it utilizes in order to generate products, which are then released back into the larger society. The products or outputs are in this case the school leavers and the skills they have attained in school while the environment is the larger society.
Schooling as an Input – Process – Output System

**Inputs from Society**
- Structure: For example, grade levels, classes, school levels, departments, organizational hierarchy
- People: For example, teachers, bus drivers, counselors, coaches, custodians, supervisors, dieticians, administrators, nurses
- Technology: For example, buildings, class schedules, curricula, laboratories, chalkboards, books, audio-visual equipment, buses
- Tasks: For example, teaching, serve food, run buses, administer tests, account for funds, stewardship, supervise personnel, conduct extracurricular program.

**Educational Process**

**Outputs to Society**
- Individuals more able to serve themselves and society because of improved:
  - Completion rates
  - Access to education.
  - Retention of students in schools.
  - Creativity and inventiveness
  - Communication skills
  - Cultural appreciation
  - Understanding of the world
  - Sense of social responsibility

**Source:** *Organizational Behaviour in Education by Owens, Robert (1981, p64)*

Inputs from society are transformed through the educational process to outputs in form of educated graduates who should be absorbed in the job market. A system is composed of sub-systems or sub-units that work together in a division of labour so that the entire organization can achieve its goals. The key objective is for all sub-systems to perform in manners that promotes high productivity for the whole organization. According to the systems theory, if one sub-system fails, the whole system is put in jeopardy.
1.12 Conceptual Framework

Figure 1.1 diagrammatically presents the conceptual framework of the study, which shows the connection between the independent and dependent variables.

**Figure 1.1: Conceptual Framework**

![Diagram](image)

**Source:** Researcher (2012)

Figure 1.1 above shows that the success of FSE could be influenced by adequacy of funds for teaching/learning resources, infrastructure, tuition and operations; timeliness of funds disbursed to schools by the government; and financial management regulations at the school level.

These factors are the study’s independent variables, and they could influence the success of subsidized secondary education, which is the dependent variable. The indicators of success of FSE include academic performance of students, discipline of students and staff members, access and completion rates, and motivation of teachers.
1.13 Definition of Terms

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

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.

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

Timeliness of disbursement- This is when the government deposits FSE funds in the school accounts before the opening day of each school term.

Infrastructure The physical resources needed in a school to support learning by students e.g. classrooms, laboratories, libraries and fields among others.

Teaching/Learning Resources Are materials that enhances learning in a school such as reference books, computers, maps, models and textbooks.

Tuition funds Money for the purchase of learning materials like tonners, chalks, printing papers, duster, etc.

Operations funds Money to settle expenses in a school such as salaries, electricity and water bills, maintenance & improvement, and activities.

Adequacy of funds That the subsidized fee of ksh.12, 870 per student can cover the expenses incurred by a student in one school year.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
The main focus of this chapter is a review of literature on financing of subsidized day secondary education. The chapter covers literature on the following: background to subsidized secondary education; adequacy of funds for infrastructure, teaching/learning resources, tuition and operations; disbursement of funds; and effects of FSE on academic performance and completion rates.

2.2 Background to Subsidized Secondary Education
Globally, education is considered to be a basic human right. The UN Universal Declaration of Human Rights Charter considers education as one of the key basic human rights. Bishop (1989) observes that the 1948 Universal Declaration of Human Rights (Article 26) states that everyone has the right to access education and that people should not be charged fees in order to access education, at least at the basic and primary levels. Highlights of the Education For All have been the main focus in international forums, such as (UNESCO) World Conference that took place in Jomtien, Thailand in the year 1990 (Ministry of Education, 1999).

The resolutions outlined at the Conference included: Ensuring that the basic learning needs for all are met – youth, children, and adults, recognizing they all have diverse learning needs, which requires diverse teaching and learning methods, content, and modalities; giving preference to women and girls - removing every barrier that hampers their lively participation and eradication of all gender typecasting in education; giving special consideration to the learning
requirements of the disabled and the destitute - promoting learning and taking steps to offer equivalent access to education; concentrating on learning, instead of exclusively contribution in organized programs and achievement of certification, assuring education attainment for adults, children and youth to "realize and uphold an satisfactory level of education" for all and "advance and apply systems of evaluating education achievement"; promoting the environment for learning - communities must ensure that all learners adults, youths and children, get the health care, nutrition and general physical and psychological support they require in order to contribute actively in, and gain from, their education; increasing partnerships - education authorities and governments have a unique responsibility to offer basic education for all, but innovative and rejuvenated partnerships at all stages will be required: Non-governmental and government organizations, local communities, the private sector, religious groups and households.

The position of teachers must be immediately improved; increase the means and capacity of basic education - by implementing an "extended vision" of basic education that is not limited to a particular period (childhood), a particular institution (school) or a particular type of information (official school curriculum); awareness that learning starts at birth and is permanent; identifies the value and soundness of traditional knowledge and native cultural heritage of every social group; and goes past education (family life, workplace, community, communication media, etc.), concerning non-formal and informal learning.

The participants of the World Education Forum in Dakar, Senegal, in April 2000 committed themselves to the accomplishment of the following goals: increasing and improving inclusive care in early childhood and education, particularly for the most
helpless and deprived children; making sure that by 2015 all children, mainly girls, children in complicated situations and those who come from minority communities, have access to and totally free and necessary primary education of high-quality; making sure that the studying and learning requirements of all young individuals and adults are attained through reasonable access to suitable education and life skills programs; realizing a 50 per cent development in levels of literacy in adults by the year 2015, particularly for women, and reasonable access to basic and long-term education for all adults; eradicating gender discrepancy in primary and secondary education by the year 2005, and realizing gender fairness in education by the year 2015, with an aim of ensuring girls have equal access to and attainment in basic education of high-quality; promoting all elements of the quality of education and promoting excellence of all with the intention that measurable and recognized learning results are realized by all, particularly in numeracy, literacy and important life skills.

In Kenya the recognition of the noble role of education in society has for years informed the developments and reforms in the education sector in Kenya. Since independence, the sector has undergone key transformations with over 10 reviews by Special Commissions created by the Government. The terms of reference for the commission of investigation into the education system in Kenyan, Koech (1999) report stated as follows:

1. To evaluate Kenya’s education system and suggested ways and procedures of enabling it to promote national unity, accelerated industrial, mutual social responsibility, and technology development, adaptation to changing circumstances and consolidation of life-long learning.
2. To suggest a probable programme of action, considering the financial limitations the government encountered with in accordance with:

- Legal framework of education
- The structure of 8-4-4 system of education
- The contribution of long-term education
- The need for harmonization of all forms of education and training
- The role of private sector in offering education openings
- The administration and management of education
- The content of education at different levels particularly special and basic education
- Ways and means of promoting management and operation including cost effectiveness and cost benefit of non-formal and formal education
- Ways and means of increasing accessibility, relevance, equity and quality, with special focus to gender sensitivity, disadvantaged groups and disabled.

3. To recommend ways and means of promoting inclusive social education, values and ethics and AIDs – related educational programmes and micro and macro levels.

4. To suggest ways and means of coming up and promoting substitute educational programmes.

5. To suggest ways and means of increasing liberalization of the educational sector for accelerating nation development.

6. To review and make use of official reports, sessional papers and studies of commissions, committees, working parties, e.t.c that have previously examined education systems in Kenya and make suggestions therein.
This section reviews the background to tuition free secondary education, with specific focus on UPE, EFA, and the Free Secondary Education (FSE). The following sections give a brief overview of free secondary education in developed countries, developing countries, and Kenya.

2.2.1 Secondary Education in Developed Countries

In developed nations, education past the compulsory level is mainly financed partially and sometimes entirely by the national government. According to the World Bank (2005), traditionally, in the industrialized nations secondary education was supplemental to higher education, and this connection has influenced choice of providers, policy, curriculum decisions, training, teacher recruitment, evaluation, authorization, and certification.

According to Moon and Mayes (1994), education from primary to secondary school level in Britain is completely funded by the government. Parents and guardians are mandated to ensure that children are attending school. In Britain, the central government and Education Authority are obliged by Section 7 of the 1944 Act to ensure that education resources are accessible. Moon and Mayes (1994) further notes that parents are viewed as the school’s major officially authorized clients until the youngster attain the age of 16 years. Section 36 of the Act maintains that it shall be the responsibility of the child’s parent of each child of school going age to ensure that the child receive education appropriate to his age, capacity, and fitness, either by usual turnout at school or otherwise.

According to Nyaga (2005), Japan’s government financial policies support free education from primary to secondary school level of education. Children who have
reached the appropriate age of going to school have no choice than go to school in order to obtain education that is funded by the government. In the USA, the Federal Government funds public education. The country is national administration is authorized by Article 1, Section 8 of the Constitution Welfare to charge taxes and collect revenues in order to raise money required to the fund education. Nevertheless, the Congress chooses the scope of such funding.

Nyaga (2005) further notes that in Canada, school charges are an essential part of education organization. Parents are directed to pay for education of their children through reimbursement of fees. However, the government has realized that some parents are legitimately not in a position to pay for their children’s fee so the government makes requirements to make sure that a child is not deprived of a chance to access education due to an sincere incapability to pay fees. The education department in Canada co-operates with school boards, teachers, parents, and other collaborators to make sure those guidelines governing school fees are executed constantly in all the regions.

2.2.2 Secondary Education in Developing Countries

According to the World Bank (2008), the trends in development of education in developed countries have influenced policy changes on secondary education provision in these countries, whereby longer durations of compulsory education are turning out to be an international standard.

The demand for secondary education is drastically escalating in nearly all SSA nations. Verspoor (2008) maintains that between the years 1999 and 2005, the number of children joining primary school has amplified by about 40%; adding that
although survival rates have been constant up to now, this still shows a very great improvement in the number of pupil leaving primary school and looking for vacancies in secondary school. Ledoux and Mingat (in Verspoor, 2008) argue that with rising completion rates the number of pupils graduating from primary school could as well triple by the year 2020 in many nations in SSA. This creates a massive problem for secondary education policies which require to be structured not only to deal with usual rapid improvement in demand for secondary education, but also to offer the quality of teaching and learning required to make sure the supply of workforce with great levels of education required by an increasing and modernizing economy. Verspoor (2008) further argues that escape from the low growth rate that has been normal to different African economies, a lengthy period will require constant investment in the development of human resources, most significantly in secondary education.

According to Lewin (2008), the estimates of the necessary financing for a considerable increase in access to secondary education in East Africa - as well as development in the direction of a basic education cycle of 9 years or 10 years - shows that registration in secondary education can not be stretched at current unit cost levels. Verspoor (2008) maintains that forced by constrained public resources and in the absence of noteworthy policy transformations, countries in SSA have reacted to the rising demand for vacancies in secondary schools by distributing the same resources to a bigger number of students.

Thus, essential inputs frequently are in small supply, causing swelling sizes of classes, instructional materials, inadequate textbooks, supplies, inadequately stocked libraries and twofold or triple shift employment of available facilities.
Lewin (2008) notes that in public secondary schools in Uganda, Tanzania, and Zambia over half of the overall charges per student are funded through fees and other contributions made by the parent. In Kenya, Board of Governors (BoGs) employ extra teachers paid from fee proceeds to fill teaching vacancies for which no government teachers have been employed and almost all physical amenities for government secondary schools have been financed by parents. Zambia, in 1996, established Education Production Units that register students who are unable to find regular places in fee-paying afternoon program managed by teachers (who take part on a charitable basis to complement their income) in school location. In Rwanda, about 80% of the students are registered in private schools, nearly 40% of which get no public financial assistance and have to depend on fee income (Verspoor, 2008). In Benin, the most teachers in junior secondary schools are usually local contracted instructor paid at least partially by from fee proceeds paid by parents. According to World Bank (2005), the Democratic Republic of Congo (DRC) parents pay over 80% of the fee in both public and private secondary schools. The government of Burkina Faso provides two teachers who are paid by the government for each recently created lower secondary school; societies and other sponsors are required to contract extra teachers required in the school. According to World Bank (2005), in Chad, almost half of the instructors in junior secondary schools are teachers from the community mainly paid by parents.

2.2.3 Secondary Education in Kenya

A political changeover that took place in Kenya in the year 2002 led to the introduction of FPE. Due to the implementation of FPE in 2003, there was increase in children enrolment in schools. In an effort to make sure that children leaving
primary schools are enrolled in secondary schools, the government began the free secondary education in the year 2008.

Consistent with the Free Secondary Education policy (Republic of Kenya, 2007), the government has the responsibility of paying the tuition fees while the parents have the responsibility of paying for transport, lunch and boarding. This is in agreement with the government obligation to make sure that special requirements in every region and gender incongruence are dealt with. These determinations are aimed at the apprehension of Education for All and Millennium Development Goals (Republic of Kenya, 2007). Before then, secondary education in Kenya faced various challenges like little access, low completion rates due to high dropout rates.

To mitigate the above factors and to enhance the achievement of the EFA and the Millennium Development Goals the Kenya government in 2008 stepped in through the provision of subsidised Free Day Secondary Education.

2.3 Adequacy of Funds for Infrastructure, Teaching/Learning Resources, Tuition and Operations

According to Orlosky (1984), adequacy of finance and its effective management determines the way the school will meet its objectives. If finances from the government are not adequate, then the schools are not able to procure all the necessary teaching/learning and services needed to meet their objectives.

The management of quantifiable assets entails planning, allocation, acquirement, allocation and regulating the employment and preservation of the resources. Onyango (2001) maintains that strategizing for quantifiable resources entails the
identification of the supply necessities, evaluating their quality in terms of the requirements, creating measures for values, ascertaining the cost per unit and the employment of the resources whether by groups or individuals. With the outline of Subsidized Secondary Education, schools had over-enrolment, meaning that the funds accessible in schools are limited. This is likely to influence the quality of education negatively.

Verspoor (2008) maintains that growths in public expenditure will be insufficient to create growth in learning achievement and education realization unless accompanied by transformations that concentrate on a more proficient employment of obtainable resources and identify sources of extra funding. He recommends that well organized Public-Private Partnerships (PPPs) can help expand the sources of provision and financing.

Mbugua (1987) found out that one of the responsibility of the headteachers in Kenya is to improve the school’s physical amenities. She maintains that in relation to physical amenities, a principal has to decide where to place the educational program, the members of the community to be served by the facility and make sure that financial resources are readily accessible for the school expansions.

Odali (1984) states that the responsibility of putting up classrooms buying furniture, putting up teachers’ houses and building of enough toilets in school has had a big burden on parents most of whom are poor. Due to inflation and poverty many parents don’t have enough money to contribute towards school projects willingly. This inability by most parents to make contribution towards the improvement and
expansion of school facilities creates a lot of administrative constraints to the
headteachers, as pupils may have to study in overcrowded classes.

Dean (1995) notes that it is the obligation of the headteacher to make sure that there
are required amount of resources to execute the school curriculum. Onyango (2001)
explains that material resources are those resources designed, modified and prepared
to assist in teaching and learning. Such resources include textbooks, reference
books, teachers’ guides, manuals, journals, magazines, reports, charts, maps and raw
materials such as laboratory chemicals, wood and metal.

The head teacher is in charge for the school amenities. Bell and Rhodes (1995)
expound that school facilities comprise the staff rooms, administrative office and
offices, workshops, equipment, classrooms laboratories, stores libraries, staff
houses, hostels and the school playgrounds. The school should advance the learning
chances provided to the pupils who use the facilities. It is the charge of the
headteacher to make sure that there is sufficient classroom space to permit the
teaching-learning procedure take place without any complications. He should make
sure that the facilities are employed effectively and efficiently. The school grounds,
for example, play grounds should be harmless and well preserved. The school
grounds as well should be neat, clean, smart and safe. All school physical amenities
should be normally inspected for potential hazards. The staff room, the
headteachers’ office, guidance and counseling quarters and other administrative
center should be appropriately managed and maintained.

According to the Commonwealth Secretariat Report (1995), the efficient use of
other resources depends on its skill and performances of the teacher within the
educational systems. How they use their time, the financial resources provided, the school building and its environs and the textbooks and equipment made available are crucial in determining the eventual quality of the education provided.

Onyango (2001) underlines that workforce is the most significant in a school community. He maintains that teachers include the most significant staff in the school. Nevertheless, other staff members’ contributions, for example, bursars, secretaries, matron, accounts clerk, nurses, watchmen and messengers are also significant. To Dean (1995), the headteachers’ responsibility in workforce management involves:

- Leading and inspiring staff
- Conflict management
- Delegating duties efficiently

Grainger (1994) emphasizes that leading and motivating staff requires certain specific skills on the part of the headteacher. It is widely acknowledged that in organizations where managers show empathy and care about the staff, the productivity of the staff is high. The headteacher should therefore be able to use motivators e.g. the staff’s needs for achievement, recognition, responsibility, personal growth and advancement potential. Other needs such as physiological, sociological and security needs should not be neglected. They are the basic needs that the staff will strive to achieve first before thinking about other higher needs.

A school is a public institution liable for upholding social wellbeing and it is the duty of societies to take care of the school in terms of furniture and buildings. Kaime (1990), notes that community participation on the implementation of an educational
innovation is paramount so that the community members may see the need for the innovation in meeting their needs. According to Olembo et al (1992) a headteacher, as a public relations officer in school officially represents the school in activities that involve the community like parents’ day and other co-curricular activities. The headteacher is therefore the co-ordinator and mediator of school community interactions.

Spain et al (1956) notes that the school is a miniature community; it is a basic component of the much larger community. The way the school relates with the community is important. Spencer et al (1989:63) underscores the significance of school community relationships. He points out those schools were created by community, within community and for community so that through its people, community would retain its individuality and its practicability. To Spencer et al (1989), the perception of ‘school’ fundamentally embraces the collaboration between community’s groups and its teaching-learning institutes. Therefore, efficient education is a purpose of society and school relations.

Onyango (2001) maintains that it is the headteacher’s obligation to improve the relationship between the school and community. Dean (1995) points out that parental defiance towards the school do make substantial differences to children’s performance. Thus, the secondary school headteacher need to work and ensure improved associations between the community and school. He/She should look for to improve a good working connection with the Parents Teachers Associations (PTA) and Board of Governors (BOG).
The BOG involves members of the school population, inter alia, is the ultimate school administration body whose duties involve board of finances, discipline, physical capital, etc. and making sure the execution of guidelines pertaining to secondary school education. Onyango (2001) highpoints that school principal should get the governors to thoroughly understand the school, to share in its prospects, requirements, problems and accomplishments. Likewise, the school principal should endeavor to work collectively with the PTA. The PTA is as well a significant means of notifying parents concerning school undertakings. It is also imperative for the school principal to collaborate with teacher organizations and agencies in the society that provides significant services to the learners in the school.

The headteacher is also responsible for involving the parents in the work of the school especially in relation to their children’s academic work. Dean, (1995) emphasizes that parents should be made to feel that they are useful partners in their children’s education. Pugh (1989) explains that a shared sense of determination, mutual reverence and a readiness to negotiate should be the basis of the partnership between the parents and the school. Onyango adds that there should be open communication between the teachers and parents regarding the academic performance of their children and that the headteacher should not hesitate to invite parents to the classroom when necessary, but taking into account teachers’ sensitivities. The headteacher should therefore work closely with teachers in developing understanding of community needs with respect to the academics.

Onyango (2001) further emphasizes that headteacher can bring the school closer to the community through direct participation of the school in community functions and giving services to the community. For instance, the headteacher can allow the
community to use the school plant and facilities for recreation, meetings, community lectures, and forums for discussions and cultural events. Therefore, the success of the school-community relations rests entirely, with the headteacher, who is the boundary between the school and the society it serves, the lead is the key point of connection between the school and the outside world.

2.4 Disbursement of Funds for Subsidized Secondary Education

For the investment by the government and Kenya’s development partners on subsidized secondary education to bring about desired benefits, education expansion in terms of access and retention should be coupled with quality improvement. Verspoor (2008) argues that without making sure that the quality of chances to learn, development of access to secondary education is a pointless waste of resources. Provision of bankrolled secondary education in Kenya is expected to be affected by a number of challenges, which could compromise education quality.

Like any other organization, finances are required to run secondary schools, with most of the finances being used for purchase of land, stores, facilities, salaries of personnel, teaching and learning materials, training on the job and so on (Nyaga, 2005). However finances provided by the government are not always adequate to meet the school requirements for an entire academic year. Saavedra (2002) argues that even though there is no sufficient amount of resources that should be devote by country to education, the real level of resources a country invests assists in determining the quality and quantity of education acquired by its children. A high-quality education funding system creates an adequate level of support while ensuring equity and efficiency aimed at boosting the dissemination of education quality and its assistances to the members of society. Sufficient levels of spending lead, all other
things held constant, to optimum educational outcomes and outputs, while ensuring realization of a balanced pursuit of other, conflicting social goals.

According to World Bank (2005) funding secondary education is a serious challenge to both the households and governments. Secondary education in most African nations tends to be the most ignored, getting on average 15-20% of national resources. Family burden in funding secondary education is also high. Therefore, cost is a main barrier to switch to secondary school for the unfortunate, who outline the mainstream in sub-Saharan Africa.

Another factor that could compromise quality of education is financial dependence. Kenya relies of development partners and donor agencies like International Monetary Fund, World Bank and DFID for financing subsidized education. In relation to Resource Dependence Theory by Pfeffer and Salancik (1978), a lot of how an organization conducts itself is determined by dependencies of resource. Actors lacking in indispensable resources will attempt to establish connections with (be dependent upon) others so as to obtain required resources. The risk of source dependence is that if that source of backing is withdrawn, then the administration is expected to close (Palmer and Randall, 2002). Currently Kenya is faced with a dilemma as donors supporting subsidized education withdrew funding following revelations of corruption among Ministry of Education officials.

2.5 Effects of Subsidized Secondary Education on Academic Performance and Completion Rates

The introduction of subsidized secondary education in Kenya is expected to result in increased enrolment and retention of students. This has started to be experienced,
and is expected to continue over the years as more pupils benefiting from FPE graduate from primary schools.

The execution of FPE resulted in amplified enrolments in primary education which to date stands at 8 million up from 5.2 million in 2002 (Ngare, 2008). If a similar influx of students is experienced in secondary schools, the resources available would be over-stretched. Even before FSE was introduced, most schools did not have adequate resources, especially classrooms, furniture and textbooks (Nyaga, 2005).

Verspoor (2008) maintains that rise in public expenditure will be insufficient to enhance improvement in education realization and learning accomplishment except accompanied by reorganisations that target a more resourceful employment of accessible resources and identify sources of extra funding. He recommends that well designed Public-Private Partnerships (PPPs) can assist in spreading the sources of provision and financing. Mbugua (1987) maintains that one of the responsibilities of the school principals in Kenya is to improve the school’s physical amenities. She claims that in managing physical amenities, a school principal has to think about where to house the instructive program, the members of the community to be served by the capability and make sure that monetary resources are readily accessible for the school developments. Such factors also impact on quality of learning and teaching that take place in schools.

Coupled with over-enrolment is the problem of inadequacy of teachers. If the government does not post additional teachers to secondary schools, the ones in schools will be overworked and this is likely to lower quality of education. According to Odhiambo (2005), the most significant reserve a school has for
realizing its intention is the skills, familiarity, and devotion of its teachers. Teachers hence require adequate in-service training in order to offer quality instruction and assessment to students.

There is also need for their working conditions to be improved in order to raise their job satisfaction and work morale.

The execution of free secondary education could as well be affected by socio-cultural factors. This is because the family is the key social organisation for children. Rollins and Thomas (2006) ascertained that high parental control was connected to the improved accomplishment. Cassidy and Lynn (1991) involved a particular factor of the household’s socioeconomic status, flocking, as a sign of how being underprivileged affects educational achievement. They discovered that a less substantially crowded environment, in conjunction with motivation and parental backing, were related with higher learning levels of children.
CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

This chapter outlines the procedures that were employed to carry out the study. The chapter presents research design, research instruments, sample and sampling methods, target population, and data collection and analysis processes.

3.2 Research Design

The study used a descriptive survey design. Descriptive survey designs are employed in exploratory and preliminary studies to enable researchers to collect information, present, and interpret for the purpose of clarification (Orodho 2002). The design was selected because the researcher gathered data on the educational trends in the study location without influencing any variables.

3.3 Study Location

This research study was undertaken in Nyandarua County. The County Headquarters are located at Ol Kalou town. Formerly its headquarters was Nyahururu, but it is at the present part of the Laikipia sub-county. The district has population of about 479,902 and an area of 3,304 km². The main economic activities/industries in this county include livestock keeping, agro-processing and commercial businesses. It is also a tourist attraction with eco-tourism, Lake Ol Bolossat, waterfalls, and the Aberdare Ranges. All children in Nyandarua can access school with ease. Schools are usually situated a walking distance frequently of less than 3 km for both secondary and primary schools.
The county has 471 primary schools and 109 secondary schools. The total enrolment in secondary schools is 25,758 students and the average teacher/student ratio is 1:22.

The study focussed on the 109 public secondary schools in this County. Singleton (1993) stated that the perfect setting for any study should be simply reachable to the researcher and should be that which allow instantaneous rapport with the respondents. Nyandarua North sub-county was selected because it is easily accessible to the researcher. The choice of Nyandarua North sub-county was based on the fact that most schools in this district have been performing badly in KCSE as evidenced by reports from the sub-county Education Officer as indicated below,

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Candidates</th>
<th>Mean Score</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1366</td>
<td>5.5621</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>1648</td>
<td>5.1567</td>
<td>-0.3379</td>
</tr>
<tr>
<td>2011</td>
<td>2093</td>
<td>5.1116</td>
<td>-0.0453</td>
</tr>
<tr>
<td>2012</td>
<td>2166</td>
<td>4.5520</td>
<td>-0.5520</td>
</tr>
</tbody>
</table>

3.4 Target Population

Due to the large number of schools in Nyandarua County, only those in Nyandarua North sub-county were used as the target population. In this study, the target population include 19 headteachers and 228 teachers from all the 19 day public secondary schools in Nyandarua North District. The DEO Nyandarua County was also targeted.
Table 3.2: Sampling Frame

<table>
<thead>
<tr>
<th>Category of respondents</th>
<th>Population</th>
<th>Sample</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headteachers</td>
<td>19</td>
<td>14</td>
<td>73.6</td>
</tr>
<tr>
<td>Teachers</td>
<td>228</td>
<td>28</td>
<td>12.2</td>
</tr>
<tr>
<td>DEO</td>
<td>1</td>
<td>1</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>238</strong></td>
<td><strong>43</strong></td>
<td><strong>18.1</strong></td>
</tr>
</tbody>
</table>

3.5 Sample and Sampling Procedures

Sampling entails choosing a certain number of subjects from a distinct population in order to represent the whole population. According to Orodho (2002) any assertions made concerning the sample must also be accurate to the population. It is nevertheless established that the bigger the sample, the smaller the sampling error. The researcher used stratified random sampling to select 14 schools from the 19 day secondary schools. Each strata represented 3 girls’ only, 1 boys’ only, and 10 mixed schools. The 14 schools represented 73.6% of the target population. This sample size is in line with Gay (1992) recommendation which states that 20% of the target population is adequate for a small population.

Purposive sampling was employed to select 14 headteachers from the chosen schools in order to all categories of schools, while random sampling was employed to select 28 teachers. In addition, the researcher purposively selected the District Education Officer (DEO) for Nyandarua North. The study sample therefore comprised 43 participants as illustrated in table 3.1.

3.6 Research Instruments

Data was gathered through use of an interview schedule and questionnaires. The researcher used questionnaires because they are best suited to enlisting confidential
information. Gay (1992) states that questionnaire give participants autonomy to express their views or opinions. It is also unspecified. Inscrutability helps to generate more honest responses than is likely in an interview. Information of the questionnaires are given below:

3.6.1 Financing of Subsidized Day Secondary Education (Headteachers’ Questionnaire)

The questionnaire for headteachers was used to collect data from headteachers on the success of subsidized day secondary education. The questionnaire for headteachers contained five sections: Section 1 gathered the background data of headteachers. Each of the other four segments gathered information connected to the success of subsidized day secondary education proportionate to sufficiency of funds for learning/teaching resources, infrastructure, tuition and operations, timeliness of funds disbursed to schools by the government and management regulations/vote heads at the school level. The questionnaire comprised both open-ended and close-ended items.

3.6.2 Financing of Subsidized Day Secondary Education (Teachers’ Questionnaire)

This questionnaire was employed to gather data from teachers. The questionnaire contained four sections; section 1 obtained the background details of teachers. Section two collected data on the adequacy of funds for teaching/learning resources, infrastructure, tuition and operations, timeliness of funds disbursed to schools by the government. The questionnaire contained both open-ended and close-ended items.
3.6.3 Interview Schedule for Education Officers

An interview schedule was used to conduct face to face interview with the DEO on the success of subsidized day secondary education. The interview schedule collected data on the adequacy of funds for infrastructure, teaching/learning resources, tuition and operations, timeliness of disbursement of FSE funds and effects of FSE on academic performance and completion rates.

3.7 Pilot Study

Before the required data was gathered, the researcher conducted a pilot study in two schools in Nyandarua North sub-county, which were not incorporated in the final sample. The aim of the pilot study is to ascertain the validity and reliability of the research instruments, and also familiarise himself with data collection procedures.

3.7.1 Validity

Validity is the extent to which a test evaluates what it required to measure. All evaluations of validity are biased outlooks centered on the decision of the researcher (Wiersma, 1995). Borg and Gall (1989) maintain that content validity of a research instrument is enhanced through expert decision. Thus, the researcher relied on the advice of his supervisors, who, as specialists in research, assisted to increase content validity of the research instrument.

3.7.2 Reliability

Wiersma (1985) recommends that it is important that the research instruments are piloted as a way of concluding them. This is very important since it enables the reliability of the instruments to be ascertained. A pilot study made it possible for the researcher to evaluate the precision of the questionnaire items in order that those
items found to be insufficient or unclear were either modified discarded in order to increase the quality of the research instrument therefore increasing its reliability. With the intention to improve the reliability of the instrument, an assessment of the steadiness of the reactions on the pilot questionnaires was made to make a judgement on their reliability. Test-retest technique of was employed whereby the pilot questionnaires were administered twice to the respondents, within a one week interval, to allow for reliability testing. Then the scores were correlated using Pearson Product-Moment Correlation formula given below to determine the reliability coefficient.

\[
R = \frac{\sum Xy - N(\sum x)(\sum y)}{\sqrt{[\sum X^2 - (\sum x)^2][\sum y^2 - (\sum y)^2]}}
\]

Where:

- \( R \) = correlation coefficient
- \( N \) = total number of scores \( \sum \) = summation of scores
- \( X \) = scores for test 1
- \( Y \) = scores for test 2

A correlation coefficient of 0.6853 was obtained and the instruments were judged as acceptable. Mugenda and Mugenda (1999) recommend that a correlation coefficient of 0.7 and beyond is acceptable.

### 3.8 Procedures for Data Collection

The researcher got an introduction letter from Kenyatta University and later got a permit from the National Commission for Science, Technology and Innovation (NACOSTI) so as to be permitted to collect data. Then, the researcher notified the
DEO Nyandarua North sub-county about the research. The researcher made prior preparations by involving heads of the sampled schools in the distribution and filling of the instruments in their schools to make sure completeness and 100% rate of return of the filled questionnaires. Prior to administering the questionnaires to the participants, the researcher requested the approval from the participants. The researcher explained the reason of the study and what he planned to do with the data that would be collected from the participants. The respondents were guaranteed of highest confidentiality and were directed not to indicate their names or school name in the questionnaires. The researcher later arranged for interviews with the DEOs.

3.9 Procedure for Data Analysis

This research yielded data that was for both quantitative and qualitative analysis. Quantitative data analysis involves analyzing numbers about circumstances by selecting particular aspects of those circumstances. Descriptive statistics were employed to analyze the quantitative data realized in the study. The statistics employed include means, percentages, and frequency counts. Quantitative data analysis necessitated the employment of a computer spreadsheet, and for the Statistical Package for Social Sciences (SPSS) was used.

SPSS is suitable while analysing large amount of data, and given its extensive spectrum of statistical processes decisively designed for social sciences, it is efficient as well. Conversely, qualitative analysis involves analyzing in pictures or words by collecting data, recording peoples’ experiences not choosing any pre-chosen aspect. The qualitative data emerging from the interview discussions were reported in narrative form and presented in form direct quotes based on the study objective.
CHAPTER FOUR

PRESENTATIONS OF THE FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter focuses on data analysis and discussions of the research results. The main aim of the study was to examine the status of implementation of financing the subsidized Day secondary education and evaluating it’s success in achieving the intended outcomes in Nyandarua North sub-county. The findings of the research study were guided by the following research objectives; to examine the adequacy of funds for infrastructure, teaching/learning resources, tuition and operations; to identify the timeliness of disbursement of FSE funds and to identify the impacts of FSE on academic performance and completion rates. The study sample comprised of 14 head teachers, 28 teachers and 1 DEO in Nyandarua North District, Kenya. The results of the study are presented using frequency distribution tables.

4.2 Adequacy of Funds for Infrastructure, Teaching/Learning Resources, Tuition and Operations

The first research aim of this study was to ascertain the adequacy of funds for infrastructure, teaching/learning resources, tuition and operations. To ascertain this objective, the study first sought to identify from the respondents whether funds provided in schools were sufficient to satisfy all school needs.

Table 4.1 shows Headteachers’ and Teachers’ responses on Sufficiency of funds provided in schools in satisfying school needs;
Table 4.1: Headteachers’ and Teachers’ responses on sufficiency of funds provided in schools in satisfying school needs

<table>
<thead>
<tr>
<th>Sufficiency of Funds</th>
<th>Insufficient</th>
<th></th>
<th>sufficient</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Headteachers</td>
<td>14</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Teachers</td>
<td>28</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Results in Table 4.1 show that, all the headteachers and teachers (100.0%) reported that funds allocated in their respective schools were not adequate and therefore could not cater for school educational needs.

An excerpt from the interview transcript of the District Education Officer Nyandarua North sub-county states: “Funds allocated in schools are highly inadequate such that the headteachers have to look for alternative sources of funds to be able to run the school budget.”

The findings concurred with the results obtained by Chabari (2010) whose study established that resources allocated in public secondary schools located in Kangundo district were not sufficient to cater for all school needs. According to Nyaga (2005), finances are required to run secondary schools, with most of the finances being used for purchase of land, stores, facilities, salaries of personnel, teaching and learning materials, training on the job and so on. However, finances provided by the government are not always adequate to meet the school needs for an entire academic year. Saavedra (2002) argues that although there is no sufficient amount of resources that should invest in education by the government, the actual amount of money a country invests assists in establishing the quality and quantity of education acquired by its children. An excellent education funding system creates a sufficient level of
financial support while promoting effectiveness and impartiality aimed at optimizing the allocation of education excellence and its benefits among the people in the society. Table 4.2 illustrates headteachers’ ratings of the adequacy of school facilities in their schools.

Table 4.2: Headteachers’ responses on adequacy of school facilities (Multiple responses)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Adequate</th>
<th></th>
<th>Inadequate</th>
<th></th>
<th>Not applicable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalk boards</td>
<td>13</td>
<td>92.9%</td>
<td>1</td>
<td>7.1%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>School vehicles</td>
<td>12</td>
<td>85.7%</td>
<td>2</td>
<td>14.3%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Music room</td>
<td>10</td>
<td>71.4%</td>
<td>4</td>
<td>28.6%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Male teachers’ toilets</td>
<td>9</td>
<td>64.3%</td>
<td>5</td>
<td>35.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>School land (in acres)</td>
<td>9</td>
<td>64.3%</td>
<td>5</td>
<td>35.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Home science room</td>
<td>9</td>
<td>64.4%</td>
<td>5</td>
<td>35.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Text books</td>
<td>9</td>
<td>64.3%</td>
<td>5</td>
<td>35.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Girls’ toilets</td>
<td>8</td>
<td>57.1%</td>
<td>6</td>
<td>42.9%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Female teachers’ toilets</td>
<td>7</td>
<td>50.0%</td>
<td>7</td>
<td>50.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Science laboratories</td>
<td>7</td>
<td>50.0%</td>
<td>7</td>
<td>50.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Workshops</td>
<td>7</td>
<td>50.0%</td>
<td>7</td>
<td>50.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Boys’ toilets</td>
<td>6</td>
<td>42.9%</td>
<td>5</td>
<td>35.7%</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td>Classrooms</td>
<td>5</td>
<td>35.7%</td>
<td>9</td>
<td>64.3%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Support staff toilets</td>
<td>5</td>
<td>35.7%</td>
<td>9</td>
<td>64.3%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Photocopying machines</td>
<td>5</td>
<td>35.7%</td>
<td>9</td>
<td>64.3%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Administration block</td>
<td>3</td>
<td>21.4%</td>
<td>11</td>
<td>78.6%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Dormitories</td>
<td>2</td>
<td>14.3%</td>
<td>7</td>
<td>50.0%</td>
<td>5</td>
<td>35.7%</td>
</tr>
<tr>
<td>Office furniture</td>
<td>2</td>
<td>14.3%</td>
<td>12</td>
<td>85.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Teachers houses</td>
<td>2</td>
<td>14.3%</td>
<td>12</td>
<td>85.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Computers</td>
<td>2</td>
<td>14.3%</td>
<td>12</td>
<td>85.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Food stores</td>
<td>2</td>
<td>14.3%</td>
<td>12</td>
<td>85.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Computer laboratory</td>
<td>2</td>
<td>14.3%</td>
<td>11</td>
<td>78.6%</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>Dining hall/Multi-purpose hall</td>
<td>1</td>
<td>7.1%</td>
<td>13</td>
<td>92.9%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Libraries</td>
<td>0</td>
<td>0.0%</td>
<td>14</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Results presented in Table 4.2 shows that over 60.0% of the headteachers reported that the following facilities were adequate in their schools: chalk boards, school vehicles, music room, male teachers’ toilets, school land, home science room and text books. However, all the headteachers (100.0%) and 92.9% of them reported that the most inadequate facilities in their schools were libraries and dining hall/multi-purpose hall respectively. Other facilities that were reported by over 60.0% of the respondents as inadequate in schools included teachers’ houses, office furniture, food stores, computers, computer laboratories, administration block, photocopying machine, support staff toilets and classrooms. This implies that majority of the schools in the region were not sufficiently equipped with the school facilities. Table 4.3 shows teachers’ ratings on adequacy of school facilities from their respective schools.

As indicated in Table 4.3, 89.3% of the teachers stated that the most adequate facilities in their school were chalk boards, followed by male teachers’ toilets (71.4%) and then textbooks (64.3%). Other facilities that were rated as adequate by over 50.0% of the respondents were classrooms, Girls’ toilets and computer laboratory. Results in the table further showed that the most insufficient amenities in the schools were teachers’ houses, school vehicles, workshops, libraries, dormitories, food stores, administration block and photocopying machines.
Table 4.3: Teachers’ responses on adequacy of school facilities (Multiple responses)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Adequate</th>
<th></th>
<th>Inadequate</th>
<th></th>
<th>Not applicable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Chalk boards</td>
<td>25</td>
<td>89.3</td>
<td>3</td>
<td>10.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Male teachers’ toilets</td>
<td>20</td>
<td>71.4</td>
<td>8</td>
<td>28.6</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Text books</td>
<td>18</td>
<td>64.3</td>
<td>10</td>
<td>35.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Classrooms</td>
<td>15</td>
<td>53.6</td>
<td>13</td>
<td>46.4</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Girls’ toilets</td>
<td>15</td>
<td>53.6</td>
<td>13</td>
<td>46.4</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Computer laboratory</td>
<td>15</td>
<td>53.6</td>
<td>12</td>
<td>42.9</td>
<td>1</td>
<td>8.7</td>
</tr>
<tr>
<td>Female teachers’ toilets</td>
<td>14</td>
<td>50.0</td>
<td>14</td>
<td>50.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Support staff toilets</td>
<td>13</td>
<td>46.4</td>
<td>13</td>
<td>46.4</td>
<td>2</td>
<td>7.1</td>
</tr>
<tr>
<td>Boys’ toilets</td>
<td>12</td>
<td>42.9</td>
<td>9</td>
<td>32.1</td>
<td>7</td>
<td>25.0</td>
</tr>
<tr>
<td>Science laboratories</td>
<td>12</td>
<td>42.9</td>
<td>16</td>
<td>57.1</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>Computers</td>
<td>12</td>
<td>42.9</td>
<td>16</td>
<td>57.1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Dining hall/Multi-purpose hall</td>
<td>12</td>
<td>42.9</td>
<td>16</td>
<td>57.1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Photocopying machines</td>
<td>11</td>
<td>39.3</td>
<td>17</td>
<td>60.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Administration block</td>
<td>11</td>
<td>39.3</td>
<td>17</td>
<td>60.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>School land ( in acres)</td>
<td>10</td>
<td>35.7</td>
<td>16</td>
<td>57.1</td>
<td>2</td>
<td>7.1</td>
</tr>
<tr>
<td>Food stores</td>
<td>10</td>
<td>35.7</td>
<td>18</td>
<td>64.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Office furniture</td>
<td>9</td>
<td>32.1</td>
<td>16</td>
<td>57.1</td>
<td>6</td>
<td>21.4</td>
</tr>
<tr>
<td>School vehicles</td>
<td>5</td>
<td>17.9</td>
<td>20</td>
<td>71.4</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>Dormitories</td>
<td>3</td>
<td>10.7</td>
<td>19</td>
<td>67.9</td>
<td>6</td>
<td>21.4</td>
</tr>
<tr>
<td>Workshops</td>
<td>2</td>
<td>7.1</td>
<td>19</td>
<td>67.9</td>
<td>7</td>
<td>25.0</td>
</tr>
<tr>
<td>Libraries</td>
<td>2</td>
<td>7.1</td>
<td>26</td>
<td>92.9</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Teachers houses</td>
<td>2</td>
<td>7.1</td>
<td>25</td>
<td>89.3</td>
<td>1</td>
<td>3.6</td>
</tr>
<tr>
<td>Home science room</td>
<td>2</td>
<td>7.1</td>
<td>16</td>
<td>57.1</td>
<td>10</td>
<td>35.7</td>
</tr>
<tr>
<td>Music room</td>
<td>2</td>
<td>7.1</td>
<td>16</td>
<td>57.1</td>
<td>10</td>
<td>35.7</td>
</tr>
</tbody>
</table>

Based on the findings presented in Table 4.2 and 4.3 above, the results showed that most of the facilities available in schools were not adequate for smooth teaching and learning process to take place. Some of these facilities included libraries, dining
hall, teachers’ houses, food stores, computers, computer laboratories, workshops, administration block, photocopying machine, support staff toilets, classrooms and dormitories. This clearly indicates that FSE funds allocated by the government in schools were not adequate to cater for all school needs.

These findings concurred with the results by Orlosky (1984) who established that adequacy of finance and its effective management influences the way the school is run and whether or not the school will realize its goals. If funding from the government is not adequate, then the schools are not able to procure all the necessary goods and services needed to meet their objectives. Olembo and Ross (1992) maintains that the improvement efforts of school principals and head teachers in Kenya have from time to time been frustrated due to limitation of space for additional room in the school, limitation of accommodation for instructors and worse still limitation of crucial facilities like chalk, desks, books and so on. Most schools do not have sufficient classrooms and where there are classrooms they are usually in very deplorable state, which are dangerous to students, teachers and members of the staff.

Farombi (1998) in Owoeye and Yara (2011) maintained that a school library may not be useful if the books are not sufficient and modern. He also maintains that the library’s influence is reliant on how frequently and length of time it is available to students. This then, means that high quality and standard education rely mainly on the provision, sufficiency, utilization and organization of educational amenities. Akinsolu (2004) stated that educational curriculum cannot be perfect and well run with poor and shoddily managed school amenities. From the entire indication, school amenities are physical facilities that ensure efficient learning and teaching.
They include laboratories, workshops, classroom blocks, libraries, consumables, electricity, equipment, visual and audio-visual aids, water, tables, desks, playground, storage space, chairs, and toilets.

Figure 4.1 shows headteachers’ and teachers responses in relation to adequacy of FSE funds for acquisition of land and maintenance of school facilities.

As reflected in Figure 4.1, 3 (64.3%) headteachers reported that FSE funds allocated in schools were adequate to facilitate the acquisition of land and maintenance of the school facilities while 11 (35.7%) head teachers and 28 (100%) teachers reported that FSE funds were not adequate. None of the teachers reported that funds allocated in schools were adequate. Figure 4.2 illustrates headteachers and teachers responses on adequacy of FSE funds allocated in schools to cover the tuition fee for each student.
Figure 4.2: Headteachers’ and teachers’ responses on adequacy of FSE funds for tuition fee

Results presented in Figure 4.2 shows that among the 14 headteachers, 2 (14.3%) were of the view that funds allocated in school were enough to cater the tuition fee for each student while 12 (85.7%) of them were of the view that they were not enough. Results further shows that all the teachers (100.0%) were of the view that funds allocated in schools were not adequate to cater for tuition fee of every student enrolled in the school.

Tuition fee is used for the purchase of teaching and learning materials like textbooks, reference books, writing materials for both teachers and learners. Inadequacy of these funds will therefore compromise attainment of the school’s educational objectives.
Table 4.4: Effects of inadequate funds on the quality of education as reported by teachers

<table>
<thead>
<tr>
<th>Effects</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties in teaching/learning processes</td>
<td>16</td>
<td>57.1</td>
</tr>
<tr>
<td>Inadequate facilities</td>
<td>10</td>
<td>42.8</td>
</tr>
<tr>
<td>Low quality education (poor academic performance)</td>
<td>7</td>
<td>25.0</td>
</tr>
<tr>
<td>No lab facilities</td>
<td>5</td>
<td>17.8</td>
</tr>
</tbody>
</table>

Table 4.4 indicates that 57.1% of the teachers stated that lack of adequate funds in schools led to difficulties in teaching. This is because majority of the teachers lacked adequate teaching/learning materials; others lacked adequate facilities while others stated that some facilities were not available at all. These findings were reflected in Table 4.5, whereby 42.8% of the teachers stated that lack of adequate funds in schools led to purchasing of poor quality facilities (e.g. poor lab equipment, inferior reading material, de-motivated staff) while 17.8% of them stated that schools were not in a position of purchasing lab facilities at all. Deficiency of these school resources could depressingly affect the quality of the education provided in schools and as a results leads to poor academic performance among the student and the school as a whole. Table 4.5 shows effects of lack of adequate funds on quality of education.
Table 4.5: Effects of inadequate funds on the quality of Education as reported by headteachers

<table>
<thead>
<tr>
<th>Effects</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate learning materials</td>
<td>6</td>
<td>42.9</td>
</tr>
<tr>
<td>Inadequate infrastructure</td>
<td>4</td>
<td>28.6</td>
</tr>
<tr>
<td>Students are sent home for fees frequently</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>Some services are not offered e.g. in-service training</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>Lack of syllabus coverage</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>Not enough to employ BOG teachers</td>
<td>1</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Table 4.5 shows that 42.9% of the headteachers reported that inadequate funds in schools led to lack of adequate teaching and learning materials, 28.6% stated it led to inadequate infrastructure while 21.4% cited that students were sent home for fees frequently. In addition, 21.4% of the headteachers reported that schools were not in a position of supporting in-service training for the teachers and therefore some of the teachers were not conversant with the changing curriculum. Lack of in-service training could also lead to poor management of the school which could translate to low quality education.

From the results presented in Figure 4.2 and Table 4.3, it emerged that funds allocated in schools were not adequate to cater for acquisition of land, maintenance of school facilities and tuition fee. The major effects of the inadequate funds were difficulties in teaching/learning processes, inadequate infrastructures in schools and poor status of facilities available in schools. An excerpt from an interview transcript from the DEO Nyandarua North sub-county (June, 12, 2014) stated as follows”
Inadequate funding leads to purchasing of low quality school equipment, for example laboratory and co-curricular equipment. This has a negative impact on the performance of practical subjects and co-curricular activities.”

These findings were in agreement with the results by Ajayi (1999) who reported that most of the schools are dilapidated due to inadequate funding. Such circumstances hinder effective learning and teaching, making the procedure thorough and unexciting to teachers and students. Equally, Owuamanam (2005) maintained that the insufficiency of infrastructural amenities and lack of preservation for accessible resources were main problems that educational system were experiencing at the primary school level. The resources in school are grossly insufficient to match the population of student and the available resources were inadequately maintained. The accessibility and preservation of school amenities will improve learning and teaching and advance academic achievement of students.

4.3 Timeliness of Disbursement of FSE Funds

The second objective of the study was to identify the timeliness of disbursement of FSE funds for the success of subsidized secondary education. To address this objective, study participants were asked to rate the payout of FSE finances in their schools. Presented in Figure 4.3 are the results of this analysis.
Figure 4.3: Disbursement of FSE funds

As shown in Figure 4.3, 92.9% of the headteachers and all the teachers (100.0%) reported that FSE funds were not disbursed in schools on time. This as a result brings up number of problems especially in the school that has limited space that cannot accommodate learners who have not fulfilled their fees responsibilities. The learners are sent home several times in order to ensure that their parents pay school fees in full. This interrupts their learning and teaching programme and as a result contributes to poor academic performance. Delayed disbursement also led to lack of synchronization of the school programmes and the disbursement schedule which eventually negatively influences teaching/learning processes. To verify these findings, the researcher conducted an interview with the DEO Nyandarua North sub-county who noted that funds were not disbursed on time due to differences between the government financial year and the school calendar. These findings were in agreement with the results by Musalia (2005) and Kilonzo (2007), who established that constant delays by the government in transferring the money to school was affecting the efficient execution of free primary education.
Table 4.6 shows various ways employed by the headteachers and teachers to ensure that students are retained in schools after delayed disbursement of funds.

Table 4.6: Ways of ensuring students are retained in school after delayed disbursement of funds

<table>
<thead>
<tr>
<th>Ways</th>
<th>Head teachers</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Ask parents to pay fees</td>
<td>9</td>
<td>64.3</td>
</tr>
<tr>
<td>Sent the students home</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>Use CDF funds</td>
<td>2</td>
<td>14.2</td>
</tr>
<tr>
<td>Ask for funds from donors</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As depicted in Table 4.6, 9 (64.3%) headteachers asked parents to pay fees for their children, 3 (21.4%) sent the students home while the remaining 2 (14.2%) ensured that needy students benefit from the CDF funds. Among the teachers, 17 (60.7%) asked parents to pay fees, 6 (21.4%) ensured that needy students benefit from the CDF funds while 5 (17.9%) asked for funds from donors. This implies that majority of the headteachers and teachers asked parents to pay fees in order to ensure their children retention in school.

Table 4.7 illustrates headteachers and teachers view in relation to the effect of timeliness of disbursement of funds on quality education.
Table 4.7: Effects of timeliness of disbursement of funds on quality education

<table>
<thead>
<tr>
<th>Effect</th>
<th>Headteachers</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targets are not achievable due to late disbursement</td>
<td>10  71.4</td>
<td>17  60.7</td>
</tr>
<tr>
<td>Late supply of materials</td>
<td>8  57.1</td>
<td>15  53.6</td>
</tr>
<tr>
<td>Insufficient provision of resources</td>
<td>6  42.9</td>
<td>8  28.6</td>
</tr>
<tr>
<td>Low quality services</td>
<td>4  28.6</td>
<td>6  21.4</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>2  14.3</td>
<td>12  42.9</td>
</tr>
<tr>
<td>Human resource get de-motivated</td>
<td>1  7.1</td>
<td>0  0.0</td>
</tr>
</tbody>
</table>

Data presented in Table 4.7 shows that 71.4% of the headteachers and 60.7% of the teachers reported that due to late disbursement of funds schools were not able to achieve their targets. Another challenge mentioned by 57.1% of the headteachers and 53.6% of the teachers was late supply of materials and insufficient provision of resources (42.9% of the headteachers and 28.6% of the teachers). This was discovered to have negative impacts on learning and teaching processes as the school attain a level where critical materials are not obtainable in schools on time. The headteachers are forced to send students home for the school levies as a way of raising money to run the school. This resulted to high rate of absenteeism (14.3% of the headteachers and 42.9% of the teachers) among learners and some eventually dropout of school.
4.4 Effects of FSE Funds on Academics Performance and Completion Rate

The third objective was to ascertain the effects of FSE on academic performance and completion rates in secondary schools in Nyandarua North District. To meet this objective, study respondents were asked to indicate the level to which FSE has been a success in achieving its objectives. Figure 4.4 illustrates results obtained.

![Bar Chart](image)

**Figure 4.4: Extent of FSE funds in achieving its objectives on students' academic performance**

As shown in Figure 4.4, out of the 14 headteachers who took part in the study, 8 (57.1%) felt that FSE funds achieved its objectives to a great extent while 6 (42.9%) were of the view that FSE programme achieved its goals to a small extent. As for the teachers, results shows that 8 (28.6%) teachers felt that FSE funds achieved its objectives to a great extent whereas 20 (71.4%) of them felt that it achieved its goals to a small extent. Based on these findings, it emerged that head teachers and teachers differed in their perceptions towards achievement of the FSE funds in schools.
The findings revealed that majority of the teachers felt that FSE impacted on access and retention to a small extent whereas majority of the headteachers felt that the FSE programme increased access and retention to a great extent. Figure 4.5 shows that impacts of FSE funds on students’ academic performance.

![Bar chart showing impacts of FSE funds on students' academic performance](image)

**Figure 4.5: Headteachers’ and teachers views in relation to the impact of FSE funds on students’ academic performance**

Figure 4.5 illustrates that all (100.0%) the head teachers and 26 (92.9%) teachers were of the view that FSE funds had an impact on students’ academic performance. This implies that despite majority of the respondents indicating that FSE funds allocated in schools was not adequate to cater for all educational needs, FSE programme had a positive impact towards students’ academic performance in schools.
Table 4.8: Impact of FSE funds on students’ academic performance (Multiple responses)

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Headteachers</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Higher school enrollment</td>
<td>8</td>
<td>57.1</td>
</tr>
<tr>
<td>Minimized absenteeism</td>
<td>6</td>
<td>42.9</td>
</tr>
<tr>
<td>Minimized cases of drop out</td>
<td>4</td>
<td>28.6</td>
</tr>
<tr>
<td>Improved performance due to high school retention rate</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>Improved textbook to student ratio</td>
<td>2</td>
<td>14.3</td>
</tr>
</tbody>
</table>

The results presented in Table 4.8 indicate that 57.1% of the headteachers and 53.6% of the teachers reported that FSE programme increased the number of students enrolled in schools. This shows that introduction of FSE programme gave more learners opportunity to access secondary education thus raising the school enrollment rates. Another impact of FSE funds mentioned by 42.9% of the headteachers and 46.4% of the teachers was minimized cases of absenteeism in schools. A quotation from an interview transcript of the DEO stated that:

FSE has improved enrolment and retention rates, also with FSE there is optimum utilization of resources though they are overstretched.

This clearly indicates that FSE funds helped in reducing cost of education and thus cases of absenteeism as a result of school fees were reduced. The results further showed that schools registered minimized cases of drop out. This was reported by 28.6% of the headteachers and 32.1% of the teachers. More so, 21.4% of the headteachers and 25.0% of the teachers stated that FSE funds led to improved performance in schools due to high students’ retention rates.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter outlines summary of the study, conclusion and recommendations in relation to the findings of this study. It also outlines areas that require further research.

5.2 Summary of the Study

The key goal of the study was to evaluate the status of financing the success of subsidized Day secondary education in achieving the intended outcomes in Nyandarua North district. The study was based on Dixon’s (1991), Systems Theory. The theory attempts to explain and predict behaviour of the complete organization. The study used descriptive survey design to gather information from all the teachers and headteachers from the 26 public secondary schools located in Nyandarua North District. Fourteen out the 26 schools were arbitrarily selected to take part in the actual study. Purposive sampling was used to select all the 14 headteachers and the area District Education Officer. Two teachers from each of the participating schools were also randomly selected to take part; giving rise to a total of 43 participants. Questionnaires for headteachers and teachers plus an interview schedule for the DEO were employed as the key tools of collecting data. The following is the major study findings.
5.2.1 Adequacy of Funds for Infrastructure, Teaching/Learning Resources, Tuition and Operations

In relation to this objective, the study established that FSE funds allocated in schools by the government was not adequate to cater for all educational needs.

These results were obtained from all the headteachers and teachers (100.0%) who took part in the study. To justify this finding, majority of respondents stated that most of the facilities that were available in schools were not adequate for smooth teaching and learning process to take place. These facilities included libraries, dining hall, teachers’ houses, food stores, computers, computer laboratories, workshops, administration block, photocopying machine, support staff toilets, classrooms and dormitories. In addition to this, over 70.0% of the respondents showed that funds dispatched in schools were not adequate to cater for acquisition of land, maintenance of school facilities and tuition fee. The major effects of the inadequate funds were difficulties in teaching/learning processes, inadequate infrastructures in schools and poor status of facilities available in schools. This situation hinders efficient learning and teaching, making the process thorough and boring to students and teachers and as a result leading to low quality education.

5.2.2 Identify the Timeliness of Disbursement of FSE Funds

Regarding this objective, the study established that 92.9% of the headteachers and all the teachers (100.0%) reported that FSE funds were not disbursed in schools on time. This as a result brings up number of problems especially in the school that cannot hold learners who have not attained their fees responsibilities. The learners are sent home numerous times to go and look for money to meet their fees responsibilities. This affects their learning programme and as a result contributes to
poor academic performance. Delayed disbursement also led to lack of synchronization of the school programmes and the disbursement schedule which eventually negatively influences teaching/learning process.

Other challenges faced due to late disbursement of funds were: schools were not able to achieve their targets, schools experience late supply of materials, insufficient provision of resources and high rate of absenteeism among learners.

5.2.3 Effects of FSE funds on academics performance and completion rate

In terms of effects of FSE funds on academic performance, the study found out that head teachers and teachers differed in their perceptions towards achievement of the FSE funds in schools. The findings revealed that majority of the teachers (71.4%) felt that FSE achieved it goals to a small extent whereas majority of the headteachers (57.1%) felt that the FSE programme achieved its objectives to a great extent. According to 57.1% of the headteachers and 53.6% of the teachers, FSE programme increased the number of students enrolled in schools whereas 42.9% of the headteachers and 46.4% of the teachers felt that FSE programme minimized cases of absenteeism in schools. This shows that introduction of FSE programme gave more learners opportunity to access secondary education thus raising the school enrollment rates. The results further illustrates that FSE funds helped in reducing cost of education and thus cases of absenteeism as a result of school fees were reduced. This implies that despite majority of the respondents indicating that FSE funds allocated in schools was not adequate to cater for all educational needs, FSE programme had a positive impact towards students’ academic performance in schools.
5.3 Conclusion

In relation to the above findings, the study concludes that:-

i. FSE funds allocated by the government to schools in Nyandarua North district were not adequate to cater for all schools educational needs.

ii. There was late disbursement of funds in schools. This led to lack of achievement of the set goals, late supply of materials and insufficient provision of resources. Delayed disbursement also led to high rate of absenteeism among learners. This is because learners are sent home from school numerous times to go and look for funds to meet their fees responsibilities. This affects their learning programme and as a result contributes to poor academic performance.

iii. FSE programme had a positive impact towards students’ academic performance in schools. This is because FSE programme reduced the cost of education and thus cases of absenteeism as a result of school fees were reduced. This translated to an improvement in academics since students were retained in schools most of the times.

5.4 Recommendations of the Study

In relation to the study findings outlined above, the researcher made the following recommendations:-

i. The National Government should give more funds to the education sector in order to provide the basic infrastructures such as libraries, workshops, dormitories, administration blocks, classrooms and other necessary teaching/learning materials.

ii. School administrators, head teachers, teachers and students should come up with and inculcate excellent facilities preservation culture.
iii. More resources should be disbursed in schools to cater for school facility maintenance. This is because maintenance costs much money and as such policy makers and educational planers should make sure that adequate provision is made in the budget for facilities preservation and management.

iv. Government must strive to make sure that the FSE finances are in school accounts well prior to the school term commencement to enable accurate planning and procurement procedures.

5.5 Areas for Further Research

i. Another study should be done to establish roles played by school stakeholders in Nyandarua North district to ensure that FSE programme achieve the intended goals.

ii. A study should be carried out to ascertain factors effecting implementation of Free Secondary Education in Nyandarua North district.
REFERENCES


60


APPENDIX I

Letter of Introduction

Kairu J. Muthiora
P. O. Box 829
NYAHURURU

Dear Sir/Madam,

RE: EDUCATIONAL RESEARCH

I am a postgraduate student at Kenyatta University. I am undertaking educational research on “Financing of Subsidized Day Secondary Education in Nyandarua County, Kenya” Your school has been selected to participate in this study. Your assistance will enable this study produce precise findings. The responses provided will be treated with highest privacy and will be used for academic purposes only.

Thank you.

Yours faithfully,

Kairu J. Muthiora
Kenyatta University
APPENDIX 2

Questionnaire for Headteachers

Introduction
This research seeks to assess the success of Subsidized Day secondary education. You are asked to respond to these questions as sincerely and accurately as possible. Answers to these questions will be treated with confidentiality. Kindly do not write your name or school name on this questionnaire. Kindly tick [✓] where applicable or provide the required information on the spaces provided.

Section A: Background information
1. Your gender
   Male [ ]  Female [ ]

2. Academic qualifications
   M.Ed [ ]  B.Ed [ ]  Dip/Ed [ ]
   Other (Specify) .................................................................

3. Other qualifications
   M.Ed [ ]  MSc [ ]  MA [ ]
   Other (Specify) ................................................................
   i. Your experience in management in years ...................... years
   ii. Your experience in management in the current school ........ years

Section B: FSE funds
1. Are the FSE funds disbursed to your school sufficient to meet the school requirements throughout the year?
   Yes [ ]  No [ ]

If No, how does this affect the quality of education offered in your school? ..... ........................................................................................................................................................

.................................................................
2. Kindly indicate the adequacy of the following amenities in your school.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male teachers’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female teachers’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support staff toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School land (in acres)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dormitories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office furniture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science laboratories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photocopying machines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining hall/Multi-purpose hall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home science room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalk boards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. In your opinion, are the FSE funds adequate to facilitate the acquisition of and maintenance of the school facilities mentioned in (2) above?
   Yes [ ] No [ ]

4. Are the funds enough to cover the tuition fee for each student you enrol?
   Yes [ ] No [ ]

67
5. How would you rate the timeliness in disbursement of FSE funds to schools?
   Timely [ ] Not timely [ ]

6. If the FSE funds do not come in time, what do you do to ensure that students stay in school?
   - Ask parents to pay fees [ ]
   - Ask for funds from donors [ ]
   - Use CDF funds [ ]
   - Sell some school assets [ ]
   - Engage in money-making ventures to raise funds [ ]
   - Close down the school till the FSE funds arrive [ ]
   - Send the students home [ ]
   - Others (Specify) ........................................................................................................

7. How does the timeliness of disbursement of funds affect the quality of secondary school education?

8. In your opinion, to what extent has FSE been a success in achieving its objectives?
   - To a very great extent [ ]
   - To a great extent [ ]
   - To a small extent [ ]
   - To a very small extent [ ]

9. Give suggestions on what can be done to ensure the success of FSE...
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

THANK YOU FOR PARTICIPATING
APPENDIX 3

Questionnaire for Teachers

This research is meant for academic purpose. It will assess the success of Subsidized Day secondary education. You are kindly asked to respond to these questions as frankly and accurately as possible. Responses to these questions will be treated as top secret. Please do not write your name or school name anywhere on this questionnaire. Please tick [✓] where applicable or fill in the suitable information on the provided spaces.

Section 1: Background Information

1. Your gender
   Male [   ]  Female [   ]

2. Level of education
   Bachelor’s Degree [ ]  Diploma [ ]  Masters Degree [ ]
   Other (Specify)

3. How many years have you been a teacher?

Section B: Objectives

4. Are the FSE funds disbursed to your school enough to meet the school requirements throughout the year?
   Yes [   ]  No [   ]

   If No, how does this affect the quality of education offered in your school?

   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
5. Kindly indicate the adequacy of the following facilities in your school.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male teachers’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female teachers’ toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support staff toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School land (in acres)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dormitories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office furniture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science laboratories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photocopying machines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining hall/Multi-purpose hall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home science room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalk boards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. In your opinion, are the FSE funds adequate to facilitate the acquisition of and maintenance of the school facilities mentioned in (2) above?

   Yes  [ ]  No  [ ]

7. Are the funds enough to cover the tuition fee for each student you enrol?

   Yes  [ ]  No  [ ]
8. How would you rate the disbursement of FSE funds to schools?
   
   Timely [ ] Not timely [ ]

9. If the FSE funds do not come in time, what do you do to ensure that students stay in school?
   
   Ask parents to pay fees [ ]
   Ask for funds from donors [ ]
   Use CDF funds [ ]
   Sell some school assets [ ]
   Engage in money-making ventures to raise funds [ ]
   Close down the school till the FSE funds arrive [ ]
   Send the students home [ ]
   Others (Specify) .................................................................

10. How does the timeliness of disbursement of funds affect the quality of secondary school education? .................................................................
    ........................................................................
    ........................................................................

11. In your opinion, to what extent has FSE been a success in achieving its objectives?
   
   To a very great extent [ ]
   To a great extent [ ]
   To a small extent [ ]
   To a very small extent [ ]

12. Give suggestions on what can be done to ensure the success of FSE ...............
APPENDIX 4
Interview Schedule for DEO

1. What are your opinions on the sufficiency of physical amenities in public secondary schools in Nyandarua North District?
2. How has the introduction of FSE affected sufficiency of physical amenities?
3. How has the sufficiency of physical amenities influenced the quality of education in the district?
4. What was the effect of the introduction of FSE on student enrolment in secondary schools in Nyandarua North District?
5. What are the negative and positive effects of the student enrolment development in the district?
6. What are your opinions on the sufficiency of teachers in the district as compared to the episode before FSE?
7. What effect has the recruitment levels had on the education quality in the district?
8. What are your opinions on the sufficiency of learning/teaching resources (e.g. textbooks) in public secondary schools in Nyandarua North District?
9. How has the introduction of FSE affected sufficiency of learning/teaching resources?
10. How has the sufficiency of learning/teaching facilities influenced the quality of education in the district?
11. What are your opinions on the sufficiency of the funds distributed to secondary schools by the government for subsidized secondary education sufficient per student?
12. What suggestions would you make for development of education in Nyandarua North in the period of subsidized secondary education?
13. Are the FSE funds released on time to help in the day-to-day running of the schools?