TEACHERS' PERCEPTIONS ON THE INFLUENCE OF SELECTED INSTITUTIONAL FACTORS ON IMPLEMENTATION OF TUITION FREE SECONDARY EDUCATION IN PUBLIC SECONDARY SCHOOLS IN WARENG SUB-COUNTY, KENYA

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A Thesis Submitted to the Board of Post Graduate Studies in Partial Fulfillment of the Requirement for the Award of the Degree of Master of Education in Educational Management of Egerton University

EGERTON UNIVERSITY

DECEMBER 2015

DECLARATION AND RECOMMENDATION

DECLARATION

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DEDICATION

This work is dedicated to my wife Damaris Khakoni Wamutoro and children, Dismas, Daisy and Daudi. To you all thanks.

ACKNOWLEDGEMENTS

I thank the Almighty God for giving me the health, strength and ability to undertake the study. I sincerely acknowledge the contributions of my lecturers in the department of Curriculum, Instruction and Educational Management, Egerton University for their professional support either directly or indirectly in making the undertaking of this research work a success. However I must single out my supervisors Prof. A.K Sang and Prof. M.O. Okere for their immense support, direction and guidance during the entire period of undertaking this research work. Without their support this exercise would not have been accomplished. I sincerely thank my family for their unconditional support, sacrifice and understanding during the undertaking of this course. To all my classmates who encouraged and offered advice when needed, I'm forever indebted to you. Finally, to all those who directly and indirectly contributed to the success of this work, God richly bless you.

ABSTRACT

The launch of Free Primary Education (FPE) in Kenya in 2003 resulted to high enrolment of pupils in primary schools. However only a small proportion of those pupils who completed standard eight enrolled in form one due to lack of school fees which was a burden to many parents. In January 2008 the Government of Kenya declared Tuition Free Secondary Education (TFSE) in all public secondary schools in the country in order to cope with the high number of pupils completing standard eight. As expected, this led to a large number of students enrolling for secondary education. Despite the government input, reports from many parts of the country revealed that shortage of school facilities, instructional materials, teacher staffing and head teachers with good administrative skills among other challenges made it difficult to achieve the objectives of TFSE that is increased level of student enrolment, progression from one class to next and completion. The purpose of this study was to investigate teachers' perceptions on the influence of selected institutional factors on implementation of TFSE in public secondary schools in Wareng Sub-County, Kenya. The study used descriptive survey research design. The target population was 34 head teachers and 452 teachers. A sample of 195 respondents was drawn consisting of 14 head teachers and 181 teachers. Stratified proportionate random sampling technique was used to select head teachers while random sampling was used to select teachers from the schools whose head teachers were selected. Two five point likert type of questionnaires were used to collect data from head teachers and teachers. The questionnaires were validated by a team of experts from the department of Curriculum Instruction and Educational Management. Reliability was determined by subjecting the instruments to a pilot study in six schools from Wareng Sub-County that did not take part in the study. Cronbach's alpha was used to estimate reliability of the instruments, which was established at 0.843 for head teachers' questionnaire and 0.816 for teachers' questionnaire. Data collected were analyzed using descriptive statistics including frequencies and percentages. Statistical Package for Social Sciences (SPSS) was used to process the data collected. Results of data analysis were presented using frequency distribution tables, bar graphs and pie charts. The study established that more students were able to attend school as a result of tuition free secondary education though this stressed the available resources in schools. The first objective was to investigate teachers' perceptions on the influence of facilities on implementation of TFSE, the study found that the school facilities were not adequate. On the second objective, the study concluded that most of the instructional materials in the study area were still inadequate though textbooks, globes, calculators, wall maps and curriculum guides were rated partially adequate. Majority of the respondents noted that the number of staff was not enough, forcing school management to employ Board of Management (BOM) teachers. On administrative skills, most head teachers agreed that their administrative skills were sufficient enough to manage the schools adequately while teachers' opinions differed on this. The study therefore recommends employment of more teachers to cater for increasing student population and also to provide more funds to cater for more school facilities and instructional materials. The study is expected to provide valuable insights on the influence of institutional factors on implementation of TFSE. It is hoped that the findings of this study will help the Ministry of Education and the Teachers' Service Commission to deploy appropriate resources and policy

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LIST OF ABBREVIATIONS AND ACRONYMS

ADEA Association for Development of Education in Africa.

BOM Board of Management

CHE Commission for University Education

DEB District Education Board

EFA Education for All

GNP Gross National Product

HDI Human Development Index

JLI Joint Learning Initiative

KCSE Kenya Certificate of Secondary Education

KIE Kenya Institute of Education

MDGs Millennium Development Goals

NARC National Rainbow Coalition

NER Net Enrolment Ratio

SSA Sub Saharan Africa

TFSE Tuition Free Secondary Education

TIQET Totally Integrated Quality Education and Training

TSC Teachers Service Commission

UPE Universal Primary Education

CHAPTER ONE INTRODUCTION

1.1 Background of the Study

Education forms the basis upon which economic, social and political development of any nation is founded. Investment in education can help foster economic growth, enhance productivity, contribute to national and social development, and reduce social inequality (World Bank, 1998). UNESCO (2005) argues that the level of a country's education is one of the key indicators of its level of development. Globally, education is recognized as a basic human right. The Human Rights Charter treats education as one of the human rights. Bishop (1989) notes that in 1948 the Universal Declaration of Human Rights laid down Article 26, that everyone had the right to education and that education would be free, at least in the elementary and fundamental stages.

Education for all has been discussed in international fora, for example United Nations Educational Scientific and Cultural Organization (UNESCO) and in World Conferences at Jomtien, Thailand in 1990 and its follow-up in Dakar, Senegal in 2000 (Republic of Kenya, 2005). Consequently, governments around the world have invested huge amounts of their expenditure on education. Before independence, education for most of the African countries including Kenya was geared towards perpetuating content inherited from the pre-independent past. The current re-thinking, however, ensures that the African is rooted in the culture of her environment and prepared for participation in nation building through educational reforms (Republic of Kenya, 1964). In 1963, when Kenya attained independence, the government committed itself to the provision of Universal Free Primary Education in tandem with the Addis Ababa Conference of African Ministers held in 1960 (Sifuna, 1990). The conference promised to offer Universal Primary Education within twenty years. In 1963, the government declared a fight against three enemies of development; ignorance, disease and poverty. In light of this, the government adopted a policy of universal primary education (Republic of Kenya, 1964). Since then, the government's effort to expand educational opportunities have been informed by various educational commissions, the key ones being the: Ominde 1964, Gachathi 1976, Mackay 1981, Kamunge 1988 and Koech 1999 commissions, all appropriately named after their respective chairpersons. Alongside these commissions were relevant policy documents such as the

Sessional Paper No.6 of 1988 and the Sessional Paper No. 1 of 2005, the latter is a Policy Framework for Education, Training and Research.

The first Commission, after independence, came up with the Report of the Kenya Education Commission (Republic of Kenya, 1964) that sought to reform the education system inherited from the colonial government to make it more responsive to the needs of independent Kenya. The Commission proposed an education system that would foster national unity and the creation of sufficient human capital for national development. Sessional Paper No: 10 of 1965 on African Socialism and its Application to Planning in Kenya formally adopted the Ominde Report as a basis for post-independence educational development (Republic of Kenya, 1964). The Report of the National Committee on Educational Objectives and Policies(Republic of Kenya, 1976), focused on redefining Kenya's educational policies and objectives, giving consideration to national unity, and economic, social and cultural aspirations of the people of Kenya. It resulted in Government support for 'Harambee' schools and also led to establishment of the National Centre for Early Childhood Education (NACECE) at the Kenya Institute of Education (KIE) (Republic of Kenya,1976). The Report of the Presidential Working Party on the Second University in Kenya(Republic of Kenya, 1981) led to the removal of the advanced (A) level of secondary education, and the expansion of other post-secondary training institutions. In addition to the establishment of Moi University, it also recommended the establishment of the 8:4:4 systems of education and the Commission for University Education (CUE).

The Report of the Presidential Working Party on Education and Manpower Training for the Next Decade and beyond focused on improving education financing, quality and relevance (Republic of Kenya, 1988). This was at a time when the Government scheme for the provision of instructional materials through the National Textbook Scheme was inefficient and therefore adversely affected the quality of teaching and learning (Rotich, 2004). From the recommendations of the Working Party in 1988, the Government produced Sessional Paper No 6 on Education and Training for the Next Decade and beyond. This led to the policy of cost sharing between government, parents and communities (Republic of Kenya, 1988). The Commission of Inquiry into the Education System of Kenya was mandated to recommend ways

and means of enabling the education system to facilitate national unity, mutual social responsibility, accelerated industrial and technological development, life-long learning, and adaptation in response to changing circumstances (Republic of Kenya, 1999). The subsequent report, popularly known as The Koech Report recommended Totally Integrated Quality Education and Training(TIQET). While the Government did not adopt the Report due to the cost implications, some recommendations such as curriculum rationalization have been adopted and implemented (Abagi, 1992).

Recent policy initiatives have focused on the attainment of Education for All (EFA) and, in particular, Universal Primary Education (UPE). The key concerns for the government were access, retention, equity, quality and relevance, and internal and external efficiencies within the education system (Achoka, *et al*, 2007). The effectiveness of the current 8-4-4 structure and system of education had also come under increasing scrutiny in light of the decline in enrolment and retention particularly at the primary and secondary school levels. The Government had shown it's commitment to the provision of quality education and training as a human right for all Kenyans through the introduction of Free Primary education (FPE) in 2003 and Tuition Free Secondary Education (TFSE) in 2008 whose implementation the study seeks to investigate. Despite this positive move towards attainment of increased enrolment, progressive retention and completion rates in secondary schools, it is not clear how institutional factors such as facilities, learning resource materials, teacher staffing and head teachers' administrative skills have influenced implementation of this program.

Just before the December 2002 general elections, the major opposition parties formed a coalition (NARC) that eventually won. During its campaigns, NARC promised to offer free primary school education. And true to its promise, after taking over in December 2002, through MoEST, the NARC government introduced FPE in January 2003. And as was expected in a country where a substantial proportion of children were out of school, the response was overwhelming. According to UNESCO's assessment report, after the introduction of FPE in Kenya in 2003, an additional 1.5 million children were able to attend school for the first time (UNESCO, 2005). The free primary initiative had been key in enhancing access, retention and completion at the

primary level as propagated by the Ominde Education Report (Republic of Kenya, 1964). The challenge that emerged for the government was to ensure that pupils graduating from primary school access secondary education. To address this challenge, the government introduced TFSE in 2008 as earlier promised in the 2007 election campaigns.

The launch of TFSE in 2008 was meant to address illiteracy, low quality education and low completion rates at the secondary level, high cost of education and poor community participation (Republic of Kenya, 2005). Unlike the FPE initiative, which had reference to enormous conventions, resolutions and literature, TFSE initiative could have been triggered by the politically charged climate that engulfed the country during the 2007 general election which implied that the country may not have been very prepared for its implementation. However, there was government commitment to increase transition from primary to secondary by seventy percent in all districts (Ohba, 2009). Despite the government's desire to have 100% transition from primary to secondary education, it remains unclear how institutional factors such as school facilities, learning resources, teacher staffing and head teachers' administrative skills were put in place in order to cater for the projected rise in enrolment in public secondary schools.

According to the TFSE policy, the government was expected to meet the tuition fees of KShs 10,265 per student, while parents were required to meet other requirements like lunch, transport and boarding fees for those in boarding schools, besides development projects. This was in line with the government commitment to ensure that regional special needs and gender disparities were addressed (Ohba, 2009). These efforts were a positive move towards the realization of the Millennium Development Goals (MDGs), Education for All and vision 2030. Based on the experience on the implementation of FPE, it would be expected that implementation of TFSE was to be faced with a myriad problems. Research on FPE indicated that there were many challenges facing its implementation (Republic of Kenya, 2005). For example, UNESCO (2005) carried out an assessment of the Free Primary Education programme in Kenya in 2005. The assessment found out that some of the major challenges facing free primary education initiative were increased student numbers; shortage of teachers; lack of clear guidelines on admission; lack

of consultation with teachers and parents; delay in disbursement of funds by the government; and expanded roles for head teachers.

In line with the assessment of FPE, this study selected school facilities, instructional materials, teacher staffing and head teachers' administrative skills. Just like FPE, TFSE would be expected to experience increased student numbers which would in turn impact on school facilities, instructional materials, teacher staffing and head teachers' administrative skills to handle the expended roles. It was however not clear how institutional factors such as school facilities, learning resources, teacher staffing and head teachers' administrative skills influenced the implementation of TFSE in Wareng district. This was the concern this study sought to investigate.

1.2 Statement of the Problem

Education is key to national development. This however can only be achieved when quality education is offered to all citizens. In an effort to enhance enrolment, progressive retention and completion after the FPE initiative of 2003, the Government of Kenya introduced TFSE in 2008. The Government and other development partners have endeavored to provide facilities for the realization of TFSE. Implementation of TFSE has been a challenge in the whole country. In a paper presented during a KESI course for Deputy principals at Tom Mboya labour college, Kisumu (10th -23rd August, 2008), Aboka, the then Nyanza Deputy Provincial Director of Education, identified thirteen challenges facing TFSE implementation. These included, among others, shortage of school facilities, instructional materials, teacher staffing and head teachers with good administrative skills. Due to these challenges it is difficult to achieve the objectives of TFSE, that is increased level of student enrolment, progression from one class to next and completion. In regard to Wareng Sub-County, these concerns are not founded on any systematic studies or supported by data. The study therefore sought to determine teachers' perceptions on the influence of the named institutional factors on implementation of TFSE in public secondary schools in Wareng Sub-County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to investigate teachers' perceptions on the influence of school facilities, instructional materials, staffing and head teachers' administrative skills on implementation of TFSE in Wareng Sub-County.

1.4 Objectives of the Study

The study was guided by the following objectives;

- i. To determine teachers' perceptions on the influence of school facilities on implementation of TFSE in public secondary schools.
- ii. To find out teachers' perceptions on the influence of instructional materials on implementation of TFSE in public secondary schools.
- iii. To establish teachers' perceptions on the influence of staffing levels on implementation of TFSE in public secondary schools.
- iv. To determine teachers' perceptions on the influence of head teachers' administrative skills on implementation of TFSE in public secondary schools.

1.5 Research Questions

The study was further guided by the following research questions;

- i. What are teachers' perceptions on the influence of school facilities on implementation of TFSE in public secondary schools?
- ii. What are teachers' perceptions on the influence of instructional materials on implementation of TFSE in public secondary schools?
- iii. What are teachers' perceptions on the influence of staffing levels on implementation of TFSE in public secondary schools?
- iv. What are teachers' perceptions on the influence of head teachers' administrative skills on implementation of TFSE in public secondary schools?

1.6 Significance of the Study

The findings of the study may be useful to the Ministry of Education as it points out areas that require deployment of appropriate resources and facilities and to help the review of policy on TFSE. This study also provides information to Teachers' Service Commission (TSC) that will

help in reviewing staffing policy. Head teachers, teachers, education officers, parents and the community as a whole may benefit from the research findings by mobilizing resources, improvising and optimizing utilization of the available instructional materials and teaching staff. The study may also provide a base on which other research may be carried out on other factors affecting secondary education in Kenya.

1.7 Scope of the Study

According to Mugenda and Mugenda (2003), scope refers to the boundaries of the study. Study only focused on the institutional factors influencing implementation of the Tuition Free Secondary Education in Wareng Sub-County. The private schools were excluded since they are not funded by the government. The full boarding schools were also excluded because only day schools were under study. The study was delimited to head teachers and teachers. The teachers' responses on institutional factors influencing implementation of TFSE formed the study's core values. The factors on learning and teaching resource materials, school facilities, teacher staffing and head teachers' administrative skills were investigated.

1.8 Limitations of the Study

The researcher faced the following limitations:

In data collection, the study relied on questionnaires, which include self-assessment measures for head teachers. As pointed out by Sharma (2008), individuals tend to overrate themselves on desirable traits and underrate themselves on undesirable traits. This means that some head teachers may have overrated themselves in some of the factors which may lead to the wrong conclusion that TFSE is not influenced by institutional factors. To overcome this, the researcher collected data on administrative skills from school head teachers and corroborated with that from teachers. Generalization to other parts of Kenya should be done with caution because Wareng Sub-County has characteristics that are only unique to it.

1.9 Assumptions of the Study

This study was carried out under the following assumptions;

The respondents would be willing to avail the information as stipulated in the questionnaires and provide honest responses that reflect the real influence of institutional factors on implementation

of TFSE. The respondents were in a position to identify the factors that impact on quality of education in their schools and that all public secondary schools in Wareng Sub-County faced similar challenges in the implementation of TFSE policy.

1.10 Definition of Terms

Administrative Skills: Skills that are required for success in administration, such as communicating, organizing, planning, scheduling or staffing. In this study it refers to skills of the head teacher of public secondary schools in Wareng District.

Completion rates: It is the ratio of number of students enrolled to the number of students that graduate after going through secondary school.

Enrolment: To register formally as a participant or member. In this study enrollment means student registration in secondary school.

Implementation: The process of putting into practice an idea, program or set of activities new to people (Oakland, 2004). In this study it is used to refer to the process of putting into practice the TFSE program.

Institutions: Are social structures that have attained a high degree of resilience and together with associated activities and resources, provide stability and meaning to social life (Scott, 1987). In this study, institution means a public secondary school.

Institutional factors: Social factors that conjointly generate a regularity of behavior. In this study institutional factors are school facilities, instructional materials, teacher staffing and head teachers' administrative skills.

Instructional materials: Are materials like books, films and computer software that support or enhance the process of learning.

Perception: Is the organization, identification, and interpretation of sensory information in order to represent and understand the environment. (Pomerantz, 2003).

Progression: A movement forward. In this study, progression refers to movement from one class to the next.

School facilities: School plant facilities, school plant projects, school buildings, common school facilities and the grounds.

Secondary education: The single secondary stage of post-primary education in Kenya.

Staffing: The process of acquiring, deploying, and retaining a workforce of sufficient quantity and quality. **Tuition Free Secondary Education Program**: In this study, it means secondary education that is free of tuition levies.

CHAPTER TWO LITERATURE REVIEW

2.1Introduction

This chapter deals with the review of what various writers have documented about education in general and what has been studied about secondary education in particular. Emphasis is put on the Kenyan experience with a view to identifying the gaps that exist and which justify this particular study. The topics captured in this study are as follows; Status of Secondary Education in developed countries, Status of Secondary education in Sub-Saharan Africa, Status of Secondary Education in Kenya, Educational development planning, Management of change in schools, Education financing in Kenya, Institutional factors influencing implementation of TFSE, Theoretical framework and Conceptual framework.

2.2 Status of Secondary Education in Developed Countries

One of the main challenges countries around the world face is to equip their young people to become active citizens, to find employment in constantly changing workplace environments, and to cope with and respond to change throughout their lives. Countries need to respond to this challenge with approaches that are appropriate to their capacities and long-term development objectives. In this context, secondary education takes on special significance. According to the World Bank (2005), historically, in the developed countries secondary education was subsidiary to higher education, and this relationship has influenced policy.

According to the World Bank (2005), historically, in the developed countries secondary education was subsidiary to higher education, and this relationship has influenced policy, choice of providers, curriculum decisions, teacher recruitment and training, evaluation, accreditation, and certification. In the 20th century both U.S. and Soviet education policies led to secondary education models aimed at the creation of massive systems that emphasized open access and universal coverage. After 1945, what were later called comprehensive secondary schools began to spread from northern to southern Europe. In comprehensive schools all students receive secondary education in a single institution, based on a common curriculum, and may be streamed

through elective subjects. This is in contrast to students being tracked and grouped either by academic ability or by choice on entering secondary education.

In comprehensive schools all students receive secondary education in a single institution, based on a common curriculum, and may be streamed through elective subjects. This is in contrast to students being tracked and grouped either by academic ability or by choice on entering secondary education. Meanwhile, the vocational approach to secondary schooling developed rapidly in Eastern Europe. By the 1960s and 1970s secondary education was *de facto* linked more to primary than to tertiary education. The extension of compulsory education had entirely changed the concept, as well as the duration, of basic education, to the point that basic education usually included lower secondary schooling. Arising average level of schooling was seen as an important objective and as a measure of the success of education reforms. Many other countries have embraced the goal of extending and expanding the notion of basic education to encompass much of what used to be restricted-access, elitist secondary schooling. In Kenya the introduction of both FPE and TFSE are government initiatives toward creating open access to education for all citizens.

Goldin (2001) argues that the spectacular expansion of secondary education in the United States, which took place 40-50 years (two full generations) before the corresponding expansion in European countries, had to do with a template that entailed a sharp departure from the European tradition of secondary schooling. This U.S. template encompassed a number of virtues: public funding and provision; an open and forgiving system (non-selective, with no early specialization or academic segregation); an academic yet practical curriculum; numerous small, fiscally independent school districts; and secular control of schools and school funds. In sharp contrast with the United States, in European countries nearly half a century elapsed between when primary education was generalized and made free and compulsory and when access to secondary education was opened to all. In 1945countries such as France, Ireland, and Spain enrolled a fairly low proportion of the relevant age group in secondary education.

In developed countries, education beyond the compulsory level was usually financed in part and sometimes wholly by the state. In Britain, education up to secondary school level was fully financed by the government (Moon & Mayes, 1994). Parents are only required to ensure that children attend school. In Britain, Education Authority and Central Government are required by Section 7 of the 1944 Act to make education facilities available. This enables parents to carry out their legal duty. Parents are seen as the school's prime legal clients until the child is 16 years of age. Section 36 of the Act states that it shall be the duty of the parent of every child of compulsory school going age to cause him to receive full-time education suitable to his age, ability, and aptitude, either by regular attendance at school or otherwise (Moon & Mayes, 1994).

In Japan, the government fiscal policies provide for free education up to secondary school level. Those of school going age have no option other than attend school to acquire education that is fully funded by the government (Nyaga, 2005). In the United

States of America (USA), the Federal Government supports public education. The government is empowered by the Constitution Welfare Clause, Article 1 Section 8, to levy taxes and collect revenues for the support of education. However, the Congress decides the extent of such support (Nyaga, 2005). The situation in Kenya is not different from that of Japan and America as the government and the community participates in the provision of education. What is not clear are the challenges likely to be encountered in the implementation of free secondary education in Kenya.

In Canada, school fees are an integral part of education system. Parents are asked to contribute to their children's education through payment of fees (Nyaga, 2005). However, the government recognizes that some parents are sincerely not in a position to pay so the government makes provisions to ensure that a child is not denied access to education because of an honest inability to pay fees. The department of education in Canada works with school boards, parents, teachers, and other partners to ensure that policies governing school fees are implemented consistently in all the provinces (Nyaga, 2005). In Kenya, poverty has been a major barrier to education access for many children, and this led to the government introducing TFSE.

2.3 Status of Secondary Education in Sub-Saharan Africa

According to the World Bank's report on Governance, Management, and Accountability in Secondary Education in Sub-Saharan Africa, international trends in secondary education have been driving much of the need for reform in secondary education throughout the Sub-Saharan Africa (SSA) region (World Bank, 2008). The international commitment to basic education for all and free universal primary education that coalesced around the 1990 Jomtien and the 2000 Dakar meeting has driven the policies and financial investments of donors and developing nations alike.

The successes of this international movement have addressed many of the equity and quality issues facing developing countries as they expand their educational systems. EFA has thus drastically increased the demand for secondary education while competing with the resources necessary to respond to that demand (World Bank, 2008). Another international trend that is driving change in SSA countries is a move towards compulsory secondary education. Longer periods of compulsory education are becoming a worldwide norm. Lower secondary education is almost universally compulsory in Asia, North America, Europe, and Australasia. Some SSA countries are extending basic compulsory education. In Mali, basic education is going from six to nine years, in Senegal and Zambia, basic education lasts for eight years. Longer basic education allows more time for the consolidation of learning (Holsinger & Cowell, 2000). The introduction of TFSE in Kenya appears to be a move toward the extension of compulsory education to the secondary school level.

In South Africa, user fees are identified as a barrier to education (Veriava, 2002). While school budgets are funded by allocations from state revenue, school fees are required to supplement these budgets so that schools are able to run smoothly. The South Africa School Act (SASA) provides that a majority of parents at a public school may determine whether or not school fees are charged and the amount to be paid. There was however exemption from paying school fees for parents who could afford to meet the cost. Exemption is extended to parents whose income is less than 30 times, but not more than 10 times the amount of fees payable at the secondary school level (Veriava, 2002). In Kenya the government has a uniform allocation criterion for

secondary tuition, meaning that education is accessible to every qualifying student graduating from primary school.

In Egypt, since the 1950's the government has taken up the responsibility of supervising and financing education to achieve the principals of justice, equality and equal opportunity. Though the government had ambitions to finance all aspects of education, the finances became unattainable and this adversely affected the implementation having embraced the concept of free education for all in which the state was solely responsible for financing education. The Egyptian Ministry of Education released a document in 1952 directing that those spending on private education in the primary stage should not benefit from free education during secondary education (World Bank, 2005). This was probably to try and reduce the expenditure on free secondary education. This means that financing of education, especially for developing countries like Kenya, is costly and governments must prepare well. Another lesson is that these finances must be managed effectively to achieve the set goals.

The demand for secondary education is increasing rapidly in almost all SSA countries. Verspoor (2008) notes that between 1999 and 2005 primary school intake increased by almost 40%; adding that even though survival rates have remained stable so far, this still implies a very large increase in the number of primary school graduates that are seeking a place in secondary school. With increasing completion rates the number of primary school leavers could even triple by 2020 in many countries in SSA (Verspoor, 2008). This creates an enormous challenge for secondary education policy which needs to be designed not only to respond to inevitable rapid increase in demand for access but also to provide the quality of instruction necessary to ensure the supply of personnel with higher levels of education and training demanded by a growing and modernizing economy. Breaking away from the low growth equilibrium that has characterized too many African economies for too long will require sustained investment in the improvement of human resources, including most importantly secondary education (Verspoor, 2008). The introduction of TFSE in Kenya shows the government's commitment to provision of secondary education to all Kenyans. However, without posting of adequate teachers to schools, the quality of education

could be jeopardized. This study therefore seeks to find out the influence of teacher staffing on implementation of TFSE.

According to Lewin (2008), projections of the financing required for a significant expansion of access to secondary education - including progress towards a basic education cycle of 9 or 10 years- indicate that enrolments in secondary education cannot be expanded at present unit cost levels. Constrained by limited public resources and in the absence of significant policy reforms, SSA countries have responded to the increased demand for secondary places by spreading the same resources over larger number of students (Verspoor, 2008). Consequently, essential inputs often are in short

supply resulting in increasing class sizes, shortages of textbooks, instructional materials and supplies, poorly stocked libraries and double or triple shift use of facilities. The study seeks to find out the influence of school facilities on increased student enrolment in the Kenyan situation after the TFSE initiative.

Lewin (2008) observes that in public schools in Uganda, Tanzania and Zambia more than half of the total costs per student are financed through fees and other parental contributions. In Kenya, Boards of Management (BOM) hire additional teachers paid from fee income to fill teaching positions for which no government teachers have been assigned and virtually all physical facilities for government secondary schools have been funded by parents (Republic of Kenya, 2005). Zambia established in 1996 Education Production Units which enroll students who fail to find regular places in fee-paying afternoon sessions run by teachers (who participate on a voluntary basis to supplement their income) in school premises. In Rwanda 80% of the students are enrolled in private schools, almost 40% of which receive no public subsidy and have to rely on fee income (Verspoor, 2008). The initiative of TFSE was to ensure that every child can access secondary education by reducing the financial burden on parents.

In Benin the majority of the teachers in junior secondary schools are local contract teachers paid at least in part from fee income paid by parents. In the Democratic Republic of Congo parents pay more than 80% of the cost in both private and public secondary schools (World Bank, 2005).

In Burkina Faso the government provides two government paid teachers for every newly established lower secondary school; communities and other providers are expected to contract additional teachers as needed. In Chad half of the teachers in junior secondary schools are community teachers mostly paid by parents (World Bank, 2007). In Kenya, the introduction of TFSE was expected to lead to increase in enrolment at the secondary school level, and this requires additional teachers. This study seeks to find out how increase in students' enrolment affected teachers workload in schools.

Other institutional factors affecting secondary education in SSA countries concern provision of goods and services for schools. Most SSA countries no longer rely on public entities for the provision of goods and services, in particular classrooms and textbooks. Textbooks are procured from private publishers and private contractors sometimes hired by schools or communities build most classrooms. A review of text book provision in 18 countries in SSA by Read, *et al* (2008) found that secondary textbooks were entirely financed by parents in countries; entirely financed by government in countries (although not always adequately); and financed by government in countries with funding levels that assumed significant parental contributions. The study seeks to find out the influence of similar institutional factors in secondary schools in Wareng District after the introduction of TESE.

Read, et al (2008) noted that secondary text books especially at the senior secondary level are often imported and produced at high costs with presentational specifications that are unaffordable for many parents and governments in SSA. Verspoor (2008) proposes that effective textbook supply strategies will depend on a vibrant local publishing industry and effective book sellers' network. In smaller countries regional cooperation is essential to keeping cost down. The cost of construction of classrooms and specialized facilities is another important cost item that needs careful consideration. Verspoor (2008) proposes that at the junior secondary level facilities can resemble primary school facilities, which can often be constructed at reasonable cost by communities without expensive specialized rooms (as is the case for example in Kenya where the government has only constructed classrooms in the most disadvantaged areas) (Republic of Kenya, 2005). Where classroom need to be constructed a transparent process of procurement that

is decentralized, managed at the school level and simplified to allow tendering by smaller local contractors will usually be the most cost effective.

2.4 Status of Secondary Education in Kenya

In Kenya, as in other developing countries, the provision of quality education and relevant training to all is the key determinant for achieving the national development agenda. The government of Kenya has therefore focused its main attention on formulating appropriate education policies to ensure maximum development of the human resources who are essential for all aspects of development and wealth creation through industrialization. All education stakeholders recognize that quality education at all levels will enable Kenyans to utilize their natural resources efficiently and effectively in order to attain and maintain desirable lifestyles for all Kenyans (Munavu *et al*, 2008). In order therefore to attain the desired millennium development goals (MDGs) and education for all, the introduction of free secondary education was intended to reduce the cost burden on parents and enable more children access and attain the minimum basic secondary education.

There are, however, many challenges which threaten the sustainability of a robust educational regime in Kenya. The key challenges include low enrolment and retention rates, constricted access and equity at higher levels, establishment and maintenance of quality and relevance, and myriad inefficiencies in managing the limited resources allocated to the education sector (Republic of Kenya, 2005). Implementation of the free primary education (FPE) has been responsible for the recent upsurge in the secondary school enrolments since 2003. Enrolment trends in secondary schools show a steady growth from 30,000 in 1963 to 860,000 students in2003, and to over 1 million in 2006 (Munavu et al, 2008). Similarly the number of public secondary schools increased from 151 in 1963 to 3660 in 2005 (Republic of Kenya, 2005). One of the factors limiting growth in Gross Enrolment Ratios (GERs)at the secondary level is the limited number of secondary schools compared to the number of primary schools. The current gapping mismatch between the capacities at these levels is approximated by comparing the number of primary and secondary schools. The number of public primary schools

was 18,081 in 2003 compared to 3,660 public and 641 private secondary schools in the same year (Republic of Kenya, 2005). This mismatch will pose a major challenge in implementing the declared government policy of TFSE with effect from 2008.

Previous studies have shown that secondary education in Kenya is faced with a number of challenges. These challenges fall under the various school management task areas, which, according to Okumbe (2001), include management of staff personnel, pupils, school finance, physical and material resources, and the curriculum. A study carried out by Mbaabu (1983) revealed that lack of physical facilities, materials, equipment and tools were among the major problems that school head teachers are faced with in Kenya. The study found out that in most schools' classes had over 50 children. This study revealed that free education at the primary level brought about problems related to over-enrolment, lack of physical facilities, and inadequate teachers. The researcher will find out whether, with the introduction of free secondary education, similar challenges are experienced in general and in particular Wareng Sub-County. Olembo & Cameron (1986) indicate that school principals face increasing administrative difficulties. These include inadequate and badly constructed buildings; shortage of books and equipment; lack of proper school furniture particularly desks; poor or sometimes non-existent maintenance and repairs; untrained and half trained teachers who seldom stay long; over-crowded classrooms; poor communications and few supporting services especially health services. As a result the administration of schools has become one of the most taxing jobs in the whole education system.

In relation to the structure of physical facilities, Olembo and Ross (1992) indicate that the development efforts of school head teachers have sometimes been frustrated because of lack of space for extension of the school, lack of housing for teachers and worse still lack of essential facilities like desks, chalk, books and so on. Some schools do not have adequate classrooms and where they exist they are sometimes in very poor condition, which are hazardous to students and staff. Such a situation is likely to be observed in public secondary schools at present.

2.5 Educational Development Planning

According to Mbiti (2007), planning can be defined as a purposeful or deliberate preparation in advance. He further states that this process encompasses aims, basic methods, time frame and means or ways by which the intended purposes will be effectively achieved according to the specified scope and time. Mutua & Namaswa (1992), defines planning as a rational process of preparing decisions for future action directed at achieving goals and objectives by optimum means. He further notes that planning is concerned with the progress made, with unforeseen obstacles that arise and how to overcome those obstacles. He also notes that planning is in effect deciding well in advance what needs to be accomplished, how long it will take, and what resources are needed to accomplish the task. He observes that as one of the major national programmes, education cannot be managed effectively without detailed planning.

As a vital social service in any nation, education demands participation of all the stakeholders starting from the national level to the local level where schools are located, meaning it is a people driven process. Accordingly, educational planning process involves a comprehensive and rational preparation of human resources for development of oneself and others. This was not the case at the national level as TFSE came up as a campaign tool by the major political parties during the 2007 general election. According to Mutua & Namaswa (1992), educational planning involves the application of rational systematic analysis to the process of educational development with the aim of making education most effective and efficient in terms of responding to the needs of the student and society as a whole.

Sababu (2007) notes that strategic planning is outward looking and describes the periodic activities undertaken by organizations to cope with changes in their environment. It is a top management function, which is concerned with making decisions with regard to the determination of the organization's mission, vision, philosophy, objectives, strategies and functional policies. It also involves the development of long range plans for effective management of environmental opportunities and threats in light of the organizational strengths and weaknesses. Success in implementing FSE is possible when it is done with excellent skills to achieve expected school performance. Carron et al. (2005) assert that the secondary schools

major task in improving school academic performance is to provide sound school leadership after major policy changes. Fry and O'Neill (2002) note: "We know that if we can have a dramatic impact on raising the quality of school performance, we will have a dramatic improvement in student achievement across the board."

Research studies based on experience of companies and executives' viewpoints have indicated that strategic planning contributes positively to the performance of organizations. An educational plan describes how education provision across all sectors and nationwide would be planned, financed, managed, implemented and evaluated over the five years (Republic of Kenya, 2005).

According to the Republic of Kenya (2006), the strategic plan of the ministry of education (MOE) articulates the Governments vision for the development of Kenya's education system, and identifies the strategic imperatives necessary for the realization of the vision. It also specifies the priorities upon which the resources in the sector will be focused. The MOEST strategic plan essentially presents the corporate strategy and does not contain details of county level activities. It however, provides a sufficient frame-work within which County Action plans are to be developed. It is not clear if head teachers fully appreciate strategic planning as a crucial administrative skill in the implementation of TFSE in Wareng District.

2.6 Management of Change in Schools

Change has been defined as a shift in behavior and or attitude from what it was to what it has become Fullan (1997). It refers to a significant alteration of the behavior pattern of a large number of individuals who run an organization. Educational change is defined by Orora (1997) as the process of altering the mission, goals, values, beliefs, behavior, rules, procedures, policies, structure, resources and performance of all or some units of an educational system or institution. Fullan (1997) as cited by Orora (1997) states that real change, whether desired or not, whether imposed or voluntarily pursued, represents personal and collective experience and results in a sense of mastery accomplishment, and professional growth.

The declaration of TFSE in 2008 was a profound change in Kenya's education system. The head teachers and teachers are clearly the major implementers and change agents bearing the huge task of ensuring that the change was accepted and embraced by all. For a successful change in an organization to be effective, the management needs not to focus on formal structures and systems but set up process management needs to solve real business or organization problems (Oakland, 2007). In this case, school managers should remind the teachers of their responsibilities and duties and emphasize the importance of performance. The head teacher should also identify and develop the vision and mission of the institution as this will act as a guideline of the day-to-day processes that go on in school.

According to Oakland (2007), an approach to change based on process alignment and starting with the vision and mission statements, analyzing the critical success factors and moving on to core processes is the most effective way of engaging the staff in an enduring change. Many change programmers do not work because they begin with trying to change the knowledge, attitudes and amending beliefs of individuals. The stake holders should identify the sources or forces for change. These may come from the environment external to the school or within the school, or from individuals in the organization. School managers should be well versed with information on technique of initiation of change and at the same time maintaining the status quo. Kurt Lewin's force field theory as Koontz (1990) puts, suggests that an equilibrium is maintained by driving forces and restraining forces. In initiating change, the tendency is to increase the driving forces. This may indeed produce some movement but usually increase resistance by strengthening the restraining forces. Another approach that is usually more effective in reducing resistance is where those who are to participate in the change process are involved. Orora (1997) observes that one of the most distinctive features of educational innovations is the rate at which they fail .If proposed, they often are not adopted ,if adopted ,they frequently are not fully implemented ,and if implemented they rarely last. The school management therefore needs to involve all the stakeholders in the process of implementing the policy of TFSE by educating and communicating to them. They should highlight the problems that initially existed so that they may see the need for introducing changes .The change itself can

occur through assimilation, exposure to new concepts or development of a different lperspective (Koontz: 1990).

If the change is incongruent with the attitudes and behavior of others in the organization, chances are that a person will revert back to the old behavior. Reinforcement of new behavior is essential for the change to be successful (Koontz: 1990). Orora (1997:109) states that change is always resisted as it always threatens culture. He goes ahead to state that change moves people form strong attachments to heroes, legends, the rituals of daily life, the hoopla of extravaganza and ceremonies, and all the symbols and settings of the workplace. Change stripes all these relationships and leaves employees confused, insecure, and often angry.

When TFSE was declared in 2008, there was some resistance to it. Management actions that facilitate change can easily be misunderstood because the procedure and the processes already in existence appear to be perfectly good. The people are usually driven by fear of unknown and uncertainty of the effects of change hence some want to cling to that which they know best. Hannagan (2002) confirms that, characteristics arise from a natural reaction to deny that change is necessary to resist any change whatsoever its merits and if necessary avoid changes when they are introduced. Stoner and Freeman, (1998) outline the sources of resistance to change as; uncertainty about the cause and effects of change, unwillingness to give up existing benefits and, awareness of weaknesses in the change proposed. Stake holders have to determine the actual causes of resistance to change and remain flexible enough in their approach to overcome them in an appropriate manner. There is a considerable degree of interaction between interdependent elements in any organization and this has to be recognized. According to Koontz (1990), the structure of the organization, the technology which is applied and the people working in it are highly interdependent and all the three have to be involved in the change process. The task of managers is to direct energy away from feeling of powerlessness and looking backwards and towards seeing the opportunities for the future.

The change agent's role in an institution is to ensure that the proposed change is accepted. Orora (1997) states that, a change agent is a person who attempts to influence proposed change and its

adoption decision in a direction which beneficiaries have indicated desirable. The challenge of the head teacher is to help take the school through the process of change by interpreting the educational policies to the parents and obtaining, directing and utilizing the resources available towards its successful implementation. People move from familiar to the unknown and often experience a feeling of loss when they struggle to accept a new direction. Change in management style or attitude and working practices may be seen as a violation of people's self-image or an inadequacy. It is difficult to introduce change without criticizing the previous style or methods. The management of change therefore is the most important management skill because it can be seen as a constant process of setting up working methods to meet these circumstances.

Implementation consists of the process of putting into practice an idea, program, or set of activities and structures new to the people attempting or expecting to change. Managers/Administrators have an obligation to assess accurately the nature of and need for change. They must lay the ground work for implementation of change by examining and dealing with the possible sources of resistance. The manner in which change is implemented is as important for success as the actual change itself. Koortz (1990) observes that implementation includes shared understanding among participants concerning the implied presuppositions, values and assumptions which underlie a program, for if participants understand these, then they have a basis for rejecting, accepting or modifying a program in terms of their own society. Implementation is critical in educational change because it is the means through which desired objectives are accomplished (Koortz, 1990). "Free Secondary Education" during the 2007 general election campaigns became a familiar phrase but like many such phrases, it's outward simplicity conceals great complexity creating possible implementation challenges to head teachers and teachers that need to be investigated.

2.7 Education Financing in Kenya

According to Ministry of Education (2008), Education financing is any aspect of raising and spending revenue for educational purposes. Having accepted the rationality of cost-sharing, the Kenyan Ministry of Education, Science and Technology (MOES&T) bursary scheme was introduced as one of the safety-nets to cushion the poor and the vulnerable groups against the

consequent adverse effects. The bursary scheme, however, remains inefficient and ineffective. Other characteristics that contribute to bottlenecks in its implementation at the secondary school education level include limited access and participation due to poor quality of service, bad governance and management weaknesses. It is, therefore, arguable that against the background of more than half of Kenya's population living below the poverty line, and the rising cost of education, the majority of households, especially among the poor and vulnerable groups, are unable to invest in the development of quality secondary education. A study of secondary education reveals that the patterns and trends of education financing in Kenya incorporated a partnership between the state, households, and communities long before the introduction of the cost-sharing policy (Ayako, et al 2006).

The financing of secondary education has, however, become problematic, as parents have to shoulder an increasingly large proportion of the cost. The cost-sharing strategy has had a negative impact on the poor and vulnerable households. The latter either do not enroll their children in secondary schools, or fail to sustain progression and completion of those enrolled due to inability to meet cost requirements. This results in inadequate provision of learning facilities to the enrolled, poor quality education, and high dropout rates. According to Ayako et al (2006), there are challenges in determining who should finance what in the cost-sharing scheme, how to counter the imbalance in allocations between personnel and non personnel salaries, poor management of resources and lack of accountability, and effectively handle centralized budgeting and management systems and the weaknesses in the harmonization of policy, planning and budgeting.

A study conducted by Chabari (2011) on free secondary education in public secondary schools in Kangundo District in Kenya established that more students were able to attend school as a result of free secondary education though this stressed the available resources in schools. The study recommended the need for employment of more teachers to cater for the increasing student population and also to provide more funds.

Another study by Gatheru (2008) on challenges related to the implementation of FPE in Narok District established that due to the rising number of pupils enrolling in schools, teachers were

sometimes overwhelmed and not able to give individualized attention to pupils. Teachers could not mark pupils' assignments and this contributed to a decline in academic performance.

2.8 Institutional factors Influencing Implementation of TFSE

The goal of this study was to find out the influence of selected institutional factors on implementation of TFSE in Wareng District. The institutional factors could be related to facilities, instructional materials, staffing and head teachers' administrative skills as presented below.

2.8.1 School Facilities

According to Ngware (1997), in most developing countries such as Kenya, funding for education suffers from cost and dependency on central government revenues. In Kenya the number of schools is growing more slowly than that of pupils. As a result implementation of UPE is faced with shortage of class rooms, space and many facilities as books (Eshiwani, 1993). Classrooms are instrumental to quality of education and pupil's performance, in Kenya however only a small percentage of the education budget is allocated to this important input (Abagi, 1992). The EFA report (1992) also revealed that most schools have inadequate laboratory equipment. The absence of these facilities has had adverse effect on learning. In the year 2008, a new policy of TFSE was implemented by the government of Kenya. Given the growing number of the standard eight graduates, the new policy required additional classrooms and learning facilities in order to be implemented properly.

The input-output studies based on cognitive achievements of students provide little evidence that school resources have any regular important effect on results. Some studies have shown such factors to be apparently effective, while others have shown the opposite and the total outcome of these studies throws doubt on the importance of school facilities in the learning process (Ayot and Briggs, 1992). That notwithstanding, many parents associate the poor students' achievement in public schools to the lack of adequate learning facilities and shortage of teachers too. Lewin (2008) agrees that physical facilities have a lot to do with moral education; that it is a fact that attractive environments lift the human spirit. That, it would be easier for a teacher in a neat, well-

built school with adequate facilities, well trimmed grass, flowers and trees to encourage aesthetic aspects than a teacher in a poor and ugly environment.

Lewin (2008) says that expansion of secondary education requires the purchase of furniture, equipment, and learning materials; and the provision of supporting infrastructure. The basic characteristic of equipment in this part of the world is that they are perennially substandard. Their durability and versatility are questionable. It is not any wonder then that with soaring enrolments, such facilities can hardly last a term. Worse, educational mangers are ill at will to incur expenditure twice a year over the same facility. The upshot is that enrolment, progression and completion rates in secondary schools are bound to decline drastically if facilities and equipment are shoddily looked at. Glewwe and Kremer (2005) found that the construction and development or expansion of schools have been a big problem or rather challenge to the government, as it requires a lot of funds. Glewwe & Kremer (2005) find no evidence that provision of official Kenyan government textbooks increased scores for the typical student. However, they do find evidence that textbooks led to higher test scores for the subset of students who scored well on a pre-test.

Laboratories are 'discovery centers' and any young person's desire is to discover why things exist the way they do. The most esteemed laboratory is the computer laboratory. MOEST (2005) found that the idea of using computers in schools seems particularly promising in areas where both the number of qualified teachers and the quality of employed teachers is notoriously poor. This is practically the situation in Kenya. MOEST (2005) agrees that Information and Communication Technology (ICT) has a direct role to play in education and if appropriately used, it can bring many benefits to the classroom as well as education and training processes in general. With the enthusiasm for ICT, many secondary schools receive an influx of students with the thirst for computer knowledge. With the influx, it is expected that schools beef up the available stock in order to make the whole learning process a success. Crowding is the norm and with crowding, young students are likely to encounter plenty of accidents in the laboratories, ranging from chemical burns to suffocating fumes and breakage of glassware such as burettes. It is characteristic of learners once aware that they are many, against the limited space in the

laboratory, to scamper and hustle into the laboratory with abandon. The results are catastrophic. The school administration is also at crossroads on how to determine the cost of laboratory equipment.

Ministry of Education (2007) says that it is difficult to determine unit cost of laboratory equipment and chemicals. Individual reading done in the library is quite beneficial to learners. It is here that learners get to update class work with individual research and reading. However, the experience is not smooth. Libraries are poorly stocked and the existing books are rather obsolete. This problem is compounded by the fact that libraries are makeshift rooms recently converted from a derelict building to convince all that there exists one. In well established schools, libraries are well-built, modern, conducive but lacking in materials especially books and computers for research. With the influx of learners therefore these problems have trebled. Libraries are not only congested but are also rendered stuffy and noisy thus distorting the whole mood that was meant to exist for research in the first place.

It is noted that congestion is replicated when it comes to the busy sporting, drama and music festivals. It is known that teams in any busy school can be between 60 and 100 participants depending on the activity. Music festivals account for the highest number owing to the mass choirs that schools prefer presenting since they seem easy to prepare. This is a challenge not only to the administration but also to the learners themselves since their safety on the road is at risk. In the same light, sports facilities across all levels of education are in a state of disrepair due to the current influx of learners.

Glewwe *et al* (2005) correctly conclude that owing to introduction of TFSE, there is congestion on school facilities and buildings as space per learner is not enough. The resulting discomfort is obviously not a welcome scene to many students and teachers. Yet, as a nation we have to increase the Net Enrolment Ratio (NER), improve transition rates from primary to secondary level and above all achieve the key educational MDGs and EFA goals. Secondly, there is the adverse effect on the air quality, illumination and aesthetics of the school facilities and buildings. Thirdly, it has been concluded that the likelihood of many school buildings and facilities

undergoing unplanned renovations and extensions to accommodate the influx is very high. Unplanned renovations may end up being expensive, unsightly or a health and safety hazard altogether.

2.8.2 Instructional Materials

Instructional resources are a means of attaining specific instructional functions. However, once materials have been selected, careful preparation comes first by the user and other subsequent preparation. There are several categories of resources available to a teacher that goes beyond a class textbook. They include; textbook support materials or other suggested textbooks from other publishers that can also be good resources. The school may purchase additional supplementary, charts, computer software, and videos. Government-approved curriculum guides include subject-specific, grade-specific course goals and a fairly detailed outline of curricular content. They are recommended instructional resources e.g. computer software and videotapes.

Workbooks are used for student follow-up activities. Students can work on different exercises or use different workbooks for the teacher to check (Achoka, 2007).

Visual Media or projected visuals include slides, overhead transparencies, and computer-generated PowerPoint or other presentations that can be projected onto a screen, whiteboard, wall or other plain surfaces. Some of the items listed as non-projected can also be projected; graphic materials, still pictures, maps, DVDs and videocassettes typically contain visual presentations, as well as aural ones. Non-projected visuals that might be available in a classroom or in the library/media resource center include; chalkboards, multipurpose boards such as white boards, bulletin or display boards, graphic materials drawings, charts, graphs, posters, and cartoons, still pictures photographs, postcards, illustrations from periodicals and books, flip charts commercially prepared or blank, maps and globes, models, and regalia (Achoka, 2007).

Specialized Equipment ranging from several types of calculators to specialized machinery and equipment are essential for both teaching and learning. Chalkboard; most students find it difficult to think while they are copying material. Students need time to copy what is on the chalkboard. The chalkboard is best used for essential textual information. Video Instructional technology can

be an effective means of enhancing instruction. They can provide a bridge between the abstract world of the textbook and everyday reality. They can be stopped temporarily to discuss important moments as they occur. Videotaping students' in-class presentations offers students the opportunity of seeing themselves in action (Adewoye, 1987).

A study by Buba (2003) on social studies teaching materials in schools revealed that there was scarcity of both printed and audio-visual materials in most of the instructional neither printed nor audio-visual materials were available in sufficient quantity or quality. The few institutions which indicated the availability of these materials showed also that materials were rather in poor condition. For effective implementation of TFSE, these resources need to be increased at a similar rate at which students are increasing. Overcrowding in classes and laboratories are also hazardous to the safety of the students. If students are uncomfortable as a result of congestion and lack of the basic resources for learning, it is possible that they can get demoralized and decide to drop out of the school. If this happens, then the implementations of TFSE will miss the mark of meeting its goals of increased enrolment, transition and completion.

2.8.3 Teacher Staffing

The teacher resource is an important input in achieving the objectives of the education sector. Equitable distribution of teachers has remained one of the challenges in teacher management. The number of teachers has remained constant over the years despite growth in enrolment and the number of educational institutions resulting to inequality in distribution of teachers and impacting negatively on quality and access of education. Recruitment of teachers has in the recent past mainly been done only to replace those who exit through natural attrition.

According to Eshiwani (1993), it is clear that the number of untrained teachers more than trebled between 1970 and 1976. By 1980 they constituted almost a third of the teaching force. This must have contributed to the low quality of education because unqualified teachers are not fully aware of the basic theories of learning and teaching methodology that is a very essential tool for the teacher. Republic of Kenya (1964), the Ominde commission was also concerned about the large number of teachers without training and the low teacher morale due to poor conditions of service

and low salaries. The professional qualification of teachers has also continued to influence the provision of UPE. According to Thais (1994) the poor quality of teachers provides teaching which is hardly sufficient to make pupils thoroughly literate. A meeting held by 300 head teachers and PTA chiefs of city primary schools revealed that most schools were already crowded and shortage of teachers was the major problem.

There are also frequent cases of teachers mistreating students. Raju (1973) states that some teachers make children work for them, for instance fetching water, cooking digging and sometimes girls are abused. As a result of fear, ill treatment and corporal punishment a number of children drop out of school. The children with special educational needs include the physically challenged and the specially gifted. The EFA report 1992 cited out children with special education needs enrolled in regular schools cannot be catered for because most of the teachers do not have any basic training aids such as Braille machines, white cases, hearing aids, ear moulds and play materials. It is therefore clear that there is discrimination in education. According to Bogonko (1992), the general negative attitude of the population towards the education of disabled children is also noticeable.

Onyango (2001) emphasizes that human resource is the most important resource in a school organization. He adds that teachers comprise the most important staff in the school. However, the contribution made by other staff members such as secretaries, bursars, accounts clerks, matron, nurses, messengers and watchmen is also important. Odhiambo (2005) observes that the most important purpose of a school is to provide children with equal and enhanced opportunities for learning, and the most important resource a school has for achieving that purpose is the knowledge, skills and dedication of the teachers. Teachers therefore need to be well managed. The head teacher's responsibility in human resource management involves: Leading and motivating staff, delegating responsibility effectively, and conflict management. With increased number of students as a result of TFSE, teacher- student ratio is likely to be high, leading to increased workload for teachers. This is likely to pose a challenge to head teachers, who are expected to ensure that the quality of education is not compromised.

According to UNESCO (2010), the teacher resource is an important input in achieving the objectives of the Education Sector. Equitable distribution of teachers has remained one of the challenges in teacher management. The number of teachers has remained constant over the years despite growth in enrolments and the number of educational institutions resulting to inequality in distribution of teachers and impacting negatively on quality and access of education. Recruitment of teachers has in the recent past mainly been done only to replace those who exit through natural attrition.

The number of teachers employed by TSC had remained constant over the years except the 4,000 recruited during 2007/08 to bring a total of 239,000. Majority of these teachers are primary and secondary teachers constituting 96 percent of all teachers. The remaining 4 percent of teachers was distributed among special and technical education institutions, World Bank (2010). In order to cope with the increased enrolment and to assist in the implementation of the findings of the staffing norms study, the Ministry of Education through TSC has undertaken several measures. Particular emphasis has been on:

- Decentralized employment of teachers so that they are employed at the school level for secondary and tertiary institutions.
- Restricted recruitment of new staff to the replacement of those who leave through natural attrition only.

There is however, great pressure to adjust the current ceiling on teacher numbers to accommodate the current shortage estimated at 45,000 at primary schools and 9,000 at the secondary schools level.

2.8.4 Head teachers' Administrative Skills

Currently, in the secondary school education in Kenya, the role of the school administrators including head teachers and teachers in their respective posts is t a so propel the institutional goals to success and satisfy the stakeholders. Republic of Kenya, (1998), notes that this role is heavily laden considering the fact that it should be achieved with available resources however little they are. For school head teachers, besides initial administrative functions of supervision,

human resource management and planning, other emerging roles necessitated by contemporary situations include; management of businesses for the school and implementation of government policies, (Achoka, 2007). The following literature review explores some of the skills and personal characteristics that are attributed to institutional effectiveness.

Supervision has been defined as the act of overseeing the work or tasks of others, regulation and controlling behavior by rules or restrictions. Kadushin (1992) classifies supervision as administrative, educational and supportive. In administrative supervision the primary problem is concerned with the correct, effective and appropriate implementation of agency policies and procedures. The primary goal is to ensure adherence to policy and procedure. The supervisor in this case has been given authority by the agency to oversee the work of the supervisee. In educational supervision the primary problem for Kadushin (1992) is worker ignorance and/or ineptitude regarding the knowledge, attitude and skills required to do the job. The primary goal is to dispel ignorance and upgrade skill. The classic process involved with this task is to encourage reflection on, and exploration of the work. Supervisees may be helped to understand the client better, become more aware of their own reactions and responses to the client, understand the dynamics of how they and their client are interacting, look at how they intervened and the consequences of their interventions and explore other ways of working with this and other similar client situations (Hawkins and Shohet 1989).

In supportive supervision the primary problem is worker morale and job satisfaction (Kadushin, 1992). Workers are seen as facing a variety of job-related stresses which, unless they have help to deal with them, could seriously affect their work and lead to a less than satisfactory service to clients. For the worker there is ultimately the problem of burnout. He further notes that the other two forms of supervision focus on instrumental needs, whereas supportive supervision is concerned with expressive needs. In this way head teachers who are school administrators are expected to develop relationships and environments that enable teachers to work together and respond to change brought about by TFSE. According to (Ducker, 1988), such 'joint performance' involves having common goals, common values, the right structures, and continuing training and development.

Human resource management is the management of an organization's workforce, or human resources. It is responsible for the attraction, selection, training, assessment, and rewarding of employees, while also overseeing organizational leadership and culture, and ensuring compliance with employment and labour laws. In an effective organization, work is planned out in advance. Human Resource Planning means setting performance expectations and goals for groups and individuals to channel their efforts towards achieving organizational objectives. Getting employees involved in the planning process will help them understand the goals of the organization, what needs to be done, why it needs to be done, and how well it should be done. The regulatory requirements for planning employees' performance include establishing the elements and standards of their performance appraisal plans. Performance elements and standards should be measurable, understandable, verifiable, equitable, and achievable. Through critical elements, employees are held accountable as individuals for work assignments or responsibilities. Employee performance plans should be flexible so that they can be adjusted for changing program objectives and work requirements. When used effectively, these plans can be beneficial working documents that are discussed often, and not merely paperwork that is filed in a drawer and seen only when ratings of record are required (JLI, 2005).

Staff recruitment refers to the process of attracting and choosing candidates for employment. The personnel department of a larger organization will often have detailed recruitment and selection policies that need to be followed by those responsible for hiring new employees. It is the Governing Body's responsibility to recruit and retain their staff. Before a post is advertised School Governors should ensure that they need the post and that it is affordable within the school's budget. If the post is agreed then there must be a clear job description and person specification agreed which lists all the duties and responsibilities of the post. The person specification will list those skills, experiences, qualifications and characteristics which are essential to undertake the post. This then forms the criteria against which you will shortlist and appoint. Once you decide to proceed with advertising a post there will need to be an application pack which includes the job description and person specification along with information about the school which may include the most recent information specifically relevant to the post being

advertised. It should also include at least a summary of the school's Child Protection Policy (Ministry of Education, 1999).

At the interview, needs to ensure they have clear questions to ask each candidate about the role they are applying for as well as any specific questions regarding an applicant's suitability as a result of issues on their application form, references or criminal convictions form. The panel should ensure that they share information about the school and the role as well as soliciting information from the candidate. It is also the responsibility of the interview panel to view and take copies of any qualification certificates, verification of identity and other information identified in the Safer Recruitment Good Practice Guide. The successful individual should be informed that the Governing Body wishes to make a conditional offer of employment to them, subject to the receipt of satisfactory employment checks. Teacher appraisal includes; assigning student performance measures to teachers' courses, reviewing and approving goals teachers have set for their courses with progress measures and analyzing a teachers' performance level for courses with progress measures, (Ministry of Education, 1999). The recruitment of a new member of staff is an extremely important responsibility and should be given the necessary time and effort to ensure it is done correctly. It is essential for your school that you appoint the best person for the job. However, you also have a responsibility to carry out employment checks to ensure the person is suitable to work with children and does not present any risk to the school or its pupils (Jonathan & Barbara, 2010).

Performance management is the systematic process by which an agency involves its employees, as individuals and members of a group, in improving organizational effectiveness in the accomplishment of agency mission and goals. Employee performance management includes: planning work and setting expectations, continually monitoring performance, developing the capacity to perform, periodically rating performance in a summary fashion, and rewarding good performance (Armstrong, & Baron, (2000).

Appraisal is a thorough yet supportive and developmental process designed to ensure all teachers have the skills and support they need to carry out their role effectively. It helps to ensure teachers

are able to improve their professional practice and to develop as teachers. All schools will need to review their current arrangement and make necessary changes to ensure they meet the new regulations. Appraisal applies to all teachers where they are employed for one term or more unless they are undergoing induction or the subject of capability procedures. Capability only applies to teachers about whose performance there are serious concerns that the appraisal process has been unable to address (Armstrong & Baron, 2000).

The governing body has a duty to ensure the performance of teachers at its school is managed and reviewed in accordance with the school policy and the regulations. The governing body should also review the policy annually. The head teacher is responsible for the appraisal of other teachers but may delegate this duty to other appropriate teachers, usually those with management responsibilities. They are also responsible for producing an annual report to governors about the operation of the appraisal policy, the effectiveness of the procedures and the teachers' training and development needs. Schools will need to ensure that their current protocol meets the requirements of the new appraisal Regulations and where appropriate any references and the new teacher standards (Armstrong & Baron, 2000).

In an effective organization, assignments and projects are monitored continually. Monitoring well means consistently measuring performance and providing ongoing feedback to employees and work groups on their progress towards reaching their goals. Regulatory requirements for monitoring performance include conducting progress reviews with employees where their performance is compared against their elements and standards. Ongoing monitoring provides the opportunity to check how well employees are meeting predetermined standards and to make changes to unrealistic or problematic standards. And by monitoring continually, unacceptable performance can be identified at any time during the appraisal period and assistance provided to address such performance rather than wait until the end of the period when summary rating levels are assigned (Wayne, 2007).

Motivation has been defined as the level of effect an individual is willing to expend toward the achievement of a certain goal (Daresh & Plakyo, 1995). In attempting to motivate people we

must look for answers to the following three questions which have been faced by managers, supervisors and administrators in many organizations. What makes people to work hard while other people hardly work at all? How can educational supervisors positively influence the performance of people who work for them? Why do some people leave organizations, show up late for work, refuse to be committed, or generally tune out of their job responsibilities, while other people tend to go to work early and tend to engage in all types of behaviors indicative of a strong commitment to their labour and "go the extra mile".(Daresh & Plakyo, 1995).

The minister of education has the mandate to manage schools under the Education Act (CAP 211) and the Teachers service Commission Act (CAP 212). The minister delegates mandate at the school level to the boards and principals. The successful implementation of any programme in the school therefore depends on their managerial capacity. However, this capacity may be inadequate in them. Chepkonga (2006) found out that the principals needed training in very key management areas such as accountancy (80.9%), preparing budgets (93%) and general management (57%). While Kilonzo (2007) found out that 100% of the primary head teachers needed training in management. On their part, Kuria and Onyango (2006) say that the boards are not giving the necessary leadership that would promote quality management in schools.

Archimedes (1996) found formative leadership skills to be necessary for school effectiveness. According to the researchers, transformative skill is a global skill comprising three skills: the principles being able to identify and sustain the a vision of the school which is interpreted as conceptual skills by other researchers; intellectual stimulation of other members of the school this can only be done by a person who knows the educational processes of a school, using a combination of the technical and interpersonal skills; and individual consideration for others; the interpersonal or human skill. The use of these skills was discovered to enhance school effectiveness by increasing teacher commitment and motivating them to achieve school goals.

Also in South California, Kochamba and Murray (2008), in their study on critical leadership skills needed by principals for the achievement of school effectiveness found technical, human

relations conceptual and transformative skills critical for the achievement of school effectiveness. They also found a link between strategic thinking skills (a component of conceptual skills) and effectiveness of schools.

Okumbe (2001), found a transformational, managerial and behaviour management skills to be essential ingredients Principals need for the achievement of effective schools. In a related study on effective schools in developing countries, Kochamba & Murray (2008), discovered that the principal who had interpersonal skill; viewed his primary role as that of providing support for his teachers so they could put in their best to teaching, achieved school effectiveness. The study was hinged on the path goal theory of leadership by House (1971) which postulates that for leaders to be effective, they must have the ability to clarify the path to successful achievement of goals for followers; they must also, be able to remove obstacles on the path to achievement of organizational goals for the followers. To clarify the path, the principal must know the processes involved and have a vision on how to achieve the goals of the school. To be able to remove obstacles to achievements of the school goals from the path of the followers, the principal must have the necessary skills to know when there are obstacles, what to do and how to do it.

According to Okumbe (2001) education management has no choice as to whether to train employees or not. He observed that all employees regardless of their previous training, education and experiences must be given further training and development. It was also clear that the school management tries to offer better working conditions for the teachers. Professional reward systems for teachers, who manage to teach with least materials, are available and that mentoring and support mechanism of teachers have been initiated by school administration. However it was found that weak management system was and decision making is causing the school education wastage; Teachers' performance plans are not flexible.

The responses from teachers indicate that head teachers fair well on their administrative skills, this indicates that the principals have the requisite management skills in the study area since the

management capacity of the principals is very important in the implementation of free secondary education. Chepkonga (2006) said that to manage secondary schools, the head teachers (principals) require strong management knowledge and support services for their success in the running of the schools.

The results are inconsistent with the findings by Osei (2006) in his study on factors influencing the implementation of free secondary education in Kieni West District, school managers lack adequate capacity to manage affairs of the institutions. The study attributed to the fact that only a small percentage of school managers and other personnel have attended courses in financial management. They are also contrary with the findings by (Chepkonga, 2006) found out that the principals needed training in key management areas such as accountancy (80.9%), preparing budgets (93%) and general management(57%). The difference can be attributed to the management training organized by KESI for principals and deputies in the study area. The researcher further carried out pearsons' correlation analysis to find out the relationship between teachers perceived institutional factors and implementation of TFSE. The results indicated a significant positive relationship on school facilities and instructional materials at (p=0.01) the results indicated that the school facilities and instructional materials and staffing are significant. This implies that teachers perceive instructional materials and school facilities as the major factors that influence implementation of TFSE. These findings were in line with (Osei, 2006) who noted that overcrowding, together with other challenges such as lack of school facilities; basic teaching materials and an absence of sufficient equipment and inadequate infrastructure negatively affect the quality of education.

The government together with the school management should devise ways of improving the physical infrastructure and instructional materials, since the current state in the schools in the study area threatens the gains made so far with introduction of TFSE. Osei (2006) noted that overcrowding, together with other challenges such as lack of school facilities (lack of basic teaching materials and an absence of sufficient equipment for laboratories) and inadequate infrastructure (such as little lighting, drab walls) negatively affect the quality of education.

2.9 Theoretical Framework

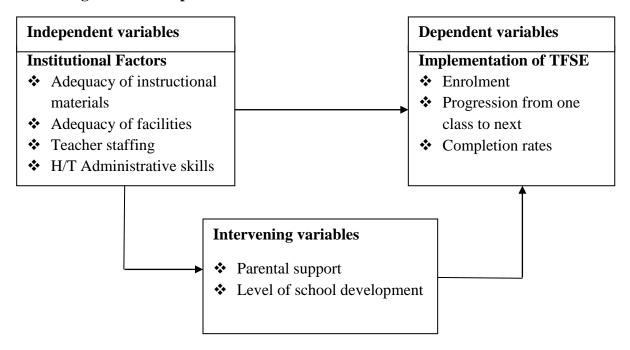
The study was anchored on the theory of Force Fields Analysis of Change that was developed by Kurt, (1947). This theory deals with the process and strategies for planning and implementing change. It looks at the variables such as management, organization and controlling a given situation in an organization. It is also useful in analyzing the various change strategies that can be used in a particular situation involved in determining effectiveness, (Thomas, 1985). Force field analysis can be used at any level such as personal, project, organizational and network to visualize the forces that may be in favour and against change initiative. The force field analysis is a method to; investigate the balance of power involved in an issue, identify the most important player (stakeholder) and forge the groups for a campaign on the issue, identify the opponents and to identify how to influence each target group. In order to conduct a force field analysis theory, one has to describe the current situation, identify the described situation and identify where the current situation can go if no action is taken and list all the forces resisting change towards desired direction. It also requires allocation of scores to each scale for instance 1 equals to extremely strange and to chart the forces by listing the left and the restoring forces on the right. Next is determination of whether changes can occur and to discuss how the change can be effected by decreasing the strength of restraining forces or driving forces. Lastly the researcher has to keep in mind that increasing the driving forces or decreasing the restraining forces may increase or decrease other forces or even create new ones, (Thomas, 1985).

According to this study, TFSE is a policy change that needs to be implemented to justify its purpose. It is important that institutional factors be put in place in order to effectively implement this program in Wareng Sub-County. The study therefore analyzed the force influencing the implementation of TFSE especially in facilities, teaching and learning resources, staffing and head teachers' administrative skills. Force Field's analysis of change enhanced the analysis of the above institutional factors since they directly influence enrolment, progressive retention and completion rate in public secondary schools in Wareng Sub-County.

2.10 Conceptual Framework

Figure 1 presents the conceptual framework of the study based on the theory of Force Field's analysis of change.

Figure 1: Conceptual Framework



Source: (Researcher, 2015)

Figure 1 shows the relationship between the dependent and independent variables of the study. As shown in the figure, the implementation of TFSE, which is the dependent variable, could be affected by institutional factors. If school facilities such as administration office, staffroom, classrooms, library, laboratories, workshops, and play grounds are not adequate, then enrolment, progression and completion rates are lowered and this may lower implementation of TFSE. Adequacy of instructional materials such as textbooks and other teaching and learning resources could also affect implementation of TFSE. Teacher staffing and head teachers' administrative skills could influence school enrolment, progression and completion rates because they are expected to come up with effective strategies for dealing with the challenges experienced. The

effects of these variables on the implementation of TFSE could also be influenced by parental support and level of school development which are the intervening variables of the study. Through sampling only district schools were selected because they have a higher degree of homogeneity in terms of facilities, instructional materials and staffing, while parental support is minimal.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design that was adopted as well as the location, target population, sample size and sampling procedures. It also describes instrumentation, validity and reliability of the instruments, data collection and data analysis.

3.2 Research Design

McMillan and Schumacher (2002), define a research design as a plan or structure or investigation used to answer research questions. The descriptive survey research design was adopted in this study. Descriptive survey research designs are used to allow researchers to gather information, summarize, present and interpret for the purpose of clarification Orodho (2002). Mugenda and Mugenda (1999) on the other hand give the purpose of descriptive research as determining and reporting the way things are. Borg and Gall (1989) noted that descriptive survey research is intended to produce statistical information about aspects of education that interest policy makers and educators. The study fitted within the provisions of descriptive survey research design because the researcher collected data and reported the way things were without manipulating any variables.

3.3 Location of the Study

The research was carried out in public secondary schools in Wareng Sub-County, Uasin Gishu County. Wareng Sub-County borders Eldoret East Sub-County to the East, Eldoret West Sub-County to the North, Nandi County to the West and Nakuru County to the South as shown on the map showing Wareng Sub-County (Appendix D). The Sub-County has two administrative divisions namely Kapseret and Kesses. Singleton (1993) advises that the ideal setting for any study should be easily accessible to the researcher and should be that which permits instant rapport with the informants. Wareng Sub-County was chosen because it was within reach by the researcher. Furthermore, reports from the Sub-County Education Office, Wareng for the period before introduction of TFSE indicated that secondary schools were facing challenges related to understaffing, inadequate physical facilities, poverty and congestion in classrooms. (Wareng

Sub-County Education Office, 2006). It would be important to gain empirical data on the influence of institutional factors on secondary education since the introduction of TFSE in 2008.

3.4 Target Population of the Study

Target population is defined as all the members of a real or hypothetical set of people, events or objects to which a researcher wishes to generalize the results of the research study (Borg & Gall, 1989). The target population for this study comprised 486, comprising of 34 head teachers and 452 teachers from the 34 Sub-County secondary schools in the two divisions of Wareng Sub-County. Kesses division has 19 while Kapseret division has 15 Sub-County secondary schools.

3.5 Sampling Procedure and Sample Size

Gay (2003) recommends that when the target population is small (less than 1000 members), a minimum sample of 30% is adequate for educational research and 10% for a population of over 1000. Using proportionate sampling, the study involved a sample of 14(41%) head teachers and 181(40%) of teachers. In selecting head teachers, proportionate random sampling was used in the two divisions of Wareng Sub-County as shown in table 1 below. Simple random sampling was used to select teachers from any of the schools whose head teachers participated in the study.

Table1: Breakdown of Sample Size by Division.

Division	Total No.	Number	Total No.	Number
	of H/Ts	selected	of Trs	selected
Kesses	19	8	250	101
Kapseret	15	6	202	80
Total	34	14	452	181

Source: Wareng District Education Office.

3.6 Instrumentation

Data was collected by use of two five point Likert type of questionnaires. The questionnaires were used for data collection because they offer considerable advantages in the administration. Gay (2003) maintains that questionnaires give respondents freedom to express their views or

opinion and also to make suggestions. It is also anonymous. Anonymity helps to produce more candid answers than is possible in an interview. A questionnaire also presents an even stimulus potentially to large numbers of people simultaneously and provides the investigation with an easy accumulation of data. The first questionnaire, Appendix B contained questions to be answered by the head teacher. Section I collected the background information of head teachers, section II collected questions related to school facilities, teacher staffing and head teacher's administrative skills while section III collected information on influence of implementation of TFSE on enrolment, progression and completion. The second questionnaire, Appendix B was used to collect data from teachers where section I collected the background information of teachers while section II collected information related to school facilities, teaching and learning resources and head teachers' administrative skills.

3.7.1 Validity

Validity refers to the correctness of results and soundness of conclusions reached in the study (Kothari, 2011). According to Borg and Gall (1989) validity is the degree to which a test measures what it purports to measure. All assessments of validity are subjective opinions based on the judgment of the researcher (Wiersma, 1995). Usually experts in the topic covered by the instrument are asked to assess its content validity (Gay, 2003). According to Borg and Gall (1989), content validity of an instrument is improved through expert judgment. As such, the researcher sought assistance of the supervisors who helped improve content validity of the instruments.

3.7.2 Reliability of the Instruments

Reliability refers to the level of internal consistency or stability of a research instrument over time (Mugenda & Mugenda, 1999). Reliability of the instruments was determined after they were pilot-tested among six schools from Wareng Sub-County that did not take part in the study. Analysis for internal consistency was accomplished using Cronbach's alpha (Gay, 2003). Since in this study responses had a range of scores, Cronbach's alpha was used for analysis of internal consistency, which was established at 0.843 for head teachers' questionnaire and 0.816 for teachers' questionnaire. Answers from the respondents enabled the researcher to identify

problems in the instruments such as ambiguity and irrelevance. According to Fraenkel & Wallen (2000), a threshold of 0.7 and above is acceptable for this kind of study. If the reliability coefficient would have been less than 0.7, the items would have been checked again or improved upon.

3.8 Data Collection Procedures

The researcher obtained an approval letter from Graduate school to help obtain a research permit from the National Commission for Science, Technology and Innovation. The head teachers of schools sampled for the study were notified in writing. The researcher personally visited the sampled schools to administer questionnaires to the sampled respondents, that is head teachers and teachers. The questionnaires were self-administered, where both groups of respondents filled them by themselves concurrently. In some situations the researcher arranged to collect the completed questionnaires at a date agreed upon with respondents.

3.9 Data Analysis

After data collection, the responses to the questionnaires were coded and then data were entered into the computer for analysis. Data analysis involved descriptive statistics. The data were converted into frequencies and percentages. The analysis was done using the Statistical Package for Social Sciences (SPSS). The resulting data analysis from questionnaires was summarized and depicted in the form of frequency tables, bar graphs and pie charts. Table 3 gives a summary of details of the variables and the statistical tools of analysis that were used.

Table 2: Summary of Data Analysis and Statistical Tests

Research Questions	Independent Variables	Dependent Variable	Method of analysis
What are teachers' perceptions on the influence of school facilities on implementation of TFSE in Wareng Sub-County?	School facilities	Implementation of TFSE -Enrolment -Progression -Completion rates	Frequencies and percentages.
What are teachers' perceptions on the influence of instructional materials on implementation of TFSE in Wareng Sub-County?	Instructional materials	Implementation of TFSE -Enrolment -Progression -Completion rates	Frequencies and percentages.
What are teachers' perceptions on the influence of teacher staffing on implementation of TFSE in Wareng Sub-County?	Teacher staffing	Implementation of TFSE -Enrolment -Progression -Completion rates	Frequencies and percentages.
What are teachers' perceptions on the influence of head teachers' administrative skills on implementation of TFSE in Wareng Sub-County?	Head teachers' administrative skills.	Implementation of TFSE -Enrolment -Progression -Completion rates	Frequencies and percentages.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter covers analysis of data and the findings of the study. The general objective of the study was to investigate teachers' perceptions on the influence of selected institutional factors on implementation of TFSE in Wareng Sub-County, Kenya. The first section of the chapter presents the demographic data of the respondents. Section two presents data on the institutional factors influencing implementation of TFSE in relation to physical facilities in public secondary schools in Wareng Sub-County. Section three of the chapter covers data on teachers' perceptions on the influence of instructional materials on implementation of TFSE in public secondary schools in Wareng Sub-County. Section four covers data on head teachers' perceptions on the influence of teacher staffing on implementation of TFSE in Wareng Sub-County. Section five contains data on head teachers' and teachers' perceptions on the influence of head teachers' administrative skills on implementation of TFSE in Wareng Sub-County.

4.2 Demographic Information

The study sought demographic data of the respondents including highest level of education, work experience, number of B.O.M teachers employed by schools population of teachers and their employer. The study was carried out in public secondary schools in Wareng Sub-County, Uasin Gishu County. The study was conducted among 14 head teachers and 181 teachers. The study sought to find out the age and education n levels of head teachers and teachers in the study. Table 3 shows the respondents' level of education.

4.2.1 Highest level of Education

Table 3 shows the educational level of head teachers was as follows; 2(14.3%) had PhD, 1(7.1%) had Masters in Education, 1(7.1%) had BA with PGDE, 10(71.4%) had bachelors degree. In the case of teachers, 34(18.9%) had Masters in Education, 11(6.1%) had BA or B.Sc with PGDE, 98(54.4%) had B.Ed, 30(16.7%) had Diploma in Education, and 7(3.9%) were form four.

Table 3: Highest Educational Level of Respondents

Education level	Head Teache	ers	Teachers		
	Frequency	%	Frequency	%	
ph.D	2	14.3	0	0	
M.Ed	1	7.1	34	18.9	
B.A or B.Sc with PGDE	1	7.1	11	6.1	
B.Ed	10	71.4	98	54.4	
Diploma	0	0	30	16.7	
Form 4	0	0	7	3.9	
Total	14	100.0	180	100.0	

Source: Field data(2014)

Figure 2: Highest Educational Level of Head Teachers.

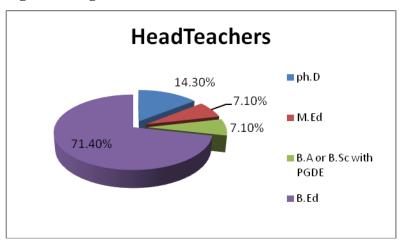
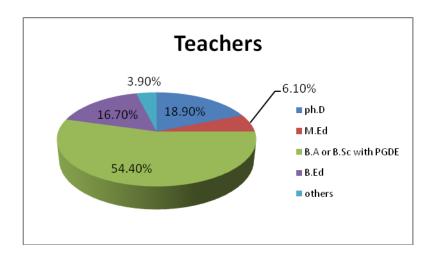


Figure 3: Highest Educational Level of Teachers.



Implementation of TFSE requires adequate skills especially for the administrators. School administrators who are head teachers and teachers need various skills in order to cope with the demands of their management and teaching tasks. Such skills can be attained through formal training, and it is encouraging to note that out of the 14 head teachers, two were PhD holders; one was an M.ED holder while eleven were B.ED holders. It is however worrying to note that there are a number of schools which due to lack of teachers, have to rely on form four leavers to teach despite lack of any training in education.

Robin (2003) notes that the skills needed for effective management can be grouped into three broad categories, namely technical skills, human skills and conceptual skills. Technical skills refer to the category of skills which enable the manager to use resources and scientific knowledge and to apply techniques in order to accomplish the objectives of the organization. Human skills refer to the ability to work well with other people and achieve results through them. Conceptual skills refer to the cognitive capacity to perceive the organization in its totality and the relationship between parts thereof. These skills manifest themselves in educational administrators being able to analyze and diagnose relatively complicated situations whilst at the same time being able to visualize the interrelationships of various units of an organization (Robin, 2003). Training of school administrators and teachers is essential in enabling them acquire these skills and thereby implement educational programs competently. The information is summarized in table 3.

4.2.2 Age Distribution of the Respondents

The age distribution of the head teachers were; 3(21.4%) aged 31-40 years, 5(35.7%) were 41-50 years, and 6(42.9%) were aged 51 years and above. For teachers, 77(42.8) were aged 20-30 years, 44(24.4%) were 31-40 years, 53(29.4%) 41-50 years, while 6(3.3%) were aged 51 years and above.

Table 4: Age of the Respondents

Age	Head teachers	Teachers		
	Frequency	%	Frequency	0/0
20-30	0	0.00	77	42.8
31-40	3	21.4	44	24.4
41-50	5	35.7	53	29.4
51 and above	6	42.9	6	3.3
Total	14	100.0	180	100.0

Source: Field data (2014)

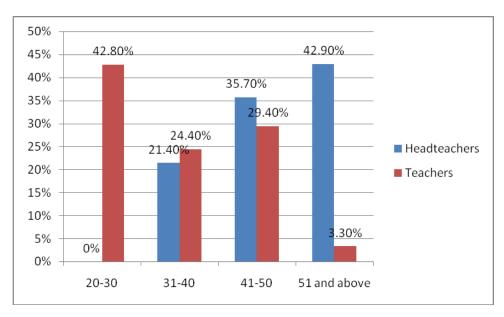


Figure 4: Age of Respondents

4.2.3 Work Experience

The head teachers and teachers were asked to indicate their work experience in the schools, to which they responded as shown in table 5. Table 5 shows that majority of the head teachers, 9(64.3%) had served for 5-9 years, while 5(35.7%) had served for 10 years and above. For teachers, 74(41.1%) had served for 0-4 years, 27(15%) 5-9 years, and 79(43.9%) had served for 10 years and above.

Table 5: Work Experience of the Respondents

Head tea	Head teachers		ners
Frequency	%	Frequency	%
0	0.0	74	41.1
9	64.3	27	15.0
5	35.7	79	43.9
14	100.0	180	100.0
	Frequency 0 9 5	Frequency % 0 0.0 9 64.3 5 35.7	Frequency % Frequency 0 0.0 74 9 64.3 27 5 35.7 79

Source: Field data (2014)

Based on these results, it can be concluded that majority of the respondents had worked for a long time, so they had adequate experience and were therefore expected to perform their duties efficiently and effectively, and were in a position to give useful insights into the challenges experienced in the implementation of tuition free secondary education.

4.2.4 The number of BOM teachers employed by schools

The schools met teachers' shortfall by employing BOM teachers, 3(21.4%) employed 4 teachers, 6(42.9%) employed 5 teachers, 3(21.4%) employed 7 teachers, 1(7.1%) employed 8 teachers while 1(7.1%) employed 21 BOM teachers. Out of the 45 teachers employed by the BOM, 7 were form four leavers who did not have any training in teaching.

Table 6: Number of BOM teachers

No.	of Schools	No. of BOM Teachers	%
	3	4	21.4
	6	5	42.9
	3	7	21.4
	1	8	7.1
	1	21	7.1
Total	. 14	45	100.0

Teachers were asked to indicate who their employers' were, to which they responded as shown in table 7. This implies that all the schools (100%) coped with teacher shortage by employing B.O.M teachers. Use of volunteer teachers is ineffective because they may not be fully committed as would those who are permanently employed, and will not fill the gap of shortage of teachers effectively.

4.3 Influence of School Facilities on Implementation of TFSE

The first research question sought to find out teachers' perceptions on the influence of school facilities on implementation of TFSE in Wareng Sub-County. To determine this, the head teachers and teachers were asked to rate the adequacy or inadequacy of school facilities, to which both head teachers and teachers responded as shown in tables 7 and 8 respectively. The responses were measured in a five point likert scale, the questions were rated as Very adequate, adequate, not sure, inadequate and very adequate.

Table 7: Head Teachers' ratings on adequacy of school facilities

Adequ	ıate	Inadequate	
Frequency	%	Frequency	%
4	35.5	10	71.4
5	35.7	9	64.3
9	64.3	5	35.7
4	28.6	10	71.4
3	21.4	11	78.6
5	35.7	9	64.3
3	21.4	11	78.6
4	28.6	10	71.4
3	21.4	10	71.4
4	28.5	8	57.1
	Frequency 4 5 9 4 3 5 3 4 3	4 35.5 5 35.7 9 64.3 4 28.6 3 21.4 5 35.7 3 21.4 4 28.6 3 21.4	Frequency % Frequency 4 35.5 10 5 35.7 9 9 64.3 5 4 28.6 10 3 21.4 11 5 35.7 9 3 21.4 11 4 28.6 10 3 21.4 10

The first objective of the study sought to establish teachers' perceptions on the influence of school facilities on implementation of TFSE. School head teachers were asked to respond to five likert scale questions. Table 7 shows that 35.5% of head teachers indicated that class rooms were adequate, while 71.4% indicated that they were inadequate. Laboratories were rated adequate by 35.7% head teachers and inadequate by 64.3% head teachers while laboratory equipment was rated adequate by 64.3% head teachers and inadequate by 35.7% head teachers. The staffroom was rated adequate by 50% head teachers and inadequate 50% head teachers. Toilets were rated

adequate by 21.4% head teachers and inadequate by 78.6% head teachers. Computer laboratory was rated by 35.7% head teachers and inadequate by 64.3% head teachers while computers were rated adequate 21.4% head teachers and inadequate by 78.6% head teachers. The library was rated adequate by 28.6% and inadequate by 71.4% head teachers while library books were rated adequate by 28.5% head teachers and inadequate by 64.3% of the head teachers. Workshops were rated adequate by 21.4% head teachers and inadequate by 61.4% head teachers while 28.5% of them rated school furniture as adequate and 51.1% rated furniture inadequate.

Table 8: Teachers' ratings on adequacy of school facilities

Facility	Adequate		Inadequate	
	Frequency	%	Frequency	%
Class reserve	<i>5</i> 1	20.2	120	71 1
Class rooms	51	28.3	128	71.1
Laboratories	83	46.2	91	50.5
Laboratory Equipment	60	33.3	108	60.1
Staffroom	72	40	106	58.9
Sanitary units (Toilets/Urinals)	85	47.2	91	51.6
Computer laboratory	80	44.5	96	54.5
Computers	73	40.5	100	55.7
Library	65	36.1	109	60.6
Workshop	19	10.6	138	77.1
School furniture	111	61.3	64	35.4

Table 8 shows that 28.3% of the teachers indicated that the classrooms were adequate, while 71.1% indicated that they were inadequate. 46.2% of the teachers indicated that laboratories were adequate and 50.5% indicated that laboratories were inadequate while 57.8% of the teachers indicated that laboratory equipment was adequate and 35.6% of the teachers indicated that laboratory equipment was inadequate. The staffroom was rated adequate by 40% of the teachers and 58.9% as inadequate. Sanitary units such as toilets and urinals were rated adequate by 47.2%

teachers and inadequate by 58.9% teachers. Computer laboratory was rated adequate by 44.4% teachers and inadequate by 54.5% teachers while computers were rated adequate by 40.5% and inadequate by 55.7 teachers. The library was rated adequate by 28.6% teachers by 60.6% teachers while library books were rated adequate by 33.3% teachers and inadequate by 60.1% of teachers. Workshops were rated adequate by 10.6% teachers and inadequate by 77.1% teachers while 61.3% of them rated school furniture as adequate and 35.4% rated furniture inadequate.

These findings were interpreted to mean that school facilities play a vital role in the implementation of TFSE in secondary schools, classrooms were rated uniformly by both the head teachers and teachers, this means that inadequacy of classrooms encourages the problem of overcrowding and therefore may be a factor that hinders implementation of TFSE in the schools under the study. Other factors highlighted by teachers may not be a major hindrance to the implementation for example school furniture, computer laboratory, computers, sanitary units and laboratories. On the other hand head-teachers' rates differed with that of the teachers as most of the facilities highlighted were lowly rated as adequate, their difference in opinions may be attributed by their positions in the school and thus have more knowledge on the adequacy of school facilities.

The findings from this study are in line with Olembo & Cameroon (1986), Bell and Rhodes (1996) who agreed that school facilities poses a great challenge in the implementation of school programs. This study also agrees with Osei (2006) findings who noted that overcrowding due to inadequate school facilities negatively affect the quality of education including the implementation of TFSE. Other studies disagree with these findings for example in a study done in Nigeria, Udoh (1998) stated that the selection and implementation of educational curriculum does not depend on the availability and adequacy of school facilities, otherwise a school policy can be implemented and work well regardless of limited resources. Udoh (2008) asserted that in classrooms, it is not sufficient to have seats but the seats should be arranged in such a manner that students can be moved around for group discussions and group work. The seats should be

comfortable for students, should permit free mobility and allow for adequate and comfortable body postures. Few but comfortable school facilities are important in any school implementation program.

4.4 Influence of instructional materials on implementation of TFSE

The second objective of the study was to find our teachers' perception on the influence of instructional materials on implementation of TFSE. To determine this, teachers were asked to rate the adequacy or inadequacy of instructional materials, to which they responded as shown in Table 10. The responses were measured in a five point likert scale, the questions were rated; Very adequate, adequate, not sure, inadequate, and very inadequate.

Table 9: Teachers' ratings on adequacy of instructional material

Instructional Material	Adequate		Inadequate	
	Frequency	%	Frequency	%
Class text books	134	74.4	44	24.4
Class readers	75	41.7	68	37.8
Audio cassettes	32	17.8	127	70.6
TV/VIDEO/CD/DVD	52	28.9	115	63.8
Globes	57	31.7	96	53.3
Graphic materials/Drawings	57	31.6	93	51.7
Calculators	91	51.7	69	38.4
Computer software	76	42.3	97	53.9
Wall maps	83	46.2	78	43.4
Curriculum guides	102	56.6	59	33.3
Bulletin/Display boards	60	33.3	99	65
Supplementary materials	77	42.8	72	40

On class text books, 134 (74.4%) said adequate, and 44 (24.4%)said inadequate, class readers, 75 (41.7%) said adequate and 68(37.8%) said inadequate, audio cassettes, 32(17.8%) said adequate and 127(70.6%) said inadequate, TV/VIDEO/CD/DVD, 52 (28.9%) said adequate and

115(63.9%) said inadequate, globes 57(31.6%) said adequate, and 96(53.3%) said inadequate, graphic materials and drawings, 57(31.7%) said adequate and 93(51.7%) said inadequate, calculators 91(51.7%) said adequate and 69(38.4%) said inadequate, computer software, 76 (42.2%) said adequate and 97(53.9%) said inadequate, wall maps, 83(46.1%) said adequate and 79(43.3%) said inadequate, curriculum guides, 102(56.7%) said adequate and 62(32.8%) said inadequate, bulletin/display boards 60(33.3%) said adequate and 99(55.0%) said inadequate, and finally supplementary materials, 77(42.2%) said adequate and 72 (40.0%) said inadequate.

These findings were interpreted to mean that those instructional materials which were rated adequate or inadequate may be a determining factor on the state of implementation of TFSE in the area under the study, for example, majority of the respondents above purports that inadequacy of instructional materials influences the implementation of TFSE. It was pointed out that class textbooks, globes, calculators, wall maps and curriculum guides were adequate and therefore largely contributes to the state of implementation of TFSE in Uasin-Gishu County, while class readers, audio cassettes, TV/VIDEO/CD/DVD, globes, graphic materials and bulletin/display boards were inadequate which may also largely influence the implementation of TFSE in the County. This implies that with adequacy of instructional materials in the school, successful implementation of the TFSE program will be achieved. This finding is obvious because lack of instructional materials will translate into poor transmission and acquisition of knowledge by the teachers and students. This finding is in agreement with the assertion of World Bank (2006) that no education system can rise above the availability of educational resources.

An observation study done by World bank in Latin American and East Asian countries in the context of increased primary school enrollment rates, which puts pressure on increased resources as demand for secondary education increases. The major challenges that these countries are encountering are inadequate resource allocations, constraints of expansion and increasing the quality of secondary education (UNESCO, 2001). The same way instructional materials influences the students desire to learn as noted by Kay (2008) in a study done Ebony

State Nigeria, also as noted in this study influences the implementation of TFSE in Kenya's public secondary schools. In a study done in Western Kenya, Eshiwani (1993) states that a shortage of teachers, scarcity of textbooks and inadequate facilities were amongst the problems that face secondary schools in Kenya. World Bank (2000) observes that when instructional material are lacking or inadequate the teaching/learning process is compromised and this inevitably is reflected in low academic achievement, high dropout rates, problemematic behaviour, poor teacher motivation and unmet educational goals. Still other studies disagree with the above study findings, a study done by Oyeniran (2003), concluded that there is no significant relationship between instructional materials and implementation of school programs, who also observed that students can learn best without enough instructional materials but through their hard-work and attitude towards education.

4.5 Influence of staffing on implementation of TFSE

The third objective of the study was to establish Teachers' perceptions on the influence of staffing on implementation of TFSE. To determine this, the head teachers were asked to respond to statements relating to staffing in their schools as shown in table 10. The responses were measured in five point likert scale, the statements were rated; strongly agree, Agree, Undecided, Disagree and strongly disagree.

Table 10: Head teachers' ratings on teacher staffing

Statement	Agre	ee	Disagre	e
	Frequency	%	Frequency	%
The total number of teachers is	2	14.2	12	85.7
sufficient				
The distribution of teachers per subject is enough to handle each subject	2	14.2	10	71.5
Teachers complain of overload due to increasing number of students	7	50	2	14.3
The school largely depends on	6	42.9	8	57.2
B.O.M teachers				
The school employs untrained	6	42.8	7	50
teachers				
It takes long before more teachers	10	71.4	3	21.4
are posted to our school				
Teachers hardly pay individualized	10	71.4	4	28.6
attention to students				

On whether the teachers are sufficient for increased enrolment due to TFSE, 2(14.3%) agreed, and 12 (85.7%) disagreed, on the question that distribution of teachers per subject is enough, 2(14.3%) agreed and 10(71.4%) disagreed, on teachers complain of overload due to increasing number of students, 7(50.0%) agreed, and 2(14.3%) disagreed, on the opinion that schools majority depend on B.O.M teachers to handle students, 6(42.9%) agreed and 7(50.0%) disagreed, on the question that it takes long for teachers to be posted to school, 10(71.4%) agreed and 3(21.4%) disagreed. Lastly, on the statement that teachers hardly pay individualized attention to students, 10 (71.4%) agreed while 4(28.6%) disagreed.

From the above findings it can be clearly noted that staffing is inadequate in the area under the study, essentially, the personnel within the institutions and their capabilities in contributing to

productivity and achievement of institutional objectives are vital in any educational system. Teachers in secondary schools are engaged in the processing of all educational inputs, students inclusive, so that the educational institutions will be able to achieve their objectives. They disseminate knowledge and skills through teaching, contribute to advancement in knowledge and engage in community services. Their availability and utilization would determine the success or failure of the educational system. These findings are true according to Abimbade (1997) who noted that staffing as a resource in teaching and learning make students to learn more and retain better what they have been taught and that it also promotes and sustains student's interest. It also allows the learners to discover themselves and their abilities and consequently provides them with an opportunity to realize their full potential. Schramn (1977) reinforces this view and adds that enough teachers enrich learner's knowledge and reinforce instruction.

A study done by Falade, (2006) disagreed with the findings; he stated that although teachers are required to deliver formal teaching in a classroom, much of the day to day teaching which helps in the achievement of educational objectives goes on outside the classroom in the course of interaction between learners and the environment. A well equipped library can help to enhance teaching and facilitate learning and thus make a shift to a learner centered approach, thus staffing may not be much important.

4.6 Influence of Head Teachers' Administrative Skills on implementation TFSE

The fourth objective of the study was to establish Teachers' perceptions on the influence of head teachers' administrative skills on implementation of TFSE. To determine this, the head teachers and teachers were asked to rate the adequacy or inadequacy of head teachers' administrative skills, to which both head teachers and teachers responded as shown in table 11 and 12 respectively. The responses were measured on five point likert scale, the questions were rated; very adequate, adequate, not sure, inadequate, and very inadequate.

Table 11: Head teachers' responses on influence of head teachers' administrative skills on implementation of TFSE

Statement	Agre	ee	Disagre	ee
	Frequency	%	Frequency	%
School administration motivates	14	100	0	0
teachers				
Workers are trained to handle ever	6	42.8	6	42.8
increasing number of students				
Head teacher closely supervises	14	100	0	0
teachers				
Head teacher has established	7	50	0	0
standards for teachers'				
performance appraisal				
Teachers are held accountable as	10	71.4	2	14.3
individuals for work assignments				
There is a detailed recruitment	7	50	3	21.4
policy of teachers in my school				
BOM meets to assess school's	9	64.3	1	7.1
financial ability before recruiting				
new teachers				

All the head teachers agreed that school administration motivates teachers morally, concerning training teachers regularly to handle increasing number of students, 5(35.7%) agreed while 6(42.9%) disagreed, they all agreed that head teachers closely supervised teachers, 10(71.4%) agreed that school programs are planned in advance, on the question that head teacher has established standards for teachers' performance appraisal, 7(50.0%) agreed and 7(50.0%) disagreed, on teachers are held accountable as individuals for work assignments, 10(71.4%) agreed and 2(14.3%) disagreed. On detailed recruitment policy of teachers in my school, 7(50.0%) agreed and 3(21.4%) disagreed, finally on B.O.M meets to asses school's financial ability before recruiting new teachers, 9(64.3%) agreed while 1(7.1%) disagreed.

Table 12: Teachers' responses on the influence of head teachers' administrative skills on implementation of TFSE

Statement	Ade	Adequate		uate
	Frequency	%	Frequency	%
Head teacher motivates teachers	106	58.9	56	31.1
Head teacher promotes continued	122	67.8	34	18.8
training of teachers				
Head teacher closely supervises	43	24	114	63
teachers				
School programs are planned	117	65	41	23
I am involved in making rules and	118	65	41	23
regulations in my school				
Head teacher helps teachers deal	114	63	37	20
with job related stresses				
Head teacher and teachers have	124	68.5	36	19.9
common goals and aspirations				
Head teacher sets achievable	143	79	27	14.9
performance expectations				

To corroborate head teachers responses, the researcher sought some information on teachers concerning head teachers' administrative skills. On the opinion that head teacher motivates teachers 106(59.9%) agreed while 56(31.1%) disagreed, on head teacher promotes continued training of teachers, 122(67.8%) agreed while 34(18.9%) disagreed, on the opinion that head teacher closely supervises teachers, 43(23.9%) agreed while 114(63.3%) disagreed, on school programs are planned, 118(65.6%) agreed while 41(22.8%) disagreed. On the opinion that teachers are involved in making rules and regulations in school,118(65.6%) agreed and 41(22.8%) disagreed, concerning Head teachers helps teachers to deal with job related stresses caused by TFSE, 114(63.3%) agreed and 37(20.6%) disagreed, on Head teachers and teachers

have common goals and aspirations, 124(68.5%) agreed and 36(19.9%) disagreed, finally on Head teacher sets achievable performance expectations, 143(79%) agreed and 27(14.9%) disagreed.

From the above findings, it can be noted that head-teacher administrative skills largely influences the implementation of TFSE as supported by the majority of the respondents. Implementation of Tuition Free secondary education requires adequate skills especially for the management. Head-teachers, school administrators and teachers need various skills in order to cope with the demands of their management and teaching tasks.

These interpretations are in line with UNESCO (2001), whose observations are that the principals should constantly update through training on their financial management skills and expertise. The principal has a role to play in coordinating parents associations to raise funds for school developments and he is to assist them in estimating the cost of putting up schools facilities. He adds that if principals lack proper training in financial management, they may experience problems when making school budget and accounting for expenditure in financing the school programmes by parents. Also Chepkonga (2006) found out that head teachers needed training in key management areas such as accountancy, preparing budgets and general management while Kilonzo (2007) found out that head teachers needed training in management in order to achieve their educational objectives. In South Carolina, Kochamba and Murray (2008), in their study on critical leadership skills needed by principals for the achievement of school effectiveness found technical, human relations, conceptual and transformative leadership skills critical for the achievement of school effectiveness. In Hong Kong, Pang and Pisapia (2012), found a link between strategic thinking skills (a component of conceptual skill) and effectiveness of schools.

According to Okumbe (2001), education management has no choice as to whether to train employees or not. He observed that all employees regardless of their previous training, education and experience must be given further training and development. It was also clear that the school management tries to offer better working condition for the teachers. Professional reward systems

for teachers, who manage to teach with least materials, are available that mentoring and support mechanism of teachers have been initiated by school administration. However, it was found that weak management system and decision making is causing the school education wastage; teachers' performance plans are not flexible.

The responses from teachers indicate that head teachers fair well on their administrative skills, this indicates that they have the requisite management skills in the study area since the management capacity is very important in the implementation of TFSE. Warner and Palfreyman (1996) said that to manage secondary schools, head teachers require strong professional management knowledge and support services for their success in the running of schools manage affairs of institutions. The study attributed that it to the fact that only a small percentage of the school managers and other personnel have attended courses in financial management. They are also in contrast with the findings by Chepkonga, 2006) who found that head teachers needed training in key management areas. The difference can be attributed to the management trainings organized by KESI for principals and deputies in the study area.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings of the main study, conclusions and recommendations arrived at. It also gives suggestions for further studies.

5.2 Summary

The first objective of the study was to establish teachers' perceptions on the influence of school facilities on implementation of TFSE. From the head teachers' responses, majority agreed that laboratory equipment was adequate while the other facilities; library, staffroom, laboratories, workshops, furniture, latrines, computer laboratory and computers were inadequate. Teachers' responses on school facilities indicated that; furniture and laboratory equipment were adequate while classrooms, toilets, workshops, staffroom, library and computer laboratory were inadequate.

The second objective was to find out teachers' perceptions on the influence of instructional materials on implementation of TFSE. Teachers' responses indicated that instructional materials, class textbooks, teaching materials, recommended text books, laboratory equipment, calculators and curriculum guides were adequate. However, class readers, audio cassettes, TV/VIDEO/DC/DVD, globes, graphic materials, wall maps, bulletin boards and supplementary materials were inadequate.

The third objective of the study was to establish teachers' perceptions on the influence of staffing on implementation of TFSE. The results indicated that the schools have good manage skills to handle work force, and that they have reward system for teachers, however it was found that teachers are not sufficient in meeting the increasing enrolment due TFSE, also distribution of teachers per subject was not sufficient and that it takes long for teachers to be posted to these schools.

All the head teachers agreed that school administration motivated teachers, majority agreed that head teachers provided proper relationship. The results also indicated that regular training was not done to enable teachers handle increasing number of students, it was also clear that the school management tried to improve the working condition for the teachers. Both head teachers' and teachers' responses indicated that there were professional reward systems for teachers to enable them teach with least materials that were available. They both also revealed that mentoring and support mechanism for teachers had been initiated by school administration. The teachers also revealed that head teachers helped them deal with job related stresses owing to the increasing demands of TFSE. However, it was found that weak management system and decision making was causing the school education wastage, teachers' performance plans were not flexible.

5.3 Conclusions

Based on the findings of the study as summarized above, it can be concluded that TFSE is a worthy initiative as it led to increased enrolment, progression from one class to another and completion of secondary education despite the many challenges. The study established that more students were able to attend school as a result of free secondary education and this contributed to equity in secondary education. The first objective was to investigate teachers' perceptions on the influence of facilities on implementation of TFSE. The study found that the school facilities are not adequate. From the head teachers responses majority agreed that laboratory equipment were adequate while the other facilities; library, staffrooms were inadequate. Teachers' responses on school facilities indicated that computer laboratory, furniture and lab equipment were adequate while toilets, workshops, school administration blocks, library and computer laboratories were inadequate.

Regarding instructional materials, the study concluded that most of the instructional materials in the study area were still inadequate though instructional materials like textbooks, globes, calculators, wall maps and curriculum guides were rated partially adequate. It was noted that inadequacy of instructional materials may have many effects to the teachers and the students themselves which may lead to poor instruction in class and therefore the schools may not achieve the set educational objectives. This gap therefore may influence the implementation of TFSE in public secondary schools.

The third objective was teachers' perception on the influence of staffing on implementation of TFSE, it was concluded that the issue of staffing was a great problem noticed in most of the schools under the study as the teachers were not sufficient to handle the subjects at hand. Majority of the respondents noted that the number of staff was not enough, though the school management did their best to curb this problem by employing BOM teachers some of whom were form four leavers and were allowed to teach despite lack of any training in education. This gap may be a challenge in the implementation of TFSE and thus the objectives of enrolment, progression and completion may not be achieved.

The fourth objective on administrative skills for the head-teachers may compromise the quality of management and learning of schools, from the findings the study concluded that head-teachers play a vital role in the management of the school in general, however supervision and motivation of teachers has been highlighted by the teachers as inadequate, though the head-teachers disagree on this. Most head-teachers agreed that their administrative skills are sufficient enough to manage the schools adequately while teachers' opinions differ on this. These differences bring a gap in the management of schools and therefore greatly hinder the implementation of TFSE in secondary schools in Kenya.

5.4 Recommendations

Based on the analysis of the study, the researchers wishes to make the following recommendations;

- i. The government should allocate enough funds in time and resources to schools to ensure that free secondary school education runs smoothly without compromising quality of education. The study established that lack of adequate funds and resources was the biggest challenge affecting effective implementation of free secondary education in public secondary schools.
- ii. The government should build more schools and employ more teachers to accommodate all those qualifying for secondary education from the primary schools. Due to lack of enough teachers most teachers were teaching many lessons per week which was compromising their effectiveness.
- iii. Head teachers should enroll students according to the resources and teachers they have to avoid overcrowding schools and overworking teachers. The study revealed that most schools had shortage of classrooms and as a result of overcrowded classes teachers were experiencing big workload which may make them not to be effective in their work.
- iv. Head teachers should involve the community around them to aid in school development programmes and projects. The schools should also initiate income generating projects to subsidize government funding.
- v. The government should organize more capacity building programmes for both head teachers and teachers to equip them with adequate skills and abilities to handle the emerging issues with the implementation of Tuition Free Secondary education.
- vi. Way of motivating schools managers and teachers should be devised to compensate them for the extra workloads they are undertaking to manage their schools.
- vii. The directorate of quality Assurance and Standards within the Ministry of Education should be more empowered with resources to enable them carry out their advisory

work more effectively in schools. It is expected that their regular visits to school would be beneficial to schools as through their guidance schools would be able to maintain the expected standards for effective learning to take place.

5.5 Areas for Further Research

The researcher suggests that;

- i. A study should be conducted on the strategies being employed by school administrators to cope with the challenges faced in implementation of tuition free secondary education.
- ii. A study on the effects of free secondary education on academic performance of students in Wareng Sub-County and the rest of the country.

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APPENDIX A: QUESTIONNAIRE FOR HEAD TEACHERS

Please put a tick $(\sqrt{\ })$ next to the response applicable to you where appropriate.

Section I: Background Information.

1. What is your highest level of education?
a) Ph.D()
b) M.Ed ()
c) B.A or B.Sc with PGDE ()
d) B.Ed ()
b) Diploma in Education ()
c) Others (specify)
2. What is your age bracket?
20- 30 years ()
31-40 years ()
41-50 years ()
51 and above ()
3. What is your working experience?
a) 0- 4 years () b) 5-9 years () c) 10 years and above ()
4. How long have you served in the current station?
a) 0-4 years () b) 5-9 years () c) 10 years and above ()
5. What is the type of your school?
Extra County () County () District ()
6. What is the category of your school?
Day School ()
Boarding school ()
8. What is the registered size of your school?Stream(s)
9. What is the current population of teachers in your school?
10. How many more teachers does your school require?
11. How many BOG teachers have you employed?

SECTION II: INSTITUTIONAL FACTORS

Following is a series of statements that address factors that influence implementation of TFSE. There are no correct responses; please respond to each item as honestly as possible. Complete the question by marking the response closest to your agreement or disagreement with each statement. Key; VA-Very Adequate, A-Adequate, NS- Not Sure, I-Inadequate and VI-Very Inadequate.

Facility	VA	A	NS	I	VI
Class rooms					
Laboratories					
Laboratory equipment					
Staffroom					
Sanitary units (Toilets/Urinals)					
Computer laboratory					
Computers					
Library					
Workshop					
School furniture					

Please fill the table below by ticking the appropriate response to you.

Key; SA-Strongly Agree, A-Agree, U- Undecided, D-Disagree and SD-Strongly Disagree.

Staffing

Statement	SA	A	U	D	SD
The total number of teachers is sufficient					
The distribution of teachers per subject is enough to					
handle each subject					
Teachers complain of overload due to increasing					
number of students					
The school largely depends on BOM teachers					
The school employs untrained teachers					
It takes long before more teachers are posted to our					
school.					
Teachers hardly pay individualized attention to students					

Head teachers' Administrative Skills

Statement	S A	A	U	D	S.D
School administration motivates the teachers					
Workers are trained to handle the ever increasing number of students					
Head teacher closely supervises teachers					
School programs are planned					
Head teacher has established standards for teachers' performance appraisal					
Teachers are held accountable as individuals for work assignments					
There is a detailed recruitment policy of teachers in my school					
BOM meets to assess school's financial ability before recruiting new teaches					

SECTION III

Influence of implementation of TFSE on enrolment, progression and completion

Please fill the table below by ticking the appropriate response to you.

Key; SA-Strongly Agree, A-Agree, U- Undecided, D-Disagree and SD-Strongly Disagree.

Statements	SA	A	U	D	SD
TFSE has led to increased enrolment in my school					
Some students who had dropped out due to lack of					
school fees came back to school when TFSE was					
introduced					
More students within the school catchment have					
enrolled in this school with introduction of TFSE					
More parents clear the remaining fees on time after					
implementation of TFSE					
The number of students whose results are retained					
due to fees arrears has reduced with implementation					
of TFSE					
The school is able to meet its financial obligations on					
time since introduction of TFSE					
Fee arrears carried forward from previous years have					
reduced with implementation of TFSE					
More students who enroll in this school after TFSE					
complete their studies					

APPENDIX B: QUESTIONNAIRE FOR TEACHERS

Please put a tick $(\sqrt{\ })$ next to the response applicable to you where appropriate.

Section I: Background Information.

1. What is your highest level of education?
a) Ph.D()
b) M.Ed ()
c) B.A or B.Sc with PGDE ()
d) B.Ed()
b) Diploma in Education ()
c) Others (specify)
2. What is your age bracket?
20- 30 years ()
31-40 years ()
41-50 years ()
51 and above ()
3. What is your working experience?
a) 0- 4 years () b) 5-9 years () c) 10 years and above ()
4. How long have you served in the current station?
a) 0-4 years () b) 5-9 years () c) 10 years and above ()
5. Who is your employer?
a) TSC () b) BOM () c) Volunteer ()
6. What is your position in school?
Assistant teacher () Head of Department () Class teacher ()

SECTION II: INSTITUTIONAL FACTORS

FACILITIES

Teachers' ratings on adequacy of school facilities

Key: VA=Very Adequate, A= Adequate, NS= Not Sure, I= Inadequate and VI= Very Inadequate.

Facility	VA	A	NS	I	VI
Class rooms					
Laboratories					
Laboratory Equipment					
Staff room					
Sanitary Units (Toilets/Urinals)					
Computer Laboratory					
Computers					
Library					
Workshops					
Furniture					

Kindly rate the adequacy of the followingTeaching and Learning Resource Materials in your school.

Key: VA = Very Adequate, A= Adequate, NS =Not Sure, I =Inadequate and VI = Very Inadequate.

Instructional Materials

HEAD TEACHERS' ADMINISTRATIVE SKILLS

Please fill the table below by ticking the appropriate response to you.

Key; SA-Strongly Agree, A-Agree, U- Undecided, D-Disagree and SD-Strongly Disagree.

SA	A	U	D	SD
	SA	SA A	SA A U	SA A U D

SECTION III

IMPLEMENTATION OF TUITION FREE SECONDARY EDUCATION

Influence of implementation of TFSE on enrolment, progression and completion Please fill the table below by ticking the appropriate response to you.

Key; SA-Strongly Agree, A-Agree, U- Undecided, D-Disagree and SD-Strongly Disagree.

Statements	SA	A	U	D	SD
TFSE has led to increased enrolment in my school					
Some students who had dropped out due to lack of					
school fees came back to school when TFSE was					
introduced					
More students within the school catchment have					
enrolled in this school with introduction of TFSE					
More parents clear the remaining fees on time after					
implementation of TFSE					
The number of students whose results are retained					
due to fees arrears has reduced with implementation					
of TFSE					
The school is able to meet its financial obligations on					
time since introduction of TFSE					
Fee arrears carried forward from previous years have					
reduced with implementation of TFSE					
More students who enroll in this school after TFSE					
complete their studies					

APPENDIX C: ANALYZED DATA

FACILITIES

1) HEAD TEACHERS

Facility	VA	VA		A	I	NS		I	V	I
	F	%	F	%	F	%	F	%	F	%
Class rooms	1	7.1	3	28.4	0	0.0	8	57.1	2	14.3
Laboratories	2	14.1	3	21.4	0	0.0	6	42.9	3	21.4
Laboratory Equipment	2	14.1	7	50.0	0	0.0	1	7.1	4	28.6
Staffroom	2	14.1	2	14.3	0	0.0	5	35.7	5	35.7
Sanitary units (Toilets/Urinals)	2	14.1	1	7.1	0	0.0	7	50.0	4	28.6
Computer laboratory	2	14.1	3	21.4	0	0.0	6	42.9	3	21.4
Computers	2	14.1	1	7.1	0	0.0	7	50.0	4	28.6
Library	0	0.0	4	28.6	1	7.1	5	35.7	5	35.7
Workshop	1	7.1	2	14.3	1	7.1	3	21.4	7	50.0
School furniture	1	7.1	3	21.4	2	14.3	3	21.4	5	35.7

2) TEACHERS

Facilities	VA			A]	NS		I		
	F	%	F	%	F	%	F	%	F	%
Class rooms	9	5.0	42	23.3	2	1.1	65	36.1	63	35.0
Laboratories	29	16.2	54	30.0	6	3.3	74	41.1	17	9.4
Laboratory Equipment	20	11.1	40	22.2	12	6.7	84	46.7	24	13.4
Staffroom	9	5.0	63	35.0	2	1.1	96	53.3	10	5.6
Sanitary units (Toilets/Urinals)	15	8.3	70	38.9	4	2.2	76	43.3	15	8.3
Computer laboratory	12	6.7	68	37.8	2	1.1	34	18.9	62	35.6
Computers	11	6.1	62	34.4	8	4.4	52	28.9	48	26.8
Library	16	8.9	49	27.2	6	3.3	68	37.8	41	22.8
Workshop	1	0.6	18	10.0	23	12.8	65	36.1	73	41.0
School furniture	13	7.2	98	54.4	6	3.3	39	21.7	24	13.4

INSTRUCTIONAL MATERIALS

1) TEACHERS

Material	VA		A	A		NS		I	VI	
	F	%	F	%	F	%	F	%	F	%
Class text books	29	16.1	105	58.3	3	1.7	40	22.2	4	2.2
Class readers	14	7.8	61	33.9	38	21.2	52	28.9	16	8.9
Audio Cassettes	5	2.8	27	15.0	22	12.3	55	30.6	72	40.0
TV/VIDEO/CD/DVD	6	3.3	46	25.6	14	7.8	62	34.4	53	29.4
Globes	53	29.4	54	30.0	28	15.6	62	34.4	34	18.9
Graphic materials/drawings	8	4.4	49	27.2	31	17.3	65	36.1	28	15.6
Calculators	14	7.8	79	43.9	19	10.6	48	26.7	21	11.7
Computer software	12	6.7	64	35.6	8	4.45	45	25.0	52	28.9
Wall maps	10	5.6	73	40.6	19	10.6	57	31.7	21	11.7
Curriculum guides	13	7.2	89	49.4	18	10.0	44	24.4	15	8.9
Bullet/Display boards	6	3.3	54	30.0	22	12.3	67	37.2	32	17.8
Supplementary materials	5	2.8	72	40.0	32	17.8	53	29.4	19	10.6s

STAFFING

1) HEAD TEACHERS

Statements	SA A		A		U		D	SD		
	F	%	F	%	F	%	F	%	F	%
The total number of teachers is	1	7.1	1	7.1	0	0.0	4	28.6	8	57.1
sufficient.										
The distribution of teachers per	1	7.1	1	7.1	2	14.3	4	28.6	6	42.9
subject is enough to handle each										
subject										
Teachers complain of overloaded	4	28.6	3	21.4	5	35.7	2	14.3	0	0.0
due to increasing number of										
students										
The school largely depends on	4	28.6	2	14.3	0	0.0	6	42.9	2	14.3
BOM teachers										
The school employs untrained	3	21.4	3	21.4	1	7.1	1	7.1	6	42.9
teachers										
It takes long before more teachers	5	35.7	5	35.7	1	7.1	3	21.4	0	0.0
are posted to our school										
Teachers hardly pay	2	14.3	5	35.7	3	21.4	4	28.6	0	0.0
individualized attention to										
students										

HEAD TEACHERS' ADMINISTRATIVE SKILLS

1) HEAD TEACHERS

Statements		SA		A		U		D		SD
	F	%	F	%	F	%	F	%	F	%
School administration motivates the teachers	12	85.7	2	14.3	0	0.0	0	0.0	0	0.0
Workers are trained to handle ever increasing number of students	5	35.7	1	7.1	2	14.3	5	35.7	1	7.1
Head teacher closely supervises teachers	5	35.7	9	64.3	0	0.0	0	0.0	0	0.0
School programs are planned in advance	4	28.6	6	42.9	4	29.4	0	0.0	0	0.0
Head teacher has established standards for teachers' performance appraisal	2	14.3	5	35.7	7	50.0	0	0.0	0	0.0
Teachers are held accountable as individuals for work assignments	3	21.4	7	50.0	2	14.3	2	14.3	0	0.0
There is a detailed recruitment policy of teachers in my school	2	14.3	5	35.7	4	29.4	3	21.4	0	0.0
BOM meets to asses school's financial ability before recruiting new teachers	9	64.3	0	0.0	4	29.4	1	7.1	0	0.0

1) TEACHERS

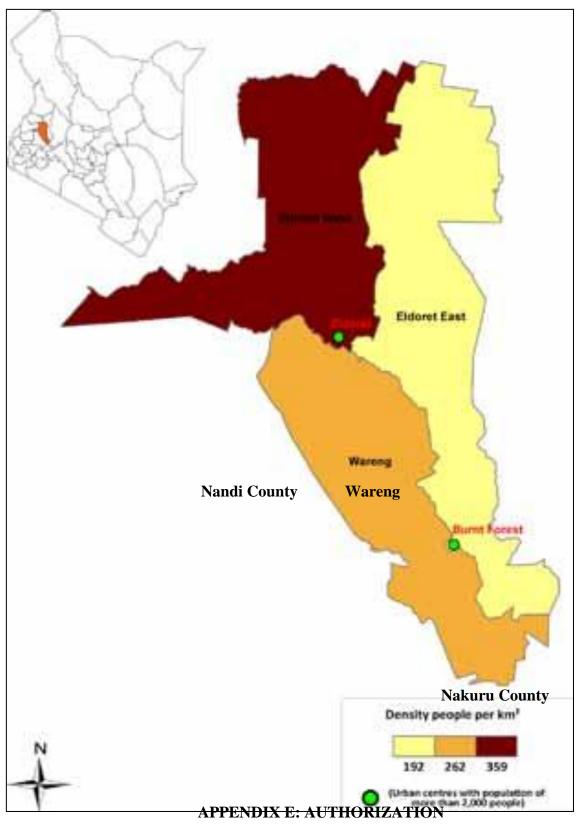
Statements	SA		A	A		U	D		SD	
	F	%	F	%	F	%	F	%	F	%
Head teacher motivates teachers	31	17.2	75	41.7	18	10	39	21.7	17	9.4
Head teachers promotes continued training of teachers	32	17.8	90	50.0	24	13.3	26	14.4	8	4.4
Head teacher closely supervises teachers	10	5.6	33	18.3	23	12.8	57	31.7	57	31.7
School programs are planned.	37	20.6	80	44.4	26	14.4	29	16.1	12	6.7
I am involved in making rules and regulations in my school	17	9.4	101	56.1	21	11.7	32	17.8	9	5.0
Head teacher helps teachers deal with job related stresses.	16	8.9	98	54.4	29	16.1	31	17.2	6	3.3
Head teacher and teachers have common goals and aspirations	34	18.9	90	50.0	20	11.1	28	15.6	8	4.4
Head teacher sets achievable performance expectations.	32	17.8	111	61.7	10	5.6	19	10.6	8	4.4

EFFECTIVENESS OF TFSE IMPLEMENTATION

1) HEAD TEACHERS

Statements	SA			A		U		D	S	SD
	F	%	F	%	F	%	F	%	F	%
TFSE has to increased enrolment in	5	35.7	8	57.1	0	0.0	0	0.0	1	7.1
my school										
With TFSE some students who had	2	14.3	2	14.3	3	21.4	7	50.0	2	14.3
dropped out due to lack of fees came										
More students have enrolled with	7	50.0	7	50.0	0	0.0	0	0.0	0	0.0
introduction of TFSE										
Students are sent home for fees less	3	21.4	9	64.3	1	7.1	1	7.1	1	7.1
often with implementation of TFSE										
With TFSE parents clear fees on time	4	28.6	6	42.9	1	7.1	2	14.3	1	7.1
With TFSE retention of certificates	4	28.6	5	35.7	2	14.3	1	7.1	2	14.3
due to fee balances has reduced										
With TFSE the school is able to meet	1	7.1	6	42.9	2	14.3	5	35.7	0	0.0
their financial obligation on time										
With TFSE fee arrears has reduced	3	21.4	7	50.0	1	7.1	3	21.4	0	0.0
With TFSE more student who enroll	5	35.7	6	42.9	2	14.3	1	7.1	0	0.0
in this school complete their studies										

APPENDIX D: MAP OF WARENG SUB- COUNTY





NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

felepinene: -254-26-2213471 2241349,310571,2219420 Fax: +254-20-318245,318249 Email: secretary@nacosti.go.ke Website: www.nacosti.go.ke When replying please quore

97 Floor, Utahi House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No.

Date

10th March, 2014

NACOSTI/P/14/3980/936

Moses Wamutoro Egerton University P.O.Box 536-20115 EGERTON.

RE: RESEARCH AUTHORIZATION

following your application for authority to carry out research on "Teachers perception on the influence of selected institutional factors on implementation on tuition Free Secondary Education in Public Secondary Schools in Wareng District, Kenya," I am pleased to inform you that you have been authorized to undertake research in Uasin-Gishu County for a period ending 15th April. 2014.

You are advised to report to the County Commissioner and the County Director of Education, Uasin-Gishu County before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report thesis to our office

DR. M. K. RUGUTT DhD, HSC. FOR: SECRETARY/CEO

Copy to:

The County Commissioner
The County Director of Education
Uasin-Gishu County.

APPENDIX F: RESEARCH PERMIT

CONDITIONS

- You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
- 2. Government Officers will not be interviewed
- without prior appointment. 3. No questionnaire will be used unless it has been approved.
- Excavarion. filming and collection of biological specimens are subject to further permission from the relevant Congenment Ministries.
- has are required to submit at least two (2) hard copies and one(1) soft copy of your final report.
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice and



REPUBLIC OF KENYA

NACOSTI

National Commission for Science. Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A

CONDITIONS: see back page

THIS IS TO CERTIFY THAT: MR. MOSES WAMUTORO of EGERTON UNIVERSITY, 0-30100 eldoret, has been permitted to conduct research in Uasin-Gishu County

on the topic: TEACHERS PERCEPTION ON THE INFLUENCE OF SELECTED INSTITUTIONAL FACTORS ON IMPLEMENTATION ON TUITION FREE SECONDARY EDUCATION IN PUBLIC SECONDARY SCHOOLS IN WARENG DISTRICT, KENYA.

for the period ending: 15th April, 2014

Applicant's Signature

Permit No: NACOSTI/P/14/3980/936 Date Of Issue: 10th March,2014

Fee Recieved :ksh 1,000.00

Secretaky National Commission for Science, Technology & Innovation