INSTITUTIONAL FACTORS INFLUENCING STUDENTS'
PARTICIPATION IN PUBLIC SECONDARY SCHOOLS IN MWINGI
CENTRAL SUB - COUNTY, KITUI COUNTY, KENYA

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A Research Project Report Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Education in Educational Planning

University of Nairobi

DECLARATION

This research project report is my original work and has not been presented for examination or
award of any degree in any university
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DEDICATION

This research project report is dedicated to my wife Josephine Kanini Kawila and my daughter Serah Yvonne Wambui Eric.

ACKNOWLEDGEMENT

The greatest lesson I have learnt in the compilation of this project report is how much we need others in doing anything substantial in academics. Many people were helpful in one way or the other, indirectly or directly. I wish to take this first opportunity to sincerely thank God for his enablement. This far, it has taken his mighty hand.

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ABBREVIATIONS AND ACRONYMS

ASAL Arid and Semi Arid Lands

DEO District Education Officer

EFA Education For all

FPE Free Primary Education

FDSE Free Day Secondary Education

GDP Gross Domestic Product

GER Gross Enrolment Rate

GMR Global Monitoring Report

IIE Institute of International Education

KESSP Kenya Education Sector Support Programme

KICD Kenya Institute of Curriculum Development

KIPPRA Kenya Institute for Public Policy Research and Analysis

MOE Ministry of Education

MOEST Ministry of Education Science and Technology

NER Net Enrolment Rate

SCEO Sub – County Education Officer

SSA Sub – Sahara Africa

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations International Children's Education Fund

ABSTRACT

The purpose of this study was to unearth the institutional factors influencing students' participation in public secondary schools in Mwingi central Sub - County, Kitui County, Kenya. The study used descriptive research survey design, in which data were collected and analyzed from 18 principals, 36 class teachers and 180 form three and form four students by means of questionnaires, interviews and direct observation. The research study was guided by four research objectives. The first objective was assessing the extent to which Free Day Secondary Education programme influence students' participation rates. It was established that 100% principals, teachers and students confirmed that the funds allocated to their schools by the government were not enough to meet the school needs and there were delays in disbursement of the funds to the needy students. 88.9% of teachers and 98.9% of students indicated that students have continued to drop out of school due to high cost of secondary education despite the government initiatives to enhance participation rates like FDSE programme, bursaries and CDF funds. The principals and teachers recommended that government increase its skimpy budget allocations to schools, by providing funds so as to ensure smooth running of educational activities. The second objective examined the influence of parental level of education on students' participation rates. It was found that majority of parents in Mwingi central sub -County were illiterate and this had a bearing on students' enrolment and participation rates according to 55.6% of the principals. It was concluded that low education levels of parents lowered participation rates in public secondary schools. Class teachers and head teachers recommended that, parents and members of the community should be sensitized on the need to provide equal educational opportunities for all children regardless of their gender through guidance and counseling as early as possible. The third objective was determining the influence of availability of school physical infrastructure on students' participation rates. It was established that 90% of the secondary schools lacked vital physical infrastructures that could ensure high participation rates. 100% of the Principals, teachers and students concluded school physical infrastructure highly influenced participation rates. Majority of the principals and students recommended the equipping of the already existing schools to enhance secondary school participation. The fourth objective was to establish the influence of distance to school on students' participation. It was established that 89% of the secondary schools in Mwingi Central Sub – county were mixed day schools. From the research findings, it was concluded that majority of students walk long distances to access secondary education and this had a bearing on the enrolment, completion and retention rates. Students recommended that education stake holders should immediately build more schools so as to avoid the problems of covering long distances to school. It was established that individual differences in terms of poverty index, persistent drought, insecurity, cultural beliefs, parental levels of education, distance to school, inadequate FDSE government funding and school physical infrastructure, has a bearing in secondary schooling hence creating a complexity in achieving 100% secondary participation rates in Mwingi central sub – County. It was also established that processes taken by the school administrators and other education officials in ensuring teaching and learning is provided according to the required standards played a major role in influencing participation rates in public secondary schools in Mwingi central Sub – County of Kitui county.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is an issue of primary concern in most countries both developed and developing countries (UNESCO, 2003). In the Education for All (EFA) Global Monitoring Report (2007), it is observed that one of planets Earth's most critical challenges is providing the globe's people with universal, quality education. In the Education for All (EFA) Global Monitoring Report (2014), education is pivotal for development in a rapidly changing world. There is widespread recognition and solid evidence of the importance of basic education to both individual well being and national development. Paradoxically, over 100 million children between ages of thirteen and seventeen do not attend secondary school. Another 120 million children begin secondary school only to drop out with less than three years of education (UNESCO, 2012).

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). According to Colclough and Lewin (1993), Denmark has universal free education while Greece and Argentina provide free education at all levels. 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). This has seen participation in all levels of education in the above mentioned countries increase.

According to a study by Bowen et al (2009) in United States on secondary completion rates by family income and parental education level, students from higher income families and whose parents have university education are more likely than others to complete secondary school within four years. According to the same study, among 1999 entrants at public secondary schools whose parents had university education, 80% completed within four years. Among those whose parents had primary education only, 61% completed within four years. This shows that parental education level greatly influences secondary school completion rates.

According to Vandiver (2011) in his study on the impact of school facilities on students' secondary completion rates in Northern Texas, after a large decrease in completion was noted in 2009, he found that quality and adequacy of educational facilities were statistically significantly associated with the students' completion and teacher turnover rates. According to his report, the United States government gives a special fund to its secondary schools to build classrooms as a means of enhancing quality of its countries education and consequently ensuring all its children enroll in schools and complete.

According to Hunt (2008), distance from home to school also often hinders some children from participating in secondary education. This is particularly so in rural areas where

population density is relatively low and households are widely scattered. In such a context, access to secondary education may mostly rest on accessibility of schools.

Table 1: Secondary school enrolments and completion rates: Selected countries in 2013

Country	Secondary gross enrolment	Secondary completion rate
•	rate (%)	(%)
Nicaragua	98	55
Ghana	50	56
Uganda	91	80
Ethiopia	51	38
Malawi	132	69
Kenya	90	68
Bolivia	129	98
Bangladesh	118	60
Honduras	100	70
Rwanda	95	32
Benin	80	45
Chad	70	28
Guinea-Bissau	68	39
Tanzania	61	53
Burundi	53	47
Niger	41	29
Burkina Faso	48	31

Source: UNESCO (2014)

From table 1, selected countries like Chad and Niger have the lowest completion rates at 28% and 29% respectively while Bolivia has the highest completion rate of 98%. Completing a full secondary school course would suggest a completion rate of 100%. However from table 1, based on the progress achieved over the 2000s and projecting forward, UNESCO (2014) finds that the global secondary completion rate in 2015 would not exceed 80%. According to Education For All (EFA) Global Monitoring Report (2007), just over half of all school-age children in Africa completed secondary school by 2000. For South Asia the average completion rate remained around 70% and that for

Middle East and North Africa was around 74% between 1990 - 2000. According to Barbara et al (2003), South Africa and Gambia registered increase in secondary school completion rates between 1990 - 2005 while Zambia, The Republic of Congo, Cameroon, Kenya, Madagascar and Qatar all registered significant declines during the same period. The 1998 Ethiopia household survey found enormous urban and rural differences in secondary school enrolment, much larger than enrolment inequalities by household income while 1995 Burkina Faso household survey, found large difference by income and by rural or urban location with larger gender difference (Barbara et al, 2003). In both countries, urban secondary school enrolment rates are about twice as high as in rural areas.

Education For All (EFA) Global Monitoring Report (GMR) (2005) cites Kenya as a signatory to numerous international commitments on provision of education for all such as The Universal Declaration of Human Rights adopted in 1948, World declaration on Education for all adopted in 1990 and the Dakar Conference of 2000. Despite these commitments, access to education for all children in Kenya remains a problem. Several government documents refer to the government's high commitment to meeting the EFA and Millennium Development Goals (MDGs) targets (Republic of Kenya, 2002; MOEST, 2004, 2005). In particular, the Sessional Paper No.1 of 2005 by the Ministry of Education Science and Technology (MOEST) underscores that costs of secondary education are the main reason for the low participation rates in secondary education. In response, the Government developed the Kenya Education Sector Support Programme (KESSP) 2005 – 2010, which clearly states their intention to integrate secondary education as part of

basic education (MOEST, 2005). The Sessional Paper No.1 of 2005 states the goal of education is to achieve EFA by 2015.

The Government of Kenya officially launched the Free Day Secondary Education (FDSE) programme at the beginning of 2008 because many Kenyan children who completed primary school were not getting access to secondary school, mostly because of school fees (Speech by President Kibaki, February 2008). This has created a complexity of having 100% completion rate in secondary schools by province, county, or district hence the basis of this study. Mwingi central sub – county is in Kitui county, which also happens to be rated among the poorest counties in Kenya. Since low participation is attributed to high poverty levels, it necessitates this study within the sub – county. Basically participation rate is not static and when the government decides to direct its massive resources to particular regions such as in Arid Semi Arid Lands (ASAL) areas and urban areas with the aim of enhancing participation rates, then they will be missing the targets of EFA. It is therefore logical to do a study of participation rates even in regions that are said to have achieved 100% GER.

According to Kenya National Bureau of Statistics (KNBS) and Society for International Development (SID) report (2013), there are extreme inequalities among Kenya's counties. Despite the development policies and funds such as free primary and secondary schooling, secondary school bursaries and CDF, levels of deprivation remain extremely high in some areas compared to others. The report says, one quarter of Kenya's population still has no education. According to the report, Kitui County has a child rich population, where 0 - 14 year olds constitute 47% of the total population. This is due to high fertility rates among women as shown by the highest percentage household size of 4

– 6 members at 42%. Only 14% of Kitui County residents have secondary level of education or above (KNBS & SID 2013). Kitui Central constituency has the highest share of residents with a secondary level of education or above at 21%. This is twice Mwingi North constituency, which has the lowest share of residents with a secondary level of education or above. A total of 62% of Kitui County residents have a primary level of education only. Kitui Rural constituency has the highest share of residents with a primary level of education only at 64%. Some 25% of Kitui County residents have no formal education. Mwingi North constituency has the highest share of residents with no formal education at 30% (KNBS & SID 2013). Issues of low participation rates in Mwingi Central Sub – County are illustrated in table 2.

Table 2: Mwingi Central Sub - County secondary enrolment from 1 to form 4 (2007-2012)

Year	2007	2008	2009	2010	2011	2012
Form	Enrolment	Enrolment	Enrolment	Enrolment	Enrolment	Enrolment
1	1653	2043	1969	1968	2082	2134
2	1336	1893	1693	1803	1871	2013
3	1099	1694	1721	1582	1900	2043
4	946	1537	1545	1403	1498	1876
Grand Total	5034	7167	6928	6756	7351	8066

Source: MOE statistics section (2012)

From the study of form 1 cohort by 2007 in Table 2, out of the 1653 enrolled students, only 1403 completed secondary schooling in 2010 despite additional increase in

enrolment to 1893 in 2008 due to FDSE. It signals that even with FDSE, challenge of full participation lies in other intertwined and complex factors. Could it be that some students drop due to high cost of discretionary items e.g. uniforms, lack of adequate teaching – learning resources, long distances to schools, lack of parental guidance and poverty or lack of interest? This study aims at finding factors influencing students' enrolment and completion rates in public secondary schools in Mwingi central sub – County of Kitui County.

1.2 Statement of the problem

According to education sector report (2009), secondary enrolment grew from 1.18 million students in 2007 to 1.70 million students in 2010. The Gross Enrolment Rate (GER) for secondary school increased from 27.3 % in 1999 to 47.8 % in 2010. The Net Enrolment Rate (NER) recorded an increase from 28.9 % in 2008 to 35.8 % in 2010. These increments were as a result of introduction of FPE in 2003 and FDSE in 2008. According to the same report, the secondary school completion rate (SCR) grew from 52.5% in 2001 to 67.4% in 2010. This is a clear indication that nationally, Kenya is yet to achieve full participation rates because there are gaps between NER and SCR worth assessing.

According to the statistics obtained from DEOs office Mwingi central, out of 1968 students enrolled in form 1 in 2010, only 573 students completed form 4 in 2013. This represents a completion rate of 29.1%. The same report indicates the comparative completion rates in the neighboring sub counties as follows; Mumoni sub - County at 29.8%, Mwingi East sub - County at 30.7% and Mwingi West sub - County at 37.3%.

The report attributes the low completion rates in Mwingi Central sub – County to poor parents who are not able to afford secondary school fees and most secondary schools lack basic teaching and learning resources hence students drop and parents take them to village polytechnics. Most parents are semi illiterate with primary level of education hence they don't prefer taking their children to secondary schools hence the need of this study. The report also pointed that most secondary schools are day schools in Mwingi central sub – County. This implies majority of students walk long distances to school and able parents transfer them to boarding schools in other sub – Counties in the country. The same report pointed out that there has been efforts by the District Education Board to enhance schooling by sensitizing the parents and general members of community on the need to educate their children.

1.3 Purpose of the study

The purpose of this study was to analyze the institutional factors influencing students' participation rates in public secondary schools in Mwingi Central Sub - County of Kitui County in Kenya.

1.4 Objectives of the study

The research study was guided by the following research objectives.

- To assess the extent to which Free Day Secondary Education programme influence students' participation rates in public secondary schools in Mwingi Central Sub -County, Kitui County.
- ii) To examine the influence of parental level of education on students' participation rates in public secondary schools in Mwingi Central Sub County, Kitui County.

- iii) To determine the influence of availability of school physical infrastructure on students' participation rates in public secondary schools in Mwingi Central Sub -County, Kitui County.
- iv) To establish the influence of distance to and from school on students' participation rates in public secondary schools in Mwingi Central Sub County, Kitui County.

1.5 Research questions

In order to achieve the research objectives, the researcher endeavored to answer the following research questions.

- i) How does the Free Day Secondary Education programme influence students' participation rates in public secondary schools in Mwingi Central Sub - County, Kitui County?
- ii) To what extent does the parental level of education influence students' participation rates in public secondary schools in Mwingi Central Sub County, Kitui County?
- iii) What is the influence of availability of school physical infrastructure on students' participation rates in public secondary schools in Mwingi Central Sub – County, Kitui County?
- iv) How does distance to and from school influence students' participation rates in public secondary schools in Mwingi Central Sub County, Kitui County?

1.6 Significance of the study

The findings of this research study would be useful to the principals. The findings may help them find ways of increasing students' participation in their respective schools through sensitization of parents and community members on the need and importance of education of their sons and daughters. Kenya Institute of Curriculum Development (KICD) may also find the findings of the study useful in the review of curriculum and programmes affecting educational institutions in order to boost participation in secondary schools. This can done through development of curriculum for adult classes and mobile schools which would boost literacy levels among parents and members of community. NGO's such as UNESCO, who have invested heavily in education in Kenya, may have a better understanding of the factors that influence students' participation in public secondary schools and plan to invest accordingly. Educational planners may have a clear understanding of the key issues like cost of education and household education among others that face education sector and plan for them adequately. Other research scholars may use the findings of this study as a point of reference for their further research studies.

1.7 Limitations of the study

The major limitation of this study was lack of adequate and accurate records kept in schools on students' enrolment, on school physical infrastructure and lack of accurate records on background information of the students and information on parental education level. This limitation was minimized by comparing the data from the school with the one collected from the DEO's office Mwingi central sub - County.

1.8 Delimitation of the study

The research study was confined to public secondary school principals and teachers in Mwingi central sub – County of Kitui County in Kenya. The research study was concerned with factors influencing students' participation rates in public secondary schools in Mwingi central sub - County. Only public secondary school teachers and principals participated in the research study because public secondary schools have similar set up guided by policies from the Ministry of Education.

1.9 Basic assumptions

Assumptions refer to any important facts presumed to be true but not actually verified (Mugenda and Mugenda, 2003). This research study was based on the following assumptions;

- i) The respondents would be honest and truthful in their responses.
- ii) All the students were residents of Mwingi central sub County.
- iii) The head teachers would allow the researcher to access school records on students' enrolment and attendance and also school inventories.

1.10 Definition of significant terms

Basic education refers to either primary and secondary education or their equivalence.

Free secondary schooling policy refers to the FDSE programme which was unveiled by the GOK in beginning of February, 2008, where the GOK promised to subsidize secondary education by Ksh. 10,625 per year per child.

Gross Enrolment Rate is the number of students enrolled in secondary school level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the secondary school level of education.

Parental education refers to the parents' and guardians' level of education and their professional status.

Net Enrolment Rate is the number of students in the theoretical age group of secondary school level of education enrolled in the level expressed as a percentage of the total population in that age group.

Participation is a general term used to refer to active involvement in secondary school education in terms of enrolment and completion rates.

Principal refers to the title of the head administrator of a public secondary school in Kenya.

School physical infrastructure refers to adequacy and availability of teaching and learning resources and facilities.

Transition this is changing from one state to another. It means the students who enrolled in school in form one are able to go through the four years course. The students are able to graduate or proceed to the next stage or class.

Public Secondary School refers to an institution wholly owned by the Government of Kenya for education and training purposes.

1.11 Organization of the study

The research study is organized in five chapters. Chapter one is introduction and focuses on the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitation of the study, basic assumptions, definition of significant terms and organization of the study. Chapter two is review of related literature and includes; introduction, literature review outside Africa, review of literature from Africa, literature review from Kenya, Free Day Secondary Education programme and students' participation rates, parental level of education and students' participation rates, availability of school physical infrastructure and students' participation rates, distance to and from school and students' participation rates, summary of literature review, theoretical framework and conceptual framework. Chapter three explores; introduction, research design, target population, sample size and sampling techniques, research instruments. instrument validity, instrument reliability, data collection procedure/techniques and data analysis techniques. Chapter four includes; data presentation, analysis and interpretation. Chapter five presents summary, conclusions and recommendations

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

Aspects of quality education have been tackled by various writers, educationists, various bodies, diaries and government reports. This chapter highlights past literature on expansion and quality of education in terms of participation rates in the world, within Africa and more specifically highlight literature on various indicators of participation and quality of education in Kenya. The chapter has various subsections whose literature review is connected to this study problem. The literature discussed related to the factors influencing students' participation in public secondary schools. It particularly focused on Free Day Secondary Education programme, parental level of education, availability and adequacy of school physical infrastructure, distance to school and on how they influenced students' participation rates in public secondary schools. A summary of the main issues on the students' participation and quality education as well as the gaps for further studying was highlighted in this chapter.

2.2 Literature Review on participation rates outside Africa

In the many countries that are striving to guarantee all her children the right to education, the focus on access often over shadows the issue of quality; yet, quality stands at the heart of Education For All. It determines how much and how well students learn and the extent to which their education achieves a range of personal, social and development goals. This study sets the quality debate in its historical context in order to understand the current knowledge about factors that influence participation and quality of secondary education.

Quantitative analysis is one approach of understanding and improving quality of education and participation. Adams (1993) defined educational quality as quality resources and inputs, quality content, quality process and quality output and outcome. Adams (1993) further adds that educational quality can be defined as one of the above or a combination of the above as seen in UNICEF (2004). World conferences on education expansion stressed the need to match quantitative with qualitative expansion of education. Dakar framework for action 2000 in Senegal made it clear that efforts to expand access to education will be in vain if completion and quality are not ensured. UNICEF (2005), adds to notion that consideration of educational participation and quality are not isolated from other aspects of an educational system notably access. The world conference in Jomtien Thailand announced an action plan to ensure that nations provide education of acceptable standards for all their citizens, (world declaration on EFA, 1990). The 2005 EFA global monitoring report entitled "quality imperatives" stress the achievement of universal participation in education will be fundamentally dependent on quality of education offered. In developing countries like Sri Lanka, Bangladesh, Brazil and Chile which used economic development dependant on education, have successfully expanded education quantitatively as well as making effort to increasing quality of education in terms of learning outcomes (UNESCO, 2005).

Poor countries like Bangladesh are faced with the challenge of losing the enrolment while at the same time addressing the quality of education offered. Republic of Korea is one of the South East Asian countries, which pursued a strategy of building a larger stock of trained human resources, to attract knowledge required in intensive investment and boost economic expansion. By 1959, Korea had managed 96% of its children in primary school

leading to rapid development of education of youth and adults and sustained economic growth. By 1980, Republic of Korea had shifted its emphasis on education quality (KEDI, 1979). This was because expanding demand for schooling had resulted in overcrowded classrooms and excessive competition for scarce places in secondary and tertiary education; which was felt to be harmful for parents and learners. To improve quality, teachers, received longer training, better incentives and school physical facilities were improved. Advisory bodies that transcended political regimes were founded and sought consistency in educative policy (ROK Korea 2003: 23037). In Cuba, access to education is abundant and easy at all levels due to high investment in education, like 10-11% of GDP. To improve quality, emulation occurs among pupils, teachers and schools. Mechanism are put in place to ensure that students, teachers and schools benefit from the experience of others, for example, group of teachers meet frequently for mutual learning and joint development of curricular, methods and materials for teaching and learning process, (Gasperini, 2007). Sirilanka is making progress in both access and quality. Grade repetition and dropout rate have declined while promotion rate stood at 98% in 2001, an indicator of participation rates and quality. Teacher pupil ration fell from 24:1 to 22:1 between 1992 and 1999 (National Institute of education of Sirilanka, 2002).

2.3 Review of literature on participation rates from Africa

In Africa, countries like Senegal and Egypt have managed to expand education quantitatively. However, completion and quality of education remain a challenge. For example in Senegal, though three quarters of pupils completed education, nevertheless, there is weakness in curricula, teaching and quality assurance (Latif, 2004). In Egypt, 1990 to 2000 saw a great expansion in education. Quality was placed high on agenda.

Though grade repetition and dropout rates have been declining since early 1990s, achievement tests did not indicate any progress in quality (World Bank, 2002). Judging from the performing developing countries, for qualitative reforms to succeed in countries or systems where there is universal access like Kenya, the governments need to play a leading role and a robust long term vision for education.

Contextual difference limit the transferability of policy lessons from one country to another even among relatively comparable countries, especially reforms aimed at rising quality of education are politically more difficult to pursue than those that aim at expansion. This means that political context is likely to have a strong impact on the prospects for reform irrespective of the technical and resource context of the school system. (OECD, 2004). This calls for study in Kenya on qualitative and quantitative of secondary education.

2.4 Literature Review on participation rates from Kenya

This section covers review of literature on factors influencing participation rates in education to determine levels of quality of education in secondary level of education in Kenya. Review was on headings like: Free Day Secondary Education programme, parental level of education, availability and adequacy of school physical infrastructure, distance to school and on how they influenced students' participation rates in public secondary schools. A summary of literature review was done to help identify gaps for further study.

2.4.1 Influence of FDSE programme on students' participation rates

Free Day Secondary Education programme has a direct influence on participation in public secondary schools. This programme involves activities that are carried out in and out of schools in terms of cost of education which in the end influence students' completion in public secondary schools. In the view of this study, the researcher focused on timeliness and adequacy of free education funds and cost of non – discretionary items. The Government of Kenya officially launched the free day secondary education programme at the beginning of 2008 because many Kenyan children who completed primary school were not getting access to secondary school, mostly because of school fees. The President of Kenya then emphasized that the main objective of providing free secondary education is to ensure that children from poor households acquire a quality education that enables them to access opportunities for self – advancement and become productive members of society (Speech by President Kibaki, February 2008). In order to implement the policy, the government promised to subsidize Ksh10, 265 per child per year for all the children in government secondary schools.

A research study by Asayo (2009) in Makueni district on whether the free secondary education enables the poor to gain access points out that, after the introduction of the new programme, the overall fees for secondary schools were substantially reduced by 41%. This suggests that government secondary schools have become more affordable for some children. However, this suggests that costs of secondary schooling are still substantially high and this leaves many children from poor households without access to secondary schools.

According to Asayo (2009), while the governments are intending to extend free education, they often allow public schools to levy fees for limited items such as school buildings and for non tuition costs which include sports fees, school meals, uniforms and textbooks such as dictionaries among others. Even though officially most fees are not sanctioned by the government, the fees are often used to make up for lost revenue due to a delay in governmental subsidies. Unlike school fees where household contributions were reduced after the free education, there was no change in non – discretionary items that parents are required to provide. These items are very expensive. This has a direct influence on participation in secondary schools.

A research study carried out by Ogwara (2006) in Kisii on the factors influencing enrolment and completion rates in public secondary schools points out that, government educational policies that aim to expand and increase access to secondary education and unpopular curriculum among other factors had an influence on the enrolment and completion rates in secondary schools. He observed that 78.0% of the respondents said that government educational policies influenced enrolment and completion rates in secondary schools.

According to Njeru and Orodho (2003), Secondary school enrolment increased in absolute numbers between 1963 – 2000. However, from 1988/89 enrolment dropped considerably, with the greatest drop from 41.5% in 1990 to -0.69% in 1991, and a further drop between 1992 and 1993 from 2.4% to -15.5%. These declines coincided with the introduction of the cost – sharing strategy in education during the 1988/89 fiscal year and further adjustments in the education sub – sector in 1991/92 fiscal year, through the Education Sector Adjustment Credit (EDSAC). The latter emphasized enhanced

implementation of user fees, limited employment of staff in educational institutions, restricted recruitment to teacher – training colleges and enrolment in universities, provision of school texts in the disadvantaged and ASAL districts and quality education and budget rationalization within the sector. This clearly indicates that government educational policies have a direct influence on participation rates in secondary schools.

2.4.2 Parental level of education influence on students' participation rates

Parents play a major role in determining participation in public secondary schools. Students come from the household and therefore their completion in education is very much influenced by their home environment. In the view of this study, parental education included educational level and the professional status of the parents and guardians. This in return influences the household income levels and their attitude towards schooling.

According to a report by Ministry of Planning (2009), most of the households in Mwingi, were predominantly male headed, of poor socio – economic status with household heads having low levels of education. Mwingi does not fare well in terms of social infrastructure, healthcare and education. A 2008 UNICEF/Central Bureau of Statistics study in Mwingi identified healthcare and nutrition as major challenges to child welfare in Mwingi. These problems in turn manifest in the education system where enrolment, retention and transition numbers have been shown to be dependent household food sufficiency. The government, religious institutions and several NGOs have, as a result, established different food intervention programs, including school feeding programs, to ameliorate the impact of food insufficient and by extension improve educational attainment and achievement. Other than household level variables, there are other community or government level factors that impact negatively on education: limited

number of educational institutions (356 primary schools and less than 50 secondary schools) as well as teacher: pupil ratio of 1:45 (Kenya Demographic and Health Survey, 2009).

Wanjala and Onyango (2007) carried out a research on factors influencing participation rates in public primary schools in Rangwe division of Homa – Bay district, Kenya. The two pointed out that, household based factors lowered the participation rates in public primary schools. They observed that, 85.5% of the class teachers said that the household attitude towards the school influenced the participation rates. 100% of the class teachers also revealed that poverty and parental education are important factors that influenced participation rates. Feckless parents were cited by an overwhelming majority of class teachers (93.6%) as influencing participation rates in the same research study. By extension, this clearly indicates that parental level of education played a major role influencing participation rates and provision of quality secondary education.

Overall, research has shown that individuals from poor backgrounds are more likely to be constrained by information. Providing individuals with more information on the benefits of education, the quality of secondary schools and on the school selection process could boost secondary school enrollments and completion rates and also allow students from poorer backgrounds to access better quality schools. Jensen (2010) finds that providing students with information on the earning returns to education led students to update their beliefs about the expected returns to education and subsequently reduced dropout rates and ultimately increased school completion.

International reports, for example the EFA Global Monitoring Report (UNESCO 2012), Girls are less likely than boys to make it to lower secondary school in most Sub Saharan African countries where overall enrolment is low. For example, in the Central African Republic in 2011 only one girl was in lower secondary school for every two boys. This report attributes this to a near universal fundamental cultural bias in favor of boy child. The widespread operation of patriarchal systems of social organization, of customary early marriage, of the incidence of early pregnancy, of heavier domestic and subsistence duties of females, a generally lower regard for the value of female life, all combine to adversely affect the participation of girls and women in formal education.

2.4.3 Adequacy of school physical infrastructure influence on students' participation rates

Availability and adequacy of school physical infrastructure greatly influences the participation rates of students and quality of education in public secondary schools. In the view of this study the school physical infrastructure included adequacy and availability of teaching – learning resources and facilities.

Available literature supports the use of teaching and learning resources in schools for quality learning to take place. They make learning become meaningful and abstract concept simplified and made real by use of resources. Onyango, (2001) explains that material resources are those designed, modified and prepared to assist in teaching and learning. Such included text books, reference books, chats, teacher's guides, manuals, journals, reports, maps and raw materials like laboratory chemicals.

Ayot, (1984) concurs with Onyango, when he emphasizes that text books are valuable books for teaching but their value is limited if the pupils cannot obtain or do not use them. According to Eshiwani (1993), schools achievements are determined by the availability of facilities such as desks, text books, quality teachers, laboratory facilities and library facilities. Lack of text books and other teaching/learning materials, and

teacher unpreparedness, who taught without schemes of work and lesson plans are some of the major problems postulated by Malusu (1981), hence, importance of textbooks and other teaching learning material cannot overemphasized; and requires proper planning in production and distribution to enhance participation and quality education.

A research study by Ndung'u (2008) in his findings, he found that, school – based factors influencing participation rates included adequacy and availability of teaching – learning resources and facilities. Otieno and K'Oliech (2003) did a research on factors affecting transition to secondary education in Africa. In their study they pointed out that, the factors that affect transition to secondary education in Africa include; Inadequacy and unavailability of teaching – learning resources, the gender specific factors that mostly affect girls, parents' low levels of educational attainment, early marriages and pregnancies, the impact of HIV/AIDS and other population dynamics. According to the same study, other factors include; long distances to schools especially in underdeveloped remote areas, political factors – including political instability and lack of political commitment.

A research by Wanjala and Onyango (2007) observed that school physical facilities are major determinants of participation rates and quality of education in schools. They cited

factors such as limited school facilities and low school quality as having negative impact on participation rates and quality of education.

2.4.4 Influence of distance from and to school on students' participation ratesDistance to school greatly influences students' enrolment, retention and completion rates in public secondary schools. In the view of this study, distance to school basically included the distance covered by students from home to school.

According to Wanjala and Onyango (2007) in their research study, they pointed that distance to school was further cited as a major factor influencing participation rates of pupils in public primary schools in Rangwe Division of Homa district. They particularly observed that those pupils who walk long distances to are less likely to complete standard 8 compared to the ones who walk shorter distances to school.

Chabari (2010) did a study on challenges facing effective implementation of free secondary education in public secondary schools in Kangundo district, Kenya. In his study he pointed that long distance to school also often hinders some children from participating in secondary education. This is particularly so in rural areas where population density is relatively low and households are widely scattered.

2.5 Summary of literature review

Research studies have shown as indicated in the literature review, that students' participation in secondary schooling is influenced by myriad of factors. They include social – cultural factors as indicated by EFA Global Monitoring Report (2012) and economic factors, school – based factors and home – based/community – based factors as

observed by Ndung'u (2008) in his research study. This is in agreement with another research study by Wanjala and Onyango (2007) who assert that educational or institutional processes, school – based factors, household/community – based factors and pupils attributes lowered participation rates in public primary schools. However, these studies did not hint on factors that would influence students' participation in secondary schools in Mwingi central district, hence the need of this study.

2.6 Theoretical framework

This study was based on production function theory which is one of the neoclassical theories. This theory was first formulated by Philip Wicksteed in 1894. He was the first to algebraically formulate the relationship between the outputs and inputs. Other proponents of this theory include Chiang Alpha in 1984 and Robert Ayres in 2009. Philip expressed the production function theory in a functional form as shown below.

$$Q=f(X_1,X_2,X_3,\dots,X_n)$$
 Where $Q=$ Quantity of output and $X_1,X_2,X_3,\dots,X_n=$ Quantities of factor inputs.

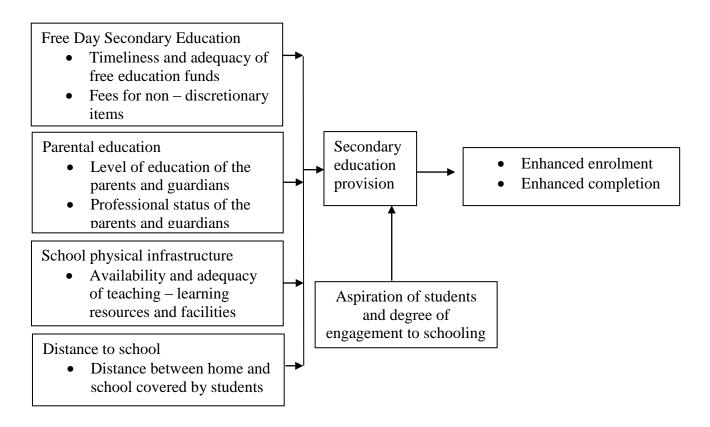
It states that a given number of inputs or factors of production can produce a wide range of outputs. This is all dependent on the way the inputs are organized, planned and implemented. This theory relates the physical output of a production process to the physical inputs or factors of quality production. Production function theory specifies the maximum output obtainable from a given set of inputs or factors of production.

In this study the inputs or factors which guarantee enhanced students' participation and provision of quality education to the secondary school students include; free secondary schooling programme, parental education, distance to school and school physical infrastructure. When these factors are organized, planned and implemented logically in

secondary schools, there is guaranteed educational outputs which include enhanced enrolment and completion rates.

2.7 Conceptual framework

Figure 2.1 A conceptual framework for factors influencing students' participation rates in public secondary schools



The conceptual framework provides a means of understanding how participation in public secondary schools is influenced by a number of factors. These factors include; Free secondary schooling programme, parental education, distance to school and school physical infrastructure. All these variables have a bearing on secondary schooling and were treated as the independent variables. The intervening variables were aspiration of students and degree of engagement to schooling. The dependent variables were enhanced enrolment and completion.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section consisted of research design, target population, sample size and sampling techniques, research instruments, data collection procedures, instruments validity, instruments reliability and data analysis techniques.

3.2 Research design

Research design is the pattern that the research intends to follow, the plan or strategy for conducting the research (Oso & Onen, 2009). This research study was carried out between March of 2014 and March of 2015 as part of an effort to create a viable data base for educational planning. The study utilized a descriptive survey research design and was descriptive in nature. The researcher preferred descriptive survey research design because the research was intended to produce statistical information about factors influencing students' participation in public secondary schools of Mwingi central sub — County. Moreover, the design allowed gathering of information, summarizing, analyzing, presenting and interpreting it for the purpose of clarification. This was in line with Koul (1984) who points out that descriptive survey research design can enable the researcher to collect descriptions of existing phenomena with the intent of employing data to justify current conditions and practices or make more intelligent plans for improving them.

3.3 Target population

Target population refers to an entire group of individuals, events or objects having a common observable characteristic of interest to the researcher (Mugenda & Mugenda

2003). According to Mwingi central District Education office schools' data, by February 2015, the district had 321 teachers; 256 male teachers and 65 female teachers. In addition, the district had 30 public secondary schools with a total of 6,900 enrolled, out of which, 3,632 were boys and 3,268 were girls. If we categorize them per divisions, Waita division had 6 schools, Central division had 13 schools, Kiomo/Kyethani division had 6 schools and Mumbuni division had 5 schools. This study targeted all the public secondary schools in Mwingi central sub - County.

3.4 Sample size and sampling techniques

A large sample was statistically chosen for this study so as to minimize the possibility of sample error. Based on this premise, 60% of the 30 public secondary schools were adequate for the purpose of this research study. The researcher used a sample size of 18 public secondary schools. Kombo and Tromp (2006) recommended that a sample size of at least 10% of the target population would be representative.

Simple random sampling technique was applied to select the 18 schools out of the total 30 public secondary schools in the district because all the 30 public secondary schools in the sub - county had the same probability of being chosen. To select schools, the researcher obtained a list of all public secondary schools in the sub - County, and then categorized them per division. The name of each school was written on a piece of paper, rolled and then dropped into either of the four boxes labeled Waita division, Central division, Kiomo/Kyethani division or Mumbuni division accordingly.

The researcher then started by drawing papers from the box labeled Waita division by picking one piece of paper at a time and recorded the name of the school picked. The

drawing of the sample and recording of the schools' names continued until a sample size of 3 secondary schools from the Waita division was achieved. The same procedure was applied to boxes labeled Central, Kiomo/Kyethani and Mumbuni divisions. A sample of 7, 5 and 3 secondary schools was obtained from Central, Kiomo/Kyethani and Mumbuni divisions respectively.

From the 18 sampled secondary schools, principals were purposively selected to participate in the study because they were key administrators in public secondary schools. Two class teachers from form four and form three respectively were selected to participate in the study through purposive sampling because they were likely to have more information about their students, since they were always charged with the responsibility of marking class attendance register and constantly interacted with students, parents and the other teachers. 5 form four and form three students respectively were randomly selected to participate in this study. In summary, the research study had a sample size of 234 respondents, which comprised of 18 principals, 36 class teachers and 180 students.

3.5 Research instruments

A research instrument is a device or tool used for gathering and collecting data with the view of answering stated research questions (Oso & Onen 2009). Two research instruments namely; questionnaires and an observation guide were utilized for data collection. Questionnaires were administered to principals, class teachers and students. Both categories of questionnaires had two sections each. Section A; gathered background information while Section B; gathered information on factors influencing students' participation in public secondary schools in Mwingi central sub - County of Kitui County

in Kenya. The questions were structured in both close – ended format to elicit certain responses and open – ended format to leave benign room for respondents to any additional information that would be deemed paramount for the study yet not captured by the researcher. The target populations were largely literate and were unlikely to have had difficulties responding to questionnaire items.

School physical infrastructure was observed within the sampled public secondary schools using an observation guide that was specifically constructed for the purpose of this study. It contained items to be observed. As an instrument for data collection, direct observation was deemed fit for this study because it allowed the researcher to verify empirically selected items and to triangulate information obtained through the questionnaires.

3.5.1 Instruments validity

Validity is the degree to which a test measures the variables it claims to measure (Kathuri & Pals, 1993). The instruments were rated in terms of how they effectively sampled significant aspects of the research study. The validity of the research tools was done by presenting the instruments to an expert including my university supervisors who ascertained their face and content validity and made commendable corrections especially in the relevance of the tools in the research study objectives.

3.5.2 Instruments reliability

Reliability of an instrument is the consistency in providing reliable results. According to Mugenda and Mugenda (2003), the reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability focuses on the degree to which empirical indicators are consistent

across two or more attempts to measure the theoretical concept (Orodho, 2009). According to Wiersma (1985), reliability is the consistency of the measuring instrument in measuring whatever it measures. It is the degree to which an instrument will give similar results for the same individual at different times. The researcher used split half method in testing reliability of the instruments. This method required only one testing session then splitting the test into two halves each half scored independently of the other with items of the two halves matched on content and difficulty. Spearman's rank order correlation was used to compute correlation co – efficient. The coefficient of co – relation determined the extent to which the two sets of ranking are similar or dissimilar. This was determined using the spearman's rank order formula:

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

 r_s = the correlation coefficient

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

n = the total number of observations

According to Mugenda and Mugenda (2003), a coefficient of 0.80 or more implies that there is a high degree of reliability of the data. For this research study, a correlation coefficient (r) of about 0.80 was high enough to judge the reliability of the instruments used.

3.6 Data collection procedures

The researcher carried out the research study for a period of about twelve months under the guidance of the university supervisors. Upon approval of the research proposal, the researcher first obtained research permit from the National Commission of Science, Technology and Innovation (NACOSTI). Upon being granted the permission to carry out the research study, the researcher reported to Mwingi Central Sub - County Education Officer (SCEO) for further permission and then proceeded to the selected public secondary schools with a letter of introduction explaining the purpose of the study and the research permit.

The researcher visited the selected secondary schools in the Sub - County and further obtained permission from the principals in order to access the respondents. The researcher personally administered the questionnaires to class teachers, principals and students. The researcher left the questionnaires with the respondents and collected them after a period of two weeks. The researcher assured the respondents' confidentiality of the information they gave. The researcher also gathered data on physical infrastructure using the constructed direct observation guide from the schools visited.

3.7 Data analysis techniques

According to Mugenda and Mugenda (2003), data obtained from the fields in raw form is difficult to interpret. Such data must be cleared, coded, key punched into computer and analyzed. All the questionnaires were ascertained for completeness before analysis started. Discrete data from the responses was crucial in answering the research questions that were generated. Descriptive statistics was used to analyze data and information generated was tabulated by use of frequencies and percentages tables.

Mugenda and Mugenda (2003), asserts that the purpose of descriptive statistics is to enable the researcher to meaning fully describe the distribution of scores or measurements using low indices or statistics. Once the questionnaire and other instruments were administered, the mass of raw data collected was systematically organized in a manner that facilitated analysis; data was converted to numerical codes representing attributes of measurement variables. Graphical representation of statistical data was also used in data analysis. The graph enables the reader to see the distribution more easily than is possible by simply working out numbers in a frequency distribution, (Mugenda and Mugenda 2003). As Onyango (2001) observes, statistical package for social sciences (SPSS) computer program is known for its ability to handle large amount of data and given its wide spectrum of statistical procedures purposefully designed for social sciences, it was also quite efficient. The findings were presented through narrations, use of graphs and direct quotations. Quantitative data was analyzed descriptively using frequency and percentage tables upon which the data findings were interpreted easily without strain. The most common response was therefore considered to be the most prevalent in determining factors affecting students' participation in secondary education in the locale of the study. Thereafter inferences, conclusions and recommendations were being drawn. All this was done along the specific objectives of this research study.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents the data analysis, interpretation and presentation of the data collected during fieldwork. The analysis and interpretation have been done within the framework of the core objectives that the study sought to address. For ease of understanding, different methods of the presentation of the data collected are used, these include frequency tables and percentages. The chapter is divided into sub – sections where general information of the respondents such as age, gender, highest education level and years of service is captured. The data is analyzed as per the objectives and the research questions of the study. The purpose of this chapter is to present the result of the procedures described in the methods and present evidence in form of frequency tables, percentages and figures on the institutional factors influencing students' participation in public secondary schools in Mwingi Central sub – County, Kitui County, Kenya.

4.2 Questionnaire return rate

This section provides a profile of respondents who participated in this study. A total of two hundred and thirty six questionnaires were given to the respondents. Eighteen questionnaires for the principals, one hundred and eighty questionnaires for the students and thirty six questionnaires for the class teachers. A total of two hundred and thirty six questionnaires were returned giving a return rate of one hundred percent as shown in table 4.1.

Table 4.1

Questionnaire return rate

Respondents	No. given	Frequency	Percentage
Principals	18	18	100%
Class teachers	36	36	100%
Students	180	180	100%
Total	236	236	100%

N = 236 Respondents

The average questionnaire return rate was one hundred percent which was considered appropriate for the research findings of the study.

4.3 Background information of principals, class teachers and students

For the researcher to find out the institutional factors influencing students' participation in public secondary schools in Mwingi Central Sub – County, Kitui County, Kenya, it was important to establish the background information of the respondents which included age of the respondents, gender of the informants, work experience and background information about the sampled public secondary schools. The distribution of the respondents according to the above demographic characteristics was shown in the following tables 4.2 & 4.3.

4.3.1 Age of the principals, class teachers and students.

The respondents were requested to indicate their age. Table 4.2 shows their responses.

Table 4.2

Age of the principals, class teachers and students.

Age	Principals		Class teach	ners	Students	
	Frequency	%	Frequency	%	Frequency	%
14 - 18	-	-	-	-	105	58.3
19 - 24	-	-	21	53.8	65	36.1
25 - 30	-	-	5	13.9	10	5.6
31 - 35	1	5.6	5	13.9	-	-
36 - 40	5	27.8	5	13.9	-	-
41 - 45	5	27.8	-	-	-	-
46 - 50	5	27.8	-	-	-	-
Above 50	2	11.1	-	-	-	-
Total	18	100	36	100	180	100

N = 236 Respondents

Age is very important critical factor in education provision. 83.4% of the principals were in mid – life age gap from the findings. This gives an indication that most of the principals had served in the profession for a good number of years. This implies that they clearly understood the institutional factors that would influence participation of students in secondary schools. This also indicates that the data obtained from them was reliable. About 54% of the teachers were aged between 19 - 24 years. This indicates that the senior classes were being managed by inexperienced and may be trainee teachers. This was an indication that most teachers lacked the requisite qualifications and experience in teaching in secondary schools. This also indicates that most of the teachers had not

interacted so much with the students and their parents. It also indicates majority of teachers lacked experience and skills which would enhance participation of students in public secondary schools. According to Table 4.2 above, 58.3% of the students were in the right age of secondary school students. However, 41.7% of the students in secondary schools were over age which is an indication of wastage in the education sector. This is a result of students either repeating classes or over staying at home before joining class one.

4.3.2. Gender of principals, class teachers and students.

The informants were requested to indicate their gender. The researcher sought to know the gender of different respondents. Below were their responses.

Table 4.3

Gender of principals, class teachers and students

Gender	Principals		Class teachers		Students	
	Frequency	%	Frequency	%	Frequency	%
Male	6	33	22	61	82	45.6
Female	12	67	14	39	98	54.4
Total	18	100	36	100	180	100

N = 326 Respondents

Table 4.3 shows that 67% of the principals were female. For the class teachers, 61% were male. For the students, 54.4% of the students were female. Since the respondents were mainly students, it implies that most of the students in public secondary schools in Mwingi Central Sub – County were dominated by females as opposed to males.

4.3.3 Category of schools

The researcher sought to know the category of different schools in Mwingi Central Sub – County. These were the responses of the informants.

Table 4.4
Category of schools

Gender	Principals		Class teachers		Students	
	Frequency	%	Frequency	%	Frequency	%
County	3	17	6	16.7	30	16.7
District	15	83	30	83.3	150	83.3
Total	18	100	36	100	180	100

N = 236 Respondents

This study revealed that 83.3% of schools were district secondary schools. District secondary schools draw majority of the students from within the district (MOE, 2001; MOE, 2005). Therefore majority of the students in public secondary schools in Mwingi central sub – county come from similar social cultural set up. The factors influencing the participation in secondary schools are therefore common among all students.

4.3.4 Nature of schools

An item was included in the questionnaire for principals, class teachers and students which sought information on the nature of the schools in the sub – county. The study revealed that majority of the schools was mixed day secondary schools as presented on Table 4.5.

Table 4.5
Nature of schools

Gender	Principals		Class teach	Class teachers		
	Frequency	7 %	Frequency	%	Frequency	%
Boys' boarding	1	5.5	2	5.5	10	5.5
Girls' boarding	1	5.5	2	5.5	10	5.5
Mixed day	16	89	32	89	160	89
Total	18	100	36	100	180	100

N = 236 Respondents

The study revealed that 89% of schools were mixed day secondary schools and 11% were Girls' boarding and boys' boarding secondary schools. The study revealed that most of the students came from mixed day schools. The students who formed the majority of the respondents came from similar social cultural set up and therefore the factors influencing their participation in secondary schools are common to all. This also indicates that majority of students walk from home to school every day which may greatly affect the participation of the students in secondary education.

4.3.5 Level of education principals and teachers

The respondents were requested to indicate their highest academic levels. Table 4.6 shows their responses.

Table 4.6
Highest level of education

Education level	Principals		Class teachers	
	Frequency	%	Frequency	%
K.C.S.E	-	-	20	55.6
Diploma	2	1.1	-	-
Degree	14	77.8	14	38.9
Masters	2	1.1	2	5.6
PHD	-	-	-	-
Total	18	100	36	100

N = 54 Respondents

Table 4.6 above shows that 55.6% of the teachers teaching in public secondary schools in Mwingi central sub – County were form 4 leavers with only KCSE certificate. 77.8% of the principals were degree holders. This is a clear indication that some teachers in public secondary schools were competently trained to teach in secondary schools. From the findings it can also be deduced that majority of the teachers were KCSE certificate holders which means they are not competent to handle education matters competently.

Implementation of free secondary education requires adequate skills especially for the management. School administrators 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 most principals were degree holders. Robbins (2003) notes that the skills needed for effective planning and management can

be grouped into three broad categories, namely technical skills, human skills and conceptual skills.

4.3.6 Years of service as a principal and as a teacher

An item was included on the principal's and class teacher's questionnaires which sought information on principals' and class teachers' teaching experience. Table 4.7 presents information on principals' and teachers' experience. The study revealed that 72.2 % of the teachers had a teaching experience of between 0 - 5 years and 28.8 % had teaching experience of between 6 - 15 years. The study revealed that 77.8% of the principals had served as principals for 0 - 5 years.

Table 4.7

Years of service as a principal and as a teacher

Years of service	Principals		Teachers	
	Frequency	%	Frequency	%
0 - 5	14	77.8	26	72.2
6 – 10	4	22.2	4	11.1
11 – 15	-	-	6	16.7
Total	18	100	36	100

N = 54 Respondents

The study revealed that the principals had been principals for a period ranging between 0 – 5 years. This means that they have more experience in teaching which makes them understand the students better. The principals can also make customized programmes and strategies to help improve participation rates in secondary school in Mwingi Central Sub

– County. MOE (2007) recommends that schools should create enabling environment and management structures and implement affirmative strategies to benefit all her children in terms of education and training. As shown on table 4.7, 72.2% of teachers have been serving as teachers for a period ranging from 0-5 years. This is a clear indication that they are not very much experienced in the teaching profession and they have not interacted for some good time with students and parents.

4.3.7 Years of service as principals/teachers in a particular school

The respondents were requested to indicate the number of years they had served in a particular school. Table 4.8 shows their responses.

Table 4.8

Years of service as principals/teachers in particular school

Years of service	Principals		Teachers	
	Frequency	%	Frequency	%
0 - 5	14	77.8	26	72.2
6 – 10	4	22.2	4	11.1
11 – 15	-	-	6	16.7
Total	18	100	36	100

N = 54 Respondents

As shown on table 4.8, 72.2% of teachers have been serving as teachers in one school for a period ranging from 0-5 years. This is a clear indication that they have not been interacting with the education matters for a long period. Besides their experience, the class teachers are better placed to give proper guidance to enhance retention of secondary

students in school (MOEST 2001). Mureithi (2006) observed that job satisfaction increase with experience. Therefore majority of teachers have more work experience which makes them create and sacrifice more of their time in handling factors leading to participation of students in education. These teachers can also give more counseling to the female students who are more vulnerable to some cultural values and practices which can hinder their participation in education.

4.3.8 Number of TSC and BOM teachers in a particular school

The respondents were asked to indicate the number of teachers employed by the Board of Management and Teachers Service Commission in different schools. Table 4.9 shows their responses.

Table 4.9

Number of TSC and BOM teachers in a particular school

Nature of employment	Principals		Teachers	
	Frequency	%	Frequency	%
TSC	54	33.3	54	33.3
ВОМ	108	66.7	108	66.7
Total	162	100	84	100

N = 54 Respondents

The study revealed that majority of the schools had BOM teachers at 66.7% compared to TSC teachers at 33.3%. This indicates an acute teacher shortage in Mwingi central Sub – County which is an educational planning issue of concern impacting negatively on students' participation in secondary education in Kenya.

4.3.9 Enrolment in 18 public secondary school in Mwingi central Sub – County

The respondents were requested to indicate the number of students enrolled in their schools from 2010 to 2015. Below are the results of this research study.

Table 4.10: Mwingi Central Sub - County 18 secondary schools enrolment from form 1 to form 4 (2010-2015)

Year	2010	2011	2012	2013	2014	2015
Form	Enrolment	Enrolment	Enrolment	Enrolment	Enrolment	Enrolment
1	1260	1156	1239	1097	1123	1378
2	1123	1250	1100	1234	1108	1089
3	1168	1098	1234	1109	1122	1053
4	1240	1154	1123	1098	989	1087
Grand Total	4791	4658	4696	4538	4342	4607

From the study of form 1 cohort of 2010 in Table 4.10, out of the 1260 enrolled students, only 1098 completed secondary schooling in 2013. According to the research study, the form 1 cohort of 2011 of 1156 students enrolled, only 989 students completed in 2014. According to the table 4.10, 1239 students enrolled in 2012 and only 1087 were in form 4 in 2015. Over the years, there has been progressive decrease in enrolment despite FDSE which was meant to lower the costs of secondary education hence enhancing the participation rates in secondary education in Kenya. The findings of this study agrees with the report obtained from the DEO's office Mwingi central Sub – County that there has been continued declining enrolment rates for a cohort which joins form one up to the time they exit the secondary school from form 4.

4.3.10 Enrolment and Completion rates in a particular school according to principals and teachers

The question of Enrolment and completion rates was asked in trying to establish the status of participation rates in secondary schools in Mwingi central Sub – County. Their responses are as presented in table 4.11

Table 4.11

Enrolment and Completion rates in a particular school

Response	Principals		Teachers	
	Frequency	%	Frequency	%
Very good	1	5.6	3	16.7
Good	12	66.7	20	38.8
Average	5	27.7	10	27.8
Unsatisfactory	-	-	3	16.7
Total	18	100	36	100

N = 54 Respondents

Table 4.11 shows that majority of the secondary schools in Mwingi central Sub – County had a good enrolment and completion rates which stood at 66.7% according to principals.

4.3.11 Enrolment and Completion rates in form 3 and form 4 classes

The class teachers were requested to indicate the status of the enrolments and completion rates in form 3 and form 4 classes. Table 4.12 shows their responses.

Table 4.12
Enrolment and Completion rates in form 3 and form 4 classes

Response	Teachers		
	Frequency	%	
Very good	4	11.1	
Good	18	50	
Average	8	22.2	
Unsatisfactory	6	16.7	
Total	36	100	

N = 36 Respondents

According to 50% of the teachers, the enrolment and completion rates were good as shown from table 4.12. This implies that most of the students aged between 14 - 18 years were attending school.

4.3.12 Average number of students per class

The sampled form 3 and form 4 students were requested to indicate the average number of students in their classes. This was meant to establish whether the classes were overenrolled or under enrolled. Table 4.13 shows their responses.

Table 4.13
Average number of students per class

Average number	Form 3		Form 4	
	Frequency	%	Frequency	%
20-29	10	11.1	16	17.8
30-39	70	77.8	72	80
40-49	10	11.1	-	-
50-59	-	-	2	2.2
Total	90	100	90	100

N = 180 Respondents

Table 4.13 indicates that majority of the classes had an average of students between 30 - 39 at 77.8% and 80% for form 3 and form 4 respectively. This implies that majority secondary schools in Mwingi central Sub – County had class enrolments which were below the recommend class enrolment of 45 students in Kenya.

4.3.13 Drop outs

The form 3 and 4 students were requested to indicate whether some students they had joined form one together had dropped out school. They were also asked to indicate whether they had brothers and sisters who dropped out of school. Table 4.14 shows their responses.

Table 4.14
Drop outs

Question	Response	Frequency	Percentage
Did some students drop out of school?	YES	160	88.9
	NO	20	11.1
	TOTAL	180	100
Do you have brothers/sisters who	YES	126	70
dropped out?	NO	54	30
	TOTAL	180	100

N = 180 Respondents

88.9% of the students indicated that some students they had started form one with had dropped out of school. 70% of the form 3 and 4 students also indicated that they had brothers and sisters who dropped out of secondary school. Some 30% of them indicated that they had no brothers and sisters who dropped out secondary school. This shows that there is a continued drop out in secondary schools in Mwingi Central Sub – County despite government interventions to enhance education for all.

4.4 Extent to which Free Day Secondary Programme influence students' participation in public secondary schools

This was the first objective of this research study.

4.4.1 Timeliness and adequacy of free education funds

The first research question sought to find out the timeliness and adequacy of funds allocated by the government for effective implementation of free day secondary school

education in Mwingi central Sub – county. Government support is essential to the growth of public educational institutions anywhere in the world, Kenya included. While doing the research, the principals, teachers and students were asked if the funds allocated to their schools were adequate to the school needs, to which all of them replied in the negative, that the funds allocated to them were not adequate to their school needs and they were not remitted in the right time. Table 4.15 shows the challenges faced by the principals in relation to finances from the government for free secondary education.

Table 4.15

Challenges related to timeliness and adequacy of funds for FDSE

Challenge	No. of principals	%	No. of teachers	%	No. of students	%
Inadequacy of funds	18	100	36	100	180	100
Late release of funds by the government	18	100	30	83.3	165	91.7
Delays in disbursement of funds by the government to the needy students	18	100	36	100	175	97.2
Students drop out of school due to fees balances	18	100	32	88.9	178	98.9

Table 4.15 shows that 100% of the principals, teachers and students confirmed that the funds allocated to their schools by the government were not enough to meet the school needs, and 100% of the principals indicated that Free Secondary Education funds were released late and there were delays in disbursement of the funds to the needy students. This implies that they were not able to perform daily school management functions because of this delay. For this reason, all respondents indicated that students were sent

home for having fees balances and consequently some students dropped out of school due to lack of school fees because their parents and guardians could not afford.

From the analysis 70% of the principals indicated that the government did not consider funding ongoing projects before implementing FDSE. This adversely affected schools because they had already organized their ways of funding projects before the government offered to pay for school tuition and most projects did not succeed as a result. A total of 100% of the principals, teachers and students experienced delays in the disbursement of funds to needy students, and this also affected the participation of students in secondary schools.

4.4.2 Fees on non – discretionary items

In addition to school fees, households have been responsible for providing non-discretionary costs. Unlike school fees where household contributions were reduced after the free education policy, there was no change in non-discretionary items that parents are required to provide. Table 4.16 presents details on items that are compulsory for each child. For instance, school uniforms are compulsory, and the average cost would be approximately Ksh. 5000 purchased at a rural market. However, the study found that parents in four public secondary schools visited were required to purchase uniforms from the school itself at a cost of between Ksh. 5500 and Ksh. 6000.

Books, stationery and other learning materials are other expensive items, which parents are often unable to afford. While schools are responsible for providing subject textbooks, parents are required to provide other books such as the bible, dictionaries, atlases and some other learning materials. Since the costs associated with these items are substantial

high, students often share books or temporarily borrow used ones from fellow – students who have completed secondary school. Some students indicated that they were sent back home when they reported in form one without some of these learning materials.

Games kits, which include standardized uniforms for sports activities, are also compulsory for all students. In addition, boarding students are required to possess items essential for boarding and to meet the travel costs. Although costs for each item vary, it can be estimated that direct costs for non – discretionary items for a day scholar could be Ksh. 10000 and for a boarding scholar Ksh. 23000 as shown in Table 4.16.

Together with the school fees, the field study estimates that the costs required by households for the first year preparation are Ksh18000 per pupil for public day secondary school and Ksh 31000 per pupil for public boarding secondary school as shown in Table 4.16.

Table 4.16

Costs for non – discretionary items and first year preparation fees

Item	Day school	Cost	Boarding	Cost
		(Ksh)		(Ksh)
Uniforms		5000		6000
Books/Learning materials		3000		5000
Boarding requirements		2000		12000
SUB -TOTAL		10000		23000
		10000		25000
Annual form one fees		18000		31000
TOTAL		28000		54000

Table 4.16 makes it clear that fees charged by secondary schools are still beyond the budget of some poor households. In addition, although the overall fees have been reduced, some schools charge higher amounts for the items they are allowed to levy from parents as shown in Table 4.16. Thus, unless the government monitors the charges levied by public secondary schools, 'free day secondary education' may not necessarily reach the very people it was intended to reach. Moreover, it was commonly observed that parents whose children are enrolled in new day secondary schools have to bear some costs for the construction of buildings.

4.4.3 Methods of coping with inadequacy of FDSE funds

Having seen that secondary schools in Mwingi central Sub – County were facing various challenges in relation to finances for implementing free day secondary education as tabulated in Table 4.15, it was important to find out the strategies employed by the principals to cope with the challenges. Table 4.17 shows how principals cope with the shortage of funds for FDSE.

Table 4.17
Methods of coping with inadequacy of FDSE funds

Coping strategy	No. of principals	%
Working on tight budgets	18	100
Seeking CDF funds for development projects	10	55.6
Subsidizing with PTA funds	15	83.3
Fundraising	17	94.4
Acquisition of goods on credit from suppliers	18	100
	5	27.8
Making budgets readjustments	7	38.9
Leaving some tasks undone Sending students home for fees	18	100

Table 4.17 shows that schools were operating under crisis to cope with inadequacy of FDSE funds. One hundred percent of principals confirmed that schools were operating on tight budgets. The schools were fundraising, acquiring of goods on credit from suppliers, making budget readjustments, borrowing money from other schools, leaving some tasks undone until funds are released by the government, seeking CDF partnership in development projects, seeking donor funding, subsidizing with PTA funds and sending students home to bring school fees.

On their part, the DEO and ZQASOs noted that the schools were struggling to meet their budgets indicating that funding was inadequate. They proposed that there was need to improve on capitation per student especially on tuition. This agrees with Lewin (2008) who asserted that projections of the financing required for 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 can not be expanded at the

present unit cost levels. 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 which adversely affect the curriculum supervision and implementation and participation in secondary school education.

4.5 Influence of parental level of education on students' participation in public secondary schools

The second objective of the research study was on influence of the parental level of education students' participation rates.

4.5.1 Level of education of parents and guardians

The respondents were asked to indicate the level of education of their parents in terms of percentages. This was meant to find out the level of education of parents and how it influenced the students' participation in secondary schools. Table 4.18 shows their responses.

Table 4.18

Level of education of parents and guardians

Education level	Principals		Teachers		Students	
	Frequency	%	Frequenc	cy %	Frequency	%
Illiterate	10	55.6	18	50	20	11.1
Primary	5	27.8	18	50	130	72.2
Secondary	3	16.4	-	-	20	11.1
College/University	-	-	-	-	10	5.6
Total	18	100	36	100	180	100

The findings on table 4.18 reveal that majority of the parents in Mwingi central Sub – County were illiterate according to 55.6% of the principals. Fifty percent of the teachers pointed out that majority of the parents were illiterate. According to students, 72.2% of their parents had primary level education.

The findings of this research study confirm the Kenya National Bureau of Statistics (KNBS) and Society for International Development (SID) report (2013). The reports indicated that only 14% of Kitui County residents have secondary level of education or above. Kitui Central constituency has the highest share of residents with a secondary level of education or above at 21%. This is twice Mwingi North constituency, which has the lowest share of residents with a secondary level of education or above. A total of 62% of Kitui County residents have a primary level of education only. Kitui Rural constituency has the highest share of residents with a primary level of education only at 64%. Some 25% of Kitui County residents have no formal education. Mwingi North

constituency where Mwingi Central Sub – County hails from has the highest share of residents with no formal education at 30%. Residents with primary level of education in Mwingi North are 89.5%.

4.5.2 Level of education of Form 3 and 4 parents according to the class teachers.

The form 3 and form 4 class teachers were required to indicate the level of education of their form 3 and form 4 parents. Table 4.19 shows their responses.

Table 4.19

Level of education of Form 3 and 4 parents according to the class teachers.

Education level	Form 3		Form 4	
	Frequency	%	Frequency	%
Illiterate	10	55.6	4	22.2
Primary	5	27.8	13	72.2
Secondary	3	16.4	-	-
College/University	-	-	1	5.6
Total	18	100	18	100

TOTAL 236 Respondents

Table 4.19 shows that majority of the form 3 parents were illiterate 55.6% while majority of form 4 parents were primary school graduates 72.2% according to their class teachers. This is in agreement with the general levels of education of all parents in the sampled schools. The level of education of parents determines the household income levels too.

For many poor families their household income has not changed therefore the direct cost of secondary school remains higher than the ability of many to pay. One parent pointed out that free day secondary education cannot solve the problems of access. "Although the government reduced the amount of secondary school fees that does not mean household income has increased. The same problem still exists. I have to feed my family and my family depends on my limited income from casual work", One parent said".

Interviews with some parents reveal that even though fees have been subsidized, the amount required by public secondary schools is still a significant deterrent for some parents to send their children there. Thus, while lowering fees has enabled some parents to send their children to school, this does not necessarily mean that all children from poor households are enabled to gain access to secondary education. This challenges the assumption by the government that lowering fees makes secondary education accessible to the poor.

4.5.3 Professional status of parents according to the students

The students were requires to indicate the professional status of their parents. This was meant to establish the employment status of the parents which consequently determine the income levels of households. Research shows that students from those households whose parents are formally employed are more likely to enroll in secondary schools than those from poor households. This research study revealed that majority of parents in Mwingi central Sub – county were informally employed with most of the parents doing menial jobs to educate their children as shown in Table 4.20.

Table 4.20
Professional status of parents according to the students

Type of employment	Students	
	Frequency	%
Formal	20	11.1
Informal	160	88.9
Total	180	100

N = 180 Respondents

Table 4.19 shows that majority of the public secondary schools parents were informally employed 88.9%. This clearly indicates that a gap exists in what is offered to the students in the secondary schools and what they value. This implies also that majority of the parents lacked requisite knowledge in education matters of their children.

4.5.4 Does the parental education influence students' enrolment and completion rates?

The principals and teachers were asked whether the level of education of parents had an influence on the students' participation in secondary school education in terms of enrolment and completion rates. Table 4.21 shows their responses.

Table 4.21

Does the parental education influence students' enrolment and completion rates?

Response	Pı	rincipals	Teachers	
	Freque	ncy %	Frequency	%
YES	18	100	36	100
NO	-	-	-	-
Total	18		36	100

TOTAL 54 Respondents

The findings on table 4.21 reveal that parental education is an important factor that influenced participation rates in public secondary schools. This was cited by an overwhelming 100% of the principals and class teachers.

The findings of this research study concur with the Education Sector Report (2007) which asserts that the existing provincial differences in terms of poverty index, persistent drought, and insecurity, cultural and religious beliefs have a bearing in secondary schooling hence create the complexity of achieving 100% participation rates by region, County or sub – County. Bray and Lilies (1988) also acknowledge the importance of private contribution of the community as being significant in enhancing participation rates.

4.6 Influence of distance to school students' participation rates in public secondary school

This was the third objective of the research study.

4.6.1 Distance between home and school covered by students in kilometers

The third research question sought to know the distance covered by the students from home to school. Table 4.22 shows the findings as indicated by the principals, teachers and students.

Table 4.22

Distance between home and school covered by students in kilometers

Principals		Class teach	ners	Students	
Frequency	%	Frequency	%	Frequency	%
9	50	5	13.9	35	19.4
7	38.9	21	58.3	105	58.3
1	5.6	5	13.9	20	11.1
1	5.6	5	13.9	20	11.1
18	100	36	100	180	100
	Frequency 9 7 1	9 50 7 38.9 1 5.6 1 5.6	Frequency % Frequency 9 50 5 7 38.9 21 1 5.6 5 1 5.6 5	Frequency % Frequency % 9 50 5 13.9 7 38.9 21 58.3 1 5.6 5 13.9 1 5.6 5 13.9	Frequency % Frequency % Frequency 9 50 5 13.9 35 7 38.9 21 58.3 105 1 5.6 5 13.9 20 1 5.6 5 13.9 20

Total 236 Respondents

Distance travelled by learners is a planning factor that affects the participation of the learners in secondary schools. It greatly influences the target population of a particular school. From the findings of this study, majority of the schools in Mwingi central Sub – County are mixed day schools 89%. Table 4.21 reveals that majority of students travelled distances between 0-5 kilometers 50% according to the principals and 58.3% according to the class teachers and students. From the research findings, majority of students walk long distances of between 0-5 kilometers to access secondary education and this has a bearing on the enrolment, completion and retention rates.

4.6.2 Does the distance from home to school influence enrolment and completion rates?

The respondents were asked to indicate whether the distances learners travel from home to school has any influence on the participation rates in public secondary schools. Table 4.22 below shows their responses.

Table 4.23

Does the distance from home to school influence enrolment and completion rates?

Response	Pri	ncipals	Teach	ers	Students	
	Freque	ncy %	Frequenc	cy %	Frequency	y %
YES	18	100	32	88.9	175	97.2
NO	-	-	4	11.1	5	2.8
Total	18	100	36	100	180	100

Total 236 Respondents

Distance from home to school was cited as a major factor influencing participation rates of students in public secondary schools in Mwingi central Sub – County as indicated by majority of the respondents (100%) for the principals, 88.9% for the class teachers and 97.2% for the students with 11.1% of teachers saying that it didn't influence participation rates.

From these findings it can be concluded that a number of school based factors were major determinants of participation rates in public secondary schools in Mwingi central Sub – County. This is due to the fact that students spent most of their time in school and therefore they drew more experiences that influenced their participation rates from the school environment. These research findings concur with Abagi (1997) observed that the

school management and administration, quality of teaching, internal and external efficiency has a great impact on the students' retention in a school.

4.7 Availability and Adequacy of school physical infrastructure

This was the fourth objective of the research study. This objective sought to examine the influence of availability and adequacy of school physical infrastructure on students' participation rates.

School physical infrastructures have been identified as major determinants of participation rates in public secondary schools in Mwingi central Sub – County, Kitui County. In order to get information on the availability of school physical infrastructures, the researcher carried out an observation on the sampled public secondary schools. The findings are as indicated in Table 4.23.

Table 4.24 Availability and Adequacy of school physical infrastructures

Classrooms Yes 18 100 Adequate 7 41.2 No - - Inadequate 11 58.8 Total 18 100 Total 18 100 Latrines Yes 18 100 Adequate 8 47.1 No - - - Inadequate 10 52.9 Total 18 100 Total 8 100 Computer Yes 2 11.8 Adequate - - Iaboratory No 16 88.2 Inadequate 18 100 Playground Yes 14 82.4 Adequate 13 71.4 Playground Yes 14 82.4 Adequate 13 71.0 Playground Yes 10 52.9 Adequate 12 66.7 Total 18 100 Total 18 100 Yes 1 <	Facility	Availability	Frequency	%	Adequacy	Frequency	%
Latrines Total 18 100 Total 18 47.1 No - - Inadequate 8 47.1 No - - Inadequate 10 52.9 Total 18 100 Total 8 100 Computer Yes 2 11.8 Adequate - - laboratory No 16 88.2 Inadequate 18 100 Total 18 100 Total 18 100 Playground Yes 14 82.4 Adequate 13 71.4 No 4 17.6 Inadequate 5 28.6 67.7 Total 18 100 Total 18 100 Water tank Yes 10 52.9 Adequate 12 66.7 No 8 47.1 Inadequate 12 66.7 No 10 52.9 Inadequate	Classrooms	Yes	18	100	Adequate	7	41.2
No		No	-	-	Inadequate	11	58.8
No - - Inadequate 10 52.9 Total 18 100 Total 8 100 Computer Yes 2 11.8 Adequate - - Iaboratory No 16 88.2 Inadequate 18 100 Playground Yes 14 82.4 Adequate 13 71.4 Playground Yes 14 82.4 Adequate 13 71.4 No 4 17.6 Inadequate 5 28.6 6.7 Total 18 100 Total 18 100 School gate Yes 10 52.9 Adequate 18 100 School gate Yes 8 47.1 Inadequate 18 100 School gate Yes 1 5.9 Adequate 1 - - Total 18 100 Total 18 100 School fence		Total	18	100	Total	18	100
Computer Yes 2 11.8 Adequate - - Iaboratory No 16 88.2 Inadequate 18 100 Playground Yes 14 82.4 Adequate 13 71.4 No 4 17.6 Inadequate 5 28.6 Total 18 100 Total 18 100 Water tank Yes 10 52.9 Adequate 12 66.7 No 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 School gate Yes 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 School fence Yes 18 100	Latrines	Yes	18	100	Adequate	8	47.1
Computer Yes 2 11.8 Adequate - - laboratory No 16 88.2 Inadequate 18 100 Total 18 100 Total 18 100 Playground Yes 14 82.4 Adequate 13 71.4 No 4 17.6 Inadequate 5 28.6 Total 18 100 Total 18 100 Water tank Yes 10 52.9 Adequate 12 66.7 No 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 School gate Yes 8 47.1 Adequate 18 100 School gate Yes 1 5.9 Adequate - - - No 17 94.1 Inadequate 18 100 School fence Yes 18		No	-	-	Inadequate	10	52.9
No	·	Total	18	100	Total	8	100
Playground Yes	Computer	Yes	2	11.8	Adequate	-	-
Playground Yes 14 82.4 Adequate 13 71.4 No 4 17.6 Inadequate 5 28.6 Total 18 100 Total 18 100 Water tank Yes 10 52.9 Adequate 12 66.7 No 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 School gate Yes 8 47.1 Adequate 18 100 No 10 52.9 Inadequate - - - Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 1 58.8 Total 18 100 Total 18 100 Administration Yes 11 58.8 Adequate	laboratory	No	16	88.2	Inadequate	18	100
No 4 17.6 Inadequate 5 28.6 Total 18 100 Total 18 100 Water tank Yes 10 52.9 Adequate 12 66.7 No 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 School gate Yes 8 47.1 Adequate 18 100 No 10 52.9 Inadequate - - - Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 School fence Yes 18 100 Total 18 100 School fence Yes 18 100 Total 18 100 Administration Yes 11 58.8 <	-	Total	18	100	Total	18	100
Water tank Total 18 100 Total 18 100 Water tank Yes 10 52.9 Adequate 12 66.7 No 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 School gate Yes 8 47.1 Adequate - - No 10 52.9 Inadequate - - - Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - - No 17 94.1 Inadequate 18 100 10 <td>Playground</td> <td>Yes</td> <td>14</td> <td>82.4</td> <td>Adequate</td> <td>13</td> <td>71.4</td>	Playground	Yes	14	82.4	Adequate	13	71.4
Water tank Yes 10 52.9 Adequate 12 66.7 No 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 School gate Yes 8 47.1 Adequate - - No 10 52.9 Inadequate - - Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 Total 18 100 Total 18 100 School fence Yes 18 100 Total 18 100 School fence Yes 11 58.8 Adequate 7 41.2 No - - Inadequate 1 60 Administration Yes 1 5.9 Adequate		No	4	17.6	Inadequate	5	28.6
No 8 47.1 Inadequate 6 33.3 Total 18 100 Total 18 100 School gate Yes 8 47.1 Adequate 18 100 No 10 52.9 Inadequate - - - Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 School fence Yes 18 100 Total 18 100 School fence Yes 18 100 Total 18 100 School fence Yes 18 100 Total 18 100 Administration Yes 11 58.8 Adequate 11 60 block No 7 41.2 Inadequate 7 40 Total 18 <t< td=""><td>_</td><td>Total</td><td>18</td><td>100</td><td>Total</td><td>18</td><td>100</td></t<>	_	Total	18	100	Total	18	100
School gate Total 18 100 Total 18 100 School gate Yes 8 47.1 Adequate 18 100 No 10 52.9 Inadequate - - Total 18 100 Total 18 100 No 17 94.1 Inadequate 18 100 School fence Yes 18 100 Total 18 100 Adequate 7 41.2 Inadequate 7 41.2 No 7 41.2 Inadequate 7 40 Dinning hall Yes 1 5.9 Adequate 18 100 Total 18 100<	Water tank	Yes	10	52.9	Adequate	12	66.7
School gate Yes 8 47.1 Adequate 18 100 No 10 52.9 Inadequate - - Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 School fence Yes 18 100 Total 18 100 School fence Yes 18 100 Adequate 7 41.2 No - - Inadequate 11 58.8 58.8 Administration Yes 11 58.8 Adequate 11 60 block No 7 41.2 Inadequate 7 40 Dinning hall Yes 1 5.9 Adequate 18 100 No 17 94.1 Inadequate - - - Total	_	No	8	47.1	Inadequate	6	33.3
No 10 52.9 Inadequate - - Total 18 100 Total 18 100 Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 School fence Yes 18 100 Total 18 100 School fence Yes 18 100 Adequate 7 41.2 No - - Inadequate 11 58.8 Administration Yes 11 58.8 Adequate 11 60 block No 7 41.2 Inadequate 7 40 Dinning hall Yes 1 5.9 Adequate 18 100 No 17 94.1 Inadequate - - - Total 18 100 Total 18 100 Textbooks Yes 18		Total	18	100	Total	18	100
Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 School fence Yes 18 100 Total 18 100 School fence Yes 18 100 Adequate 7 41.2 No - - Inadequate 11 58.8 Total 18 100 Total 18 100 Administration Yes 11 58.8 Adequate 11 60 block No 7 41.2 Inadequate 7 40 Total 18 100 Total 18 100 Dinning hall Yes 1 5.9 Adequate 1 - - Total 18 100 Total 18 100 Textbooks Yes 18 100 Total 18 100 Total 18 100	School gate	Yes	8	47.1	Adequate	18	100
Dormitory Yes 1 5.9 Adequate - - No 17 94.1 Inadequate 18 100 Total 18 100 Total 18 100 School fence Yes 18 100 Adequate 7 41.2 No - - Inadequate 11 58.8 Administration Yes 11 58.8 Adequate 11 60 Block No 7 41.2 Inadequate 7 40 Total 18 100 Total 18 100 Dinning hall Yes 1 5.9 Adequate 18 100 No 17 94.1 Inadequate - - - Total 18 100 Total 18 100 Textbooks Yes 18 100 Total 18 100 Total 18 100 Total </td <td>-</td> <td>No</td> <td>10</td> <td>52.9</td> <td>Inadequate</td> <td>-</td> <td>-</td>	-	No	10	52.9	Inadequate	-	-
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School fence Total 18 100 Total 18 100 School fence Yes 18 100 Adequate 7 41.2 No - - Inadequate 11 58.8 Total 18 100 Total 18 100 block No 7 41.2 Inadequate 7 40 Total 18 100 Total 18 100 Dinning hall Yes 1 5.9 Adequate 1 - - No 17 94.1 Inadequate - - - Textbooks Yes 18 100 Total 18 100 Total 18 100 Adequate - - - No - - Inadequate 18 100 Total 18 100 Total 18 100 Science Yes 2 11	Dormitory	Yes	1	5.9	Adequate	-	-
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No - - Inadequate 18 100 Total 18 100 Total 18 100 Science Yes 2 11.8 Adequate - - laboratory No 16 88.2 Inadequate 18 100	_	Total	18	100	Total	18	100
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laboratory No 16 88.2 Inadequate 18 100	-	Total	18	100	Total	18	100
•	Science	Yes	2	11.8	Adequate	-	-
Total 18 100 Total 18 100	laboratory	No	16	88.2	Inadequate	18	100
		Total	18	100	Total	18	100

Table 4.24 shows all the 18 public secondary schools visited (100%) had classrooms although 41.2% of them had adequate number of classrooms and therefore had a number of classes being conducted under the trees. On the side of latrines, all schools (100%) had latrines with 47.1% having adequate latrines and 52.9% inadequate latrines. Only 11.8% of the schools had computer laboratories established by charitable organizations although they were not adequate. From the observation made, 82.4% had playgrounds with 17.6% lacking them. However 71.4% had adequate playground while 28.6% had inadequate playgrounds. The government, through the Constituency Development Fund, had provided funds for the construction of water tanks. However, 52.9% of the schools had water tanks with 47.1% not having adequate water tanks. About 66.7% of the public secondary schools had adequate water tanks with 33.3% not having adequate water tanks. From the 18 public secondary schools visited, only 47.1% had school gates and were adequate. All secondary schools had fences 100% with 41.2% having adequate fences and 58.8% of schools visited having inadequate school fences. Administration blocks were also observed and 58.8% of schools visited had administration blocks while 41.2% didn't have them. However those with administration blocks had 60% having adequate space and 40% inadequate space with principals and teachers sharing the same room. It was further established that 1 boarding secondary school (5.9%) had a dinning hall which was adequate and dormitories which were not adequate. One hundred percent of the secondary schools had textbooks which were not adequate in all secondary schools (100%) . Still on the same, 88.2% of the visited secondary schools lacked science laboratory with only 11.8% having them but they were inadequate.

From these findings it can be observed that most of the public secondary schools lacked vital facilities that could ensure high participation rates in public secondary schools in Mwingi central Sub – County of Kitui County. It was also established that those with these facilities, had the facilities in poor condition and inadequate hence not serving the intended purpose as required. These findings are in agreement with Psacharopoulos (1985) who cited factors such as limited school facilities and low school quality as having negative impact on participation rates. The results further concurs with Ngau (1991), who noted that lack of adequate school physical infrastructures and equipment hampers smooth learning. Children who are overcrowded in class find it difficult to write. Driscoll (1994) concurs with these findings and asserts that material inputs such as books, computers, laboratories and playing field, effective teaching including pedagogical practices and teacher competency have implication on school participation.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the findings and conclusions of the study as per the research objectives and questions. It brings together the opinions expressed in the previous chapter in discussing and drawing conclusions from the research on the institutional factors influencing students' participation rates in public secondary schools in Mwingi Central Sub - County of Kitui County in Kenya.

As earlier indicated, educational planning and decision-making, like planning in other social sectors, is a complex, interactive process involving many policy-making, technical, and administrative bodies at the National and Provincial levels.

The general purpose of national educational planning in any country is to assist and facilitate the development of the educational system. At minimum, this task includes: linking education to the economy, culture, and society; maintaining the integrity of the system in order that the different levels and kinds of education reinforce one another; and, developing a system which monitors its own performance and responds accordingly.

The educational planning process typically includes the interaction of sets of activities and feedback loops, including: an articulated vision of the future education sector; creation of the setting of objectives; the review of existing educational policies and consideration of needed new ones; explication of programs, projects and targets; and, assessment of needed human, fiscal and physical resources. This research study endeavored to explore some of the factors that were deemed important in making some

important educational planning decisions regarding participation rates in public secondary schools in Mwingi central Sub – County.

5.2 Summary of the study

The research study aimed to examine institutional factors influencing students' participation rates in public secondary schools in Mwingi Central Sub - County of Kitui County in Kenya.

Chapter one looked at the background of the study, significance and purpose of the study. Chapter two presented the global view of the study, conceptual frame work and theoretical framework. Chapter three discussed the methodology used in the study. Chapter four covers analysis of data and the findings of the study. Free day secondary education allows standard eight graduates to access secondary education without discriminations. It was found out that when secondary education is made free, transition from primary to secondary is enhanced and enrolment of students in schools is increased. This however is likely to compromise the quality education offered if all other factors are not adequately addressed. The general objective of this study was to investigate institutional factors influencing students' participation rates in public secondary schools in Mwingi Central Sub - County of Kitui County in Kenya.

Descriptive survey research design was the most appropriate because it described recorded and analyzed the situation participation of students in secondary schools. The study was conducted in Mwingi central sub - county, Kitui county which is in Eastern Province. The targeted population for this study was secondary school students, teachers and principals. There were 9900 students, 321 teachers, 30 principals in 30 public

secondary schools. The accessible population was 180 forms three and four students and 36 form three and four class teachers. Stratified random sampling procedures were used to select students, class teachers and purposive sampling was used to select principals to participate in this study. After the schools were divided into strata, a sample of 180 students, 36 form three and four class teachers and 18 principals was used in the study.

Three types of questionnaires for the principals, form three and four class teachers and form three and four students and an observation guide was used to collect data. Instruments were developed piloted with principals, form three and four class teachers and form three of two schools in Mwingi central sub – County which has similar social cultural set up and the schools have similar formal set up. Validity of the instruments was ensured through piloting and the assistance of the faculty members and the supervisors.

Research permit was received afterwards from the National Commission for Science, Technology and Innovation. The researcher then administered the instruments to all the respondents. The research findings were entered, coded and processed by an experienced data analyst. The research findings were then analyzed using SPSS version 11.5 and the data presented in frequency tables and percentages. The study found that although the school administration takes some initiative to retain students in school, there were still some students who drop out of secondary school. The study concluded that more strategies are required to be put in place by the school management, parents, community and the government in order to enhance enrolment, retention ad completion of students in secondary schools.

The study found out that 83.4% of the principals were aged between 36 – 50 years. 53.8% of teachers were aged between 19 – 24 years while 58.3% of students were aged between 14 – 18 years. Also the study indicates that majority of the principals and students were female at 67% and 54% respectively. Majority of teachers were males at 61%. Some of the teachers and majority of the principals were degree holders with majority of the teachers having the KCSE certificate only. This is an indication that most of the teachers in Mwingi central Sub – County lacked adequate level of education and training to enhance higher participation rates Mwingi central.

Eighty three point three percent (83.3%) of the tutors had been in the profession for a period ranging from 1 to 5 years. This implies that majority of the principals and teachers in public secondary schools lacked sound experience in educational administration and management. The research findings also indicate that majority of the public secondary schools in Mwingi central Sub – County were mixed day secondary schools at 89%.

Institutional factors which were highly influencing students' participation rates in public secondary schools in Mwingi Central Sub - County of Kitui County in Kenya were found to be inadequate parental level of education (100%), lack of adequate FDSE funds (100%) and long distances from home to school (76.2%) in public secondary schools management and administration.

5.3 Discussion

This section discusses the findings as per the research objectives and questions.

5.3.1 Adequacy and timeliness of FDSE funds.

This research study looks at free day secondary education programme and the way it influences students' participation in secondary education in Kenya. Data collected during this study show that after the introduction of free day secondary education shows that government schools continue to levy fees for lunch, school buildings and boarding equipment. Households are also expected to provide non-discretionary items such as school uniforms, sports uniforms, books, stationary etc. The study found that the costs of the first year preparation for day secondary school are about eight times the monthly income for employed parents, 12 to 17 times for self-employed parents and 19 to 20 times for peasant parents engaged in casual work. In the case of boarding schools, the costs of the first year preparation for boarding school are 15 times the monthly income for employed parents, 23 to 33 times for self-employed parents and 38 to 40 times for peasant parents engaged in casual work.

The study found that poor households continue to face significant challenges in meeting the costs of 'free day secondary education'. Moreover, government bursaries for secondary education are awarded to children enrolled in boarding secondary school only; children whose households cannot raise the initial and ongoing costs required for even low cost day secondary schools face substantial challenges in accessing secondary education. The paper concludes that government policies aiming to expand access to secondary education for the poor must strive to identify and target socially disadvantaged children who are in need of financial help to access secondary education.

5.3.2 Parental level of education

Level of education of parents greatly influences their roles in educating their children and participation in educational programmes in any country in the world. In the view of this study, parental education included educational level and the professional status of the parents and guardians. This in return influences the household income levels and their attitude towards schooling.

From the findings of this research study, it was established that majority of the parents were illiterate and another substantial percentage were primary school leavers with majority of them informally employed. Most of them were peasant farmers and local business people. Their professions also did not give them an opportunity to adequately support secondary education and enhance participation rates in Mwingi central Sub – County in Kitui County.

5.3.3 Distance from home to school

Distance travelled from home to school by students is a very important concept in educational planning and school mapping. It greatly influences the participation of learners in educational institutions. From the findings of this study, it was established that majority of learners in Mwingi central Sub – County were trekking long distances to go to school. It was established that long distances had a great influence on participation in secondary school in Mwingi central Sub – County.

5.3.4 Availability and Adequacy of school physical infrastructures

Availability and adequacy of school physical infrastructure greatly influences the completion rates of students and quality of education in public secondary schools. In the

view of this study the school physical infrastructure included adequacy and availability of teaching – learning resources and facilities. The findings of this study show that majority of secondary schools in Mwingi central Sub – County had most of the school physical infrastructures but they were greatly inadequate. This had a bearing on the participation rates in Mwingi central sub – County of Kitui County.

5.4 Conclusions of the study

Research findings on adequacy and timeliness of FDSE funds showed that 100% of principals, class teachers and students viewed the FDSE funds as inadequate and they are not disbursed at the right time by the government for the needy students and this greatly influenced participation rates. 88.9% of teachers and 98.9% of students indicated that students have continued to drop out of school due to high cost of secondary education despite the government initiatives to enhance participation rates like FDSE programme, bursaries and CDF funds. 100% of the principals and teachers cited that parental level of education as a strong factor influencing participation rates. 100% of principals, 88.9% of the teachers and 97.2% of the students cited that distance from home to school greatly influences participation rates in public secondary schools.

After assessing the major institutional factors that influence students' participation rates in public secondary school in Mwingi central Sub – County, the study established that inadequate FDSE funds from the government, delayed disbursement of FDSE funds, late release of FDSE funds, low education levels of parents and long distances travelled by learners from home to school as strong factors that lowered participation rates in public secondary schools. It also emerged from the study that most of the public secondary schools lacked vital facilities that could boost participation rates in public secondary

schools. Such facilities ranged from teaching and learning facilities, security facilities, sanitary facilities as well as facilities for co – curricular activities.

5.5 Recommendations of the study

From the research findings, it is recommended as follows:

- (i) Class teachers recommended clear educational policies to be enacted immediately by educational planners without compromising the standards of education in public secondary schools, for instance, reviewing of the curriculum to ensure that students are not over burdened and also to ensure that what is taught is relevant to the students in view of future challenges to students.
- (ii) The principals and teachers recommended that government increase its skimpy budget allocations to schools, by providing funds so as to ensure smooth running of educational activities. This was strongly supported by form 3 and form 4 students who recommended that the government and other stakeholders should provide school uniform for the needy learners so that they can comfortably learn with other students.
- (iii) Students recommended that education stake holders should immediately build more schools so as to avoid the problems of covering long distances to school; the existing schools should be fully equipped and school administration to improve on their administrative styles as a way of ensuring smooth running of teaching and learning activities in public secondary schools.
- (iv) Class teachers and head teachers recommended that, parents and members of the community should be sensitized on the need to provide equal educational opportunities for all children regardless of their gender through guidance and

counseling as early as possible. They should be informed that looking at women and girls as second class citizens is a bad tradition.

5.6 Suggestion for further research

Participation rates have so many factors which affects it. This study findings narrowed into a few factors which were addressed by the study objectives and these factors cannot be fully relied upon in addressing future influences of participation rates in public secondary schools. Suggestion for further studies is therefore advisable to contribute towards identification of more other factors.

- (i) The study should be replicated elsewhere in Kenya.
- (ii) A comparative study in private secondary schools would review more institutional factors affecting students' participation rates.

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APPENDIX I

TRANSMITTAL LETTER

INTRODUCTORY LETTER TO SCHOOLS

University of Nairobi

Department of Educational Administration and Planning

P.O. Box 92,

Kikuyu - Kenya

Dear Sir/Madam

RE: INTRODUCTION LETTER

I am a master of education (planning) student in the University of Nairobi, undertaking a

research project on factors influencing students' participation rates in public secondary

schools in Mwingi central sub – County of Kitui County in Kenya. Your school has been

selected to participate in this study.

I hereby seek your permission to be allowed to visit your school to collect data and

information necessary for this research study. I will present three questionnaires; one for

the principal, another one for teachers and the last one for students. I also seek permission

to make direct observations on the physical infrastructure in your school. You are hereby

assured that your identity and information you provide will be treated with utmost

confidentiality. Your participation in this research study is highly appreciated.

Thanks in advance.

Muthoka Eric Muyanga.

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APPENDIX II

QUESTIONAIRE FOR THE PRINCIPALS

This questionnaire seeks information concerning your school on factors affecting students' participation in secondary education in terms of enrolment and completion. Please provide answers to all questions as accurately and honestly as possible. Your response will be treated with utmost confidentiality. If you have any comments that this questionnaire has not captured and is useful to this study, please feel free to write at the back of the questionnaire.

- 1. Respond to all the items
- 2. Please tick ($\sqrt{}$) or write (1), (2), (3) where applicable

SECTION A: Demographic Information

- 1. Gender: Male [] Female []
- **2.** Your age in years 18-23 years [] 24-29 years [] 30-35 years [] 36-41 years [] 42-47 years [] 48-53 years [] 54-59 years [] Above 60 years []
- 3. Category of your school: County [] District []
- 4. Nature of your school: Boy's boarding [] Girl's boarding [] Mixed day []

 Mixed boarding []

5.	What is your highest level of education? PhD [] M.ed [] B.ed [] Diploma []
	others (specify) []
6.	How long have you been a principal? 2 years & below [] 3 - 5 years [] 6- 8
	years [] 9-11 years [] 12-14 years [] 15 years and above []
7.	How long have you been the principal of this school? Less than a year $[\]1-3$
	years [] 4 – 6 years [] Above 6 years []
8.	How many TSC teachers does your school have? $1-5\ [\]\ 6-10\ [\]$ Above 10
	[]
9.	How many BOM teachers does your school have? $1-5$ [] $6-10$ [] Above10
	[]
10.	How many students does the school have presently? F1 [] F2 [] F3[]
	F4 []
11.	How do you rate the enrolment and completion of students in your school
	generally? Very good [] Good [] Average [] unsatisfactory []

SECTION B: Factors influencing students' enrolment and completion rates in public secondary schools in Mwingi central sub – County

1. Free Day	Secondary Education programme
a) R	Remittance of FDSE funds: Beginning of the term [] Middle of the
te	erm [] End of the term [] Any other specify []
b) V	When should the GOK remit the FDSE funds? Beginning of the term []
M	Middle of the term [] End of the term [] Any other specify []
c) Is	s Ksh.10, 265 allocated per student per year adequate? Yes [] No []
d) S	Should the GOK increase the FDSE fund? Yes [] No []
e) H	How much do parents pay yearly per student in your school in Ksh?
В	Below 10,000 [] 10,000 – 20,000 [] Above 20,000 []
f) D	Oo parents pay fees promptly? Yes [] No []
g) D	Oo you send students home due to fees balances? Yes [] No []
h) H	How many students drop out of school due to fees balances per year in
y	our school? None [] 1 - 50 [] 51 - 100 [] Above 100 []

1) How do you mobilize funds	to put up structures like classroom,
laboratories, administration bloc	ek etc Parents [] GOK [] CDF []
Any other specify [
j) Kindly rate the following vote h	eads as per FDSE. Use the key: Adequate
(1) Inadequate (2). Write (1) or ((2) where applicable
Repair maintenance 500.00 []	Local transport 500.00 []
Administration cost 600.00 []	Electricity, water and Conservancy []
Activity fees 600.00 []	Personal emoluments 3,965.00 []
Textbooks 2195.00 []	Exercise books 720.00[]
Lab Equipment 300.00 []	Chalk 72.00[]
Internal Examinations 190.00 []	Teaching /Learning material 195.00 []
k) How much does it cost parents of	on the following non – discretionary items
in Ksh?	
Uniforms: Below 1000 [] 1000 –	5000 [] Above 5000 []
Books and Learning materials: Be	low 1000 [] 1000 – 5000 [] Above
5000 []	
Boarding requirements: Below 1000	[] 1000 – 5000 [] Above 5000 []

2. Parents level of education

a) Kindly rate the level of education of your parents as per the key shown below:

Key: Over 50% (1) 50% (2) Below 50% (3)

Parents level of education	Percentage of parents Rate (write 1, 2 or 3 where applicable)
Illiterate	
Primary level	
Secondary level	
College level	
University level	

b) Does the level of education of parents influence the enrolment and completion of their children in this school? Yes [] No []

3. Distance to school

 a) Kindly rate the distance from home to school covered by your students in kilometers using the key shown below:

Key: Over 50% (1) 50% (2) Below 50% (3)

Distance between home and school covered by students in Kilometers	Percentage of students Rate (write 1, 2 or 3 where applicable)
0-2	
3-5	
6 – 10	
11 – 20	
Above 20	

b) Does the distance from home to school influence the enrolment and completion of students in this school? Yes [] No []

4. Availability and adequacy of school physical infrastructure

a)	How do you rate the	ne physical in	nfrastructure i	n your	school	generally?
Ad	equate [] Inadequ	ate []				

b) How do you rate the availability and adequacy of

Resources	Availability	Adequate	Inadequate
Classrooms			
Latrines			
Computer			
laboratory			
Playground			
Water tank			
School gate			
Dormitory			
School fence			
Administration			
Dining hall			
Text books			
Teachers			

c) Does availability and adequacy of school physical infrastructure affect
enrolment and completion in your school? Yes [] No []
5. Suggestions for improving students' enrolment and completion in secondary
schools in Mwingi central sub – county

APPENDIX III

QUESTIONAIRE FOR THE CLASS TEACHERS

This questionnaire seeks information concerning your school on factors affecting students' participation in secondary education in terms of enrolment and completion in public secondary schools in Mwingi central Sub - County. Please provide answers to all questions as accurately and honestly as possible. Your response will be treated with utmost confidentiality. If you have any comments that this questionnaire has not captured and is useful to this study, please feel free to write at the back of the questionnaire.

- 1. Respond to all the items
- 2. Please tick ($\sqrt{ }$) or write (1), (2), (3) where applicable

Female []

SECTION A: Demographic information.

1. Gender: Male []

others (specify) []

Your age in years 18-23 years [] 24-29 years [] 30-35 years [] 36-41 years [] 42-47 years [] 48-53 years [] 54-59 years [] Above 60 years []
 Category of your school: County [] District []
 Nature of your school: Boy's boarding [] Girl's boarding [] Mixed day [] Mixed boarding []

5. What is your highest level of education? PhD [] M.ed [] B.ed [] Diploma[]

6. Years of service in this school:	Below 3 years [] 4 to 6 years [] 7 to 9 years
[] 10 to 15 years [] Above 1	5 years []
7. Method of appointment: By TSC	[] By BOM [] Volunteered []
8. How long have you been a class	teacher in this school? Less than a year $[] 1-3$
years [] 4 – 6 years [] Above	
years[]4 - 0 years[]Above	
·	ool have presently? F1 [] F2 [] F3[]
F4 []	
10. How do you rate the enrolme	ent and completion of students in this school
generally? Very good [] Good	[] Average [] unsatisfactory []
11. How do you rate the enrolme	ent and completion of students in your class
generally? Very good [] Good	[] Average [] unsatisfactory []
SECTION B: Factors influencing s	tudents' enrolment and completion rates in
public secondary schools in Mwingi ce	entral sub – County
1. Free Day Secondary Education	programme
a) Is the Ksh. 10,625 paid by	y GOK enough? Yes [] No []

	Yes [] No []
c)	Do parents face challenges in paying school fees in this school? Yes []
	No []
d)	Do students drop out of school because of fees balances? Yes [] No []
2. Parent	tal level of education:
a)	What is the level of education of majority of parents in this school?
	Illiterate [] primary [] secondary [] tertiary []
b)	What is the level of education of majority of form four and three parents in
	this school? Illiterate [] primary [] secondary [] tertiary []
c)	Does the level of education of parents influence the enrolment and
	completion of their children in this school? Yes [] No []
3. Dista	nce to school
a)	Kindly rate the distance from home to school covered by your students in
	kilometers using the key shown below:
	Key: Over 50% (1) 50% (2) Below 50% (3)

b) Has FDSE programme enhanced enrolment and completion in this school?

b) Does the distance from home to school influence the enrolment completion of students in this school? Yes [] No [] allability and adequacy of school physical infrastructure a) How do you rate the physical infrastructure in your school gener Adequate [] Inadequate [] b) Does availability and adequacy of school physical infrastructure a enrolment and completion in your school? Yes [] No [] ggestions for improving students' enrolment and completion in seconds in Mwingi central sub – county	Distance between home and school covered by students in Kilometers	Percentage of students Rate (write 1, 2 or 3 where applicable)
a) How do you rate the physical infrastructure in your school gener Adequate [] Inadequate [] b) Does availability and adequacy of school physical infrastructure in your school gener Adequate [] Inadequate [] b) Does availability and adequacy of school physical infrastructure a enrolment and completion in your school? Yes [] No []	0-5	
b) Does the distance from home to school influence the enrolment completion of students in this school? Yes [] No [] ilability and adequacy of school physical infrastructure a) How do you rate the physical infrastructure in your school gener Adequate [] Inadequate [] b) Does availability and adequacy of school physical infrastructure a tenrolment and completion in your school? Yes [] No [] gestions for improving students' enrolment and completion in secon	6-10	
b) Does the distance from home to school influence the enrolment completion of students in this school? Yes [] No [] ilability and adequacy of school physical infrastructure a) How do you rate the physical infrastructure in your school gener Adequate [] Inadequate [] b) Does availability and adequacy of school physical infrastructure at enrolment and completion in your school? Yes [] No [] gestions for improving students' enrolment and completion in secon	11 – 20	
completion of students in this school? Yes [] No [] ilability and adequacy of school physical infrastructure a) How do you rate the physical infrastructure in your school gener Adequate [] Inadequate [] b) Does availability and adequacy of school physical infrastructure a enrolment and completion in your school? Yes [] No [] regestions for improving students' enrolment and completion in secon	Above 20	
Adequate [] Inadequate [] b) Does availability and adequacy of school physical infrastructure a enrolment and completion in your school? Yes [] No [] ggestions for improving students' enrolment and completion in secon	•	
b) Does availability and adequacy of school physical infrastructure a enrolment and completion in your school? Yes [] No[] ggestions for improving students' enrolment and completion in secon	a) How do you rate the physical in	frastructure in your school generally
enrolment and completion in your school? Yes [] No [] gestions for improving students' enrolment and completion in secon	Adequate [] Inadequate []	
gestions for improving students' enrolment and completion in secon	b) Does availability and adequacy o	f school physical infrastructure affec
	enrolment and completion in your school?	? Yes [] No[]
s in Mwingi central sub – county	gestions for improving students' enr	olment and completion in secondary
	s in Mwingi central sub – county	

APPENDIX IV

QUESTIONAIRE FOR THE STUDENTS

This questionnaire seeks information concerning your school on factors affecting students' participation in secondary education in terms of enrolment and completion in public secondary schools in Mwingi central Sub - County. Please provide answers to all questions as accurately and honestly as possible. Your response will be treated with utmost confidentiality. Please tick $(\sqrt{})$ or answer appropriately.

SECTION A: Demographic information

1.	Gender: male [] Female []
2.	Category of your school: County [] District []
3.	Nature of your school Boys boarding [] Girls boarding [] Mixed day []
	Mixed boarding []
4.	Your age in years 15-16 years [] 17-18 years [] 19-20 years [] above
	20 years []
5.	What is the average number of students per class? $20 - 29$ [] $30 - 39$ []
	40 – 49 [] 50 – 59 [] 60 and above []
6.	Did some students you joined form one with drop out of school? Yes []
	No []
7.	Do you have brothers/sisters who dropped out of school? Yes [] No []

SECTION B: Questions on pertinent areas

1. Free Day Secondary Education programme
a) Is Ksh. 10, 625 by the GOK enough? Yes [] No []
b) Do you have fees balance? Yes [] No []
c) Have you ever been send home for school fees? Yes [] No []
d) Are there students who dropped out of school because of school fees? Ye
[] No []
2. Parents level of education
a) What is the educational level of your parent? Illiterate [] primary [
secondary [] tertiary []
b) What is the type of employment of your parent? formal [] informal []
3. Home to school distance
a) What is the distance from home to your school in kilometers? 0 - 5 [
6 - 10 [] 11 - 20 [] Above 20 []
b) Are there students who dropped out of school because of trekking lon
distance to school from home? Yes [] No []
c) Does the distance from home to school influence the enrolment an
completion of students in this school? Yes [] No []
d) Is this school the nearest from your home? Yes [] No []
4. Availability and adequacy of school physical infrastructure
a) How do you rate the physical infrastructure in this school generally?
Adequate [] Inadequate []

b) How do you rate the availability and adequacy of

Resources	Availability	Adequate	Inadequate	
Classrooms				
Latrines				
Computer laboratory				
Playground				
Water tank				
School gate				
Dormitory				
School fence				
Administration				
Dining hall				
Text books				
Teachers				
c) Does availability and adequacy of school physical infrastructure affect enrolment and completion in your school? Yes [] No [] stions for improving students' enrolment and completion in this secondary				
to the secondary				

	Text books			
	Teachers			
	c) Does availability	and adequacy of	school physical ir	afrastructure affe
	enrolment and co	mpletion in your sch	nool? Yes [] I	No []
5. Sugges	tions for improving s	students' enrolmen	t and completion	in this secondar
school				
•••				

APPENDIX V

OBSERVATION GUIDE FOR THE RESEARCHER

Section A: Demographic Information. 1. Name of the school ______ 2. Total number of students per class: F1 [] F2 [] F3 [] F4 []

SECTION B: SCHOOL PHYSICAL INFRASTRUCUTURE

NO	ITEM OBSERVED	TOTAL NUMBER
1	Form 1 textbooks	
2	Form 2 textbooks	
3	Form 3 textbooks	
4	Form 4 textbooks	
5	Latrines/toilets	
6	Computer laboratory	
7	Science laboratory	
8	Water tanks	
9	Classrooms	
10	Dormitory	
11	Dining hall	
12	Water taps	
13	Dining hall	
14	Urinals	
15	Computers	
16	Bathrooms	

SECTION C: AVAILABILITY AND ADEQUACY OF THE FOLLOWING FACILITIES

Facility	Availability	Adequacy
Play ground		
Sports equipment		
Chemicals and apparatus		
School fence		
School gate		

APPENDIX VI

RESEARCH PERMIT

THIS IS TO CERTIFY THAT; upon a Commission for Science MR. ERIC MUYANGA MUTHOKAmmission for Science of UNIVERSITY OF NAIROBI, 134-90400 mwingi, has been permitted to conduct research in Kituind County ational Commission for So

on the topic: INSTITUTIONAL FACTORS INFLUENCING STUDENTS alional Commission for Sc PARTICIPATION IN PUBLIC SECONDARY SCHOOLS IN MWINGI CENTRAL SUB -COUNTY, KITUI COUNTY, KENYA ission for Science

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Permit No: NACOSTI/P/15/2988/7303

Date Of Issue: 5th August, 2015

Fee Recieved : Ksh.: 1000sion for Science; Technology and

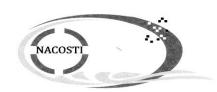
chnology and Innovetion National 30th November, 2015

Indicate the Commission for Science, Technology and Innovation National Commission for Science (National Commission for Science (National

nnovation National Commission for Science, Technology and Innovation Validation General Signature hnology and Innovation National Commission for Science, Technology and National Commission for Science, sion for Science, Technology and Innovation National Commission for Science, Technology and Innovation Technology & Innovation logy and

APPENDIX VII

RESEARCH AUTHORIZATION



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 310571, 2219420 Fax: +254-20-318245, 318249 Email: secretary@nacosti.go.ke Website: www.nacosti.go.ke When replying please quote 9th Floor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No.

5th August, 2015

NACOSTI/P/15/2988/7303

Eric Muyanga Muthoka University of Nairobi P.O. Box 30197-00100 NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Institutional factors influencing students' participation in public secondary schools in Mwingi Central Sub County, Kitui County, Kenya," I am pleased to inform you that you have been authorized to undertake research in Kitui County for a period ending 30th November, 2015.

You are advised to report to the County Commissioner and the County Director of Education, Kitui 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. S. K. LANGAT, OGW

FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Kitui County.

The County Director of Education Kitui County.

APPENDIX VIII

LIST OF SECONDARY SCHOOLS IN MWINGI CENTRAL SUB - COUNTY

- 1. ABC Munguu mixed day
- 2. Enziu mixed secondary
- 3. Ikuusya mixed day
- 4. Itendeu mixed day
- 5. Ithumbi mixed day
- 6. Kaela mixed day
- 7. Kairungu mixed day
- 8. Kalisasi mixed day
- 9. Karung'a mixed day
- 10. Katalwa mixed day
- 11. Kiio mixed day
- 12. Kiomo mixed day
- 13. Kisovo mixed day
- 14. Kivou mixed day
- 15. Kyethani mixed day
- 16. Kyulungwa mixed day
- 17. Mbondoni mixed day
- 18. Mumbuni mixed day
- 19. Musukini mixed day
- 20. Mutwang'ombe mixed day
- 21. Mwingi school
- 22. Ndithi mixed day
- 23. Nyanyaa mixed day
- 24. Precious Blood Tyaa
- 25. Syomikuku mixed day
- 26. Syungii mixed day
- 27. Waita secondary school
- 28. Wikithuki mixed day
- 29. Yambyu girls secondary
- 30. Yumbe mixed day