

**DETERMINANTS OF EDUCATION WASTAGE IN PUBLIC
SECONDARY SCHOOLS IN LAIKIPIA WEST DISTRICT,
LAIKIPIA COUNTY, KENYA**

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EDUCATION MANAGEMENT POLICY AND CURRICULUM STUDIES
OF KENYATTA UNIVERSITY**

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DECLARATION

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

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DEDICATION

This project is dedicated to my husband, Paul Mutahi and my sons Victor and Caleb, for their sacrifice and moral support.

ABBREVIATIONS AND ACRONYMS

AEO	-	Area Education Officer.
ASAL	-	Arid and Semi-Arid Lands.
EFA	-	Education for All.
FAWE	-	Forum for African Woman Educationalist.
FSE	-	Free Secondary Education.
GDP	-	Gross Domestic Product.
GER	-	Gross Enrolment Rate.
HIV	-	Human Immune Deficiency Virus
KCSE	-	Kenya Certificate of Secondary Education.
KESSP	-	Kenya Education Sector Support Programme.
MOE	-	Ministry of Education
MOEST	-	Ministry of Education Science & Technology.
SPSS	-	Statistical Package for Social Sciences.
TIQET	-	Totally Integrated Quality Education and Training.

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ABSTRACT

Despite many policies and strategies that have been developed to enhance secondary education in Kenya, wastage still remains a major concern. However, identifying what causes students to dropout is difficult because there is no single reason. Preliminary investigation by MOE (2010) shows that at the national level, dropout rates among students in public secondary schools in 2010 registered 9.5%. In Kenya, a few studies have been done on the determinants that lead to education wastage in public secondary schools. However, in Laikipia West District, no study has been done on the determinants that lead to education wastage in public secondary schools. The purpose of this study was to assess the determinants of education wastage in public secondary schools in Laikipia West District. The objectives of the study were to: determine the school based determinants that lead to education wastage in public secondary schools; establish the socio cultural determinants that lead to education wastage in public secondary schools; establish students' personal determinants that lead to education wastage in public secondary schools in Laikipia West District. In this study, the researcher employed descriptive research design. The target population for this study was 2000 respondents which consisted of 150 teachers and 1849 students and one Area Education Officer. The sample size of the study was 20 head teachers from 20 public secondary schools, 40 form four class teachers from 20 public secondary schools, 344 form four students from the 20 public secondary schools and 1 Area Education Officer. This study used questionnaires to collect data from head teachers, form four class teachers, form four students and the Area Education Officer. Quantitative data collected by using a questionnaire was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) and presented through frequencies and percentages. From the findings, it was established that there has been a steady increase in the rate of wastage in public secondary school for a period of five years (2009-2013). From the study findings, school based determinants, socio-cultural determinants and students, personal determinants contribute to education wastage in the district. The study recommended that teachers, parents and students be involved in efforts to address the school based factors leading to wastage in the district, opinion leaders and intellectuals in the local community be involved in addressing socio-cultural factors that contribute to education wastage, and guidance and counseling services be intensified to address the students' personal attributes that leads to education wastage.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Education wastage means premature withdrawal of students from schools at any stage before completion of the primary courses (Wamahiu, 1997). The delivery of secondary education in Kenya has been marked by numerous challenges some of which have culminated in wastage. The government has always endeavored to improve access to and retention of students in secondary schools but the problem of wastage has continued to persist. This makes wastage a major concern in the Kenyan education system at all levels.

Despite many policies and strategies developed to ensure that student's complete school smoothly there are still some students who withdraw from school prematurely. The Universal Declaration of Human Rights, Article 26, for instance states categorically that everyone has the right to education (UNESCO, 2005). To achieve this, the Kenya government laid down policies and allocated money in the National budget for provision of education to her people (MOEST, 2010).

One persistent constraint in attaining the goals of Education for All (EFA) is the rate of drop out from education systems (Wamahiu, 1997). According to MOE (2010) completion rates in 2010 in secondary schools registered 91.5% for boys and 87.5% for girls. The girls registered 12.5% drop out. In spite of the government policies to enhance enrolments in secondary sub sector, the girl's participation, retention, transition

and completion at secondary school education level are lower than boys. In 2010 the national Gross Enrollment Rate (GER) was 31.7% for boys and 27.3% for girls (MOE, 2010).

As we approach 2015, the year in which the international community pledged to meet the targets of Education for All (EFA) and the Millennium Development Goals (MDGs), many governments, particularly in sub-Saharan Africa (SSA), are considering abolishing school fees for secondary education. This is partly due to the domestic and international demand to achieve EFA and the MDGs. Fees charged at secondary school are indeed one of the major obstacles for some children to access secondary education, resulting in low transition rates from primary to secondary education. Thus, many governments in SSA have planned to abolish secondary school fees. The government of Kenya started to support the education sector through a subsidized secondary education. This has given poor children a chance to go to school. This will go in line towards achievement of Kenya Vision 2030, which looks upon education to provide the necessary skills and build adequate human capital to achieve and sustain the country as a middle-income country.

Reducing the number of students dropping out of school is not a simple issue, and the solutions are complex. The keys to addressing the complexity of this phenomenon are to identify students who are at risk for dropping out and the causes of students dropping out (Adu, 2007). However, identifying what causes students to dropout is difficult because there is no single reason. Therefore, creating a variety of supports within the

school environment may improve the likelihood that at-risk students will remain in school (Blackemore, & Cooksey, 2006).

A number of consequences have been associated with dropping out of school. These include high unemployment, poverty, and high crime and delinquency rates (Mbani, 2008). Martin, & Acuna, (2007) revealed that low self-esteem, marrying someone at risk, raising at-risk children, and not being able to thrive in the twenty-first century due to the lack of a high school diploma are other negative effects of dropping out of school. The costs associated with the incidence of dropout for the individual are immense (Mazera, 2009). Dropouts are more likely to experience negative outcomes such as unemployment, underemployment, or incarceration (Brigeon, 2005). Some research has revealed that employment opportunities offering decent living wages and benefits have virtually disappeared for youth who have not completed their high school education (Mutumbai, 2005). Students who drop out of school are 72% more likely to be unemployed compared to high school graduates (MOE, 2010).

Dropouts cost the nation in other ways. Dropouts are more likely to have health problems, experience high criminal activity and delinquency rates, and depend on government assistance programs than high school graduates (Ministry of Health, 2009). Keeping children in school is a cost-effective method for keeping them out of correction facilities, mental health wards, and welfare programs as adults (Murithi, 2006).

The need to curb dropout rates at the secondary school education level in Kenya cannot be overemphasized. Government policies outlined in the National Action Plan on Education for All, Poverty Reduction Strategy Paper (2000 - 2005), Economic Recovery Strategy Paper, 9th National development Plan, 2002 – 2008 among others, all point to desired outcomes for education (Republic of Kenya, 2003).

1.2 Statement of the Problem

The delivery of secondary education in Kenya has been marked by numerous challenges some of which have culminated in wastage. The government has always endeavored to improve access to and retention of students in secondary schools but the problem of wastage through school dropouts has continued to persist. This makes wastage a major concern in the Kenyan Secondary School Education System. Despite many policies and strategies developed to ensure that student's complete school smoothly there are still some students who withdraw from school prematurely. Preliminary investigation by MOE (2010) shows that at the national levels drop out rates among students in public secondary schools in 2010 registered 9.5%.

The dropout rate in this country disproportionately affects students who are low-income, minority, living in a single-parent home and attending a large, urban public high school; one-eighth of these students do not graduate from high school (MOE, 2008). Students see dropping out as a viable option, whether or not they understand the consequences in terms of personal costs (Murithi, 2006).

In Kenya, a few studies have been done on the determinants that lead to education wastage in public secondary schools. Mutumbai (2005) while conducting an analysis of a high school dropout found that it is caused by many factors which includes individual, families, schools, communities and peers factors. Laikipia West District like many other parts of Kenya has been experiencing dropout of students in secondary schools. However, in Laikipia West District, no study has been done on the determinants that lead to education wastage in public secondary schools. Therefore; Laikipia West District makes a classic case-study on the determinants of education wastage in public secondary.

1.3 Purpose of the Study

The purpose of this study was to assess the determinants of education wastage in public secondary schools in Laikipia West District, Laikipia County.

1.4 Objectives of the Study

The objectives of the study were:

- i) To establish the school based determinants that lead to education wastage in public secondary schools in Laikipia West District, Laikipia County.
- ii) To establish the socio-cultural determinants that leads to education wastage in public secondary schools in Laikipia West District, Laikipia County.
- iii) To establish student's personal determinants that leads to education wastage in public secondary schools in Laikipia West District, Laikipia County.

1.5 Research Questions

The research sought to answers the following questions:

- i) What are the schools based determinants that lead to education wastage in public secondary schools?
- ii) To what extent do socio cultural determinants lead to education wastage in public secondary schools?
- iii) What are the student's personal determinants that lead to education wastage in public secondary schools?

1.6 Significance of the Study

The research findings on the determinants that lead to education wastage in public secondary schools in Laikipia West District, Laikipia County are hoped to provide useful information to the youth in the District. Such information would be useful to stakeholders and education planners in designing customized and more effective strategies or interventions to the problem. The information collected would add to the scanty information that is available on the determinants that lead to education wastage in public secondary schools. This would help identify specific mobilization campaigns and strategies by the area education officials to address the situation. The parents and teachers would use the research findings in encouraging students towards completing their education and underlying the benefits of graduating in all levels of education. Finally, the study would form a basis for further research.

1.7 Limitations of the Study

Some of the respondents withheld some data. In this case, the researcher respected only collected the information that the respondents were ready to give. Transport to some parts are of the district was difficult due to poor transport network. In this case, the researcher used the services of local motorbikes called bodaboda to access the remote areas.

1.8 Delimitations of the Study

The main focus of this study was Laikipia West District where public secondary schools were the key subjects of the research. Data was specifically collected from the stakeholders in public secondary schools and education officers. The aim was to collect data from the respondents with a view to establish the determinants that lead to education wastage in public secondary schools.

1.9 Scope

The study was confined to 20 public secondary schools in Laikipia West District.

1.10 Assumptions of the Study

The study was based on several assumptions:

- i) All respondents were honest, cooperative and provide reliable responses.
- ii) Parents were ready to support their children in education.

1.11 Theoretical Framework

This study was based on the following theories:-

Alienation Theory

Alienation theory, which is used to explain why students drop out of school, is derived from Merton's strain theory (LeCompte & Dworkin, 1991). Alienation theory has been utilized to gain a better understanding of why students become disengaged from the academic process and eventually drop out of school (Fine, 1986). When individuals feel the strain of not closing the gap between their experiences or capabilities and cultural norms, one response these individuals may have is to alienate themselves from society (Fine, 1986).

In reference to dropping out of school, alienation theory suggest that students who drop out of school do so because they lack positive relationships with teachers and peers, resulting in an individual alienating himself from school, thus creating an environment that provides a reason for a student to withdraw from school (Newmann, 1981). Studies have shown that some students leave school primarily because they feel that the teachers did not care about them or viewed them as troublemakers and were not supportive of them (e.g. Fine, 1986). In addition to student teacher relationships, other factors that affect a student's decision to alienate and eventually withdraw from school include school structure and social organization (Bryk & Thum, 1989).

Theory of Engagement

One theory based on a model of social development that is used to explain why students drop out was developed by Finn (1989) and is referred to as the theory of engagement. Finn describes the dropout process as a very gradual one that, over time, culminates with a student dropping out of school. Finn (1989) proposed two models for viewing dropping out of school as a developmental process. Finn (1989) writes the “frustration-self-esteem model” has been used frequently to explain schools’ effects on disruptive behavior and juvenile delinquency; it offers one perspective for understanding dropping out as well. The “participation-identification model” emphasizes the importance of youngster’s “bonding” with school; when this does not occur, the likelihood of problem behavior, including leaving school before graduation, is increased.

The frustration self-esteem model,

It is a theory that was originally developed by Bernstein and Rulo (1976), who purports that a school’s deficient handling of problematic behavior results in students developing a reduced level of self-esteem which, in turn, can produce unsuccessful school outcomes (Finn, 1989). In addition, negative peer influences further exacerbate the problem (Finn, 1989).

1.12 Conceptual Framework

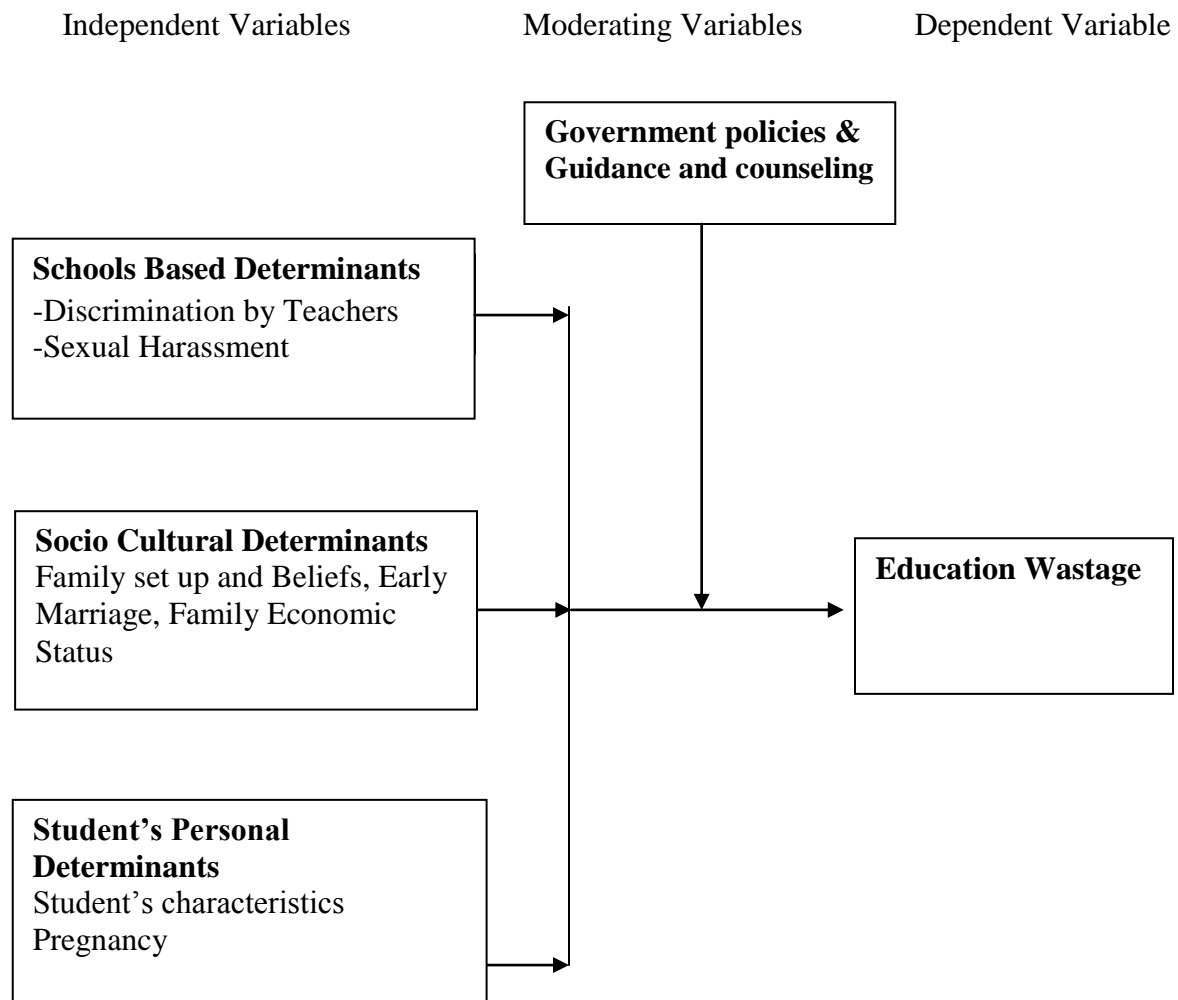


Figure 1.1: Determinants of Education Wastage in Public Secondary Schools

The dependent variable in this study was education wastage in public secondary schools. Education wastage in public secondary schools is influenced by several determinants that constitute the independent variables. Based on the literature review the determinants that influence education wastage in public secondary schools include schools based determinants, socio cultural determinants and student's personal determinants.

The moderating variables, which according to Kothari (2004) are independent variables that are not related to the purpose of the study but can have an effect on the dependent variable, includes guidance and counseling and government policies. Figure 1.1 shows the relationship between the independent variables and the dependent variable. To ensure that moderating variables did not influence the dependent variable, the variables were controlled.

1.13 Operational Definitions of Significant Terms

Drop out - Early withdrawal of students from school without completing the required secondary school years and the concerned students do not enroll back to school again.

Dropout rates - The percentage of students who withdraws from school eminently before completing the secondary school cycle against those who are enrolled in form one.

Education Wastage: Refers to premature withdrawal of students from schools at any stage before completion of their secondary education course.

Gender discrimination – Refers to unequal or preferential treatment to individuals of groups based on their gender that results into reduced access to or control of resources and opportunities.

Gender Equity – Refers to equal treatment of women and men boys and girls so that they can enjoy the benefits of development including equal access to and control of opportunities and resources.

Gender disparity– Refers to differences or unequal or unfair treatment of the males and females.

Parental involvement – This refers to active participation of parents in matters pertaining to education of their children like checking their books, provision of basic learning materials and equipment and payment of school fees promptly.

Sexual harassment – Unwelcome acts of sexual nature that cause discomfort to the targeted persons. These include words, persistent requests for sexual favors, gestures, touch, suggestions, coerced sexual intercourse.

Transfer - This refers to students moving out of the school to another in favour of another one due to personal reasons.

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.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of empirical literature on the determinants of education wastage in public secondary schools. These determinants include schools based determinants, socio cultural determinants, student's personal determinants.

2.2 Schools based determinants that lead to education wastage in public secondary schools

In this study the main school based determinants that lead to education wastage in public secondary schools will be looked at in two aspects. The main ones are student composition, school resources, structural characteristics of schools, and school processes and practices. There are others like lack of academic success, discrimination and sexual harassment by teachers, student-teacher ratios, and lack of Positive relationships between teachers and students and among students themselves.

2.2.1 Student composition

Student characteristics not only influence student achievement at an individual level, but also at an aggregate or social level. That is, the social composition of students in a school can influence student achievement apart from the effects of student characteristics at an individual level (Gamoran, 1992). Several studies have found that the social composition of schools predicts school dropout rates even after controlling for

the individual effects of student background characteristics (Bryk & Thum, 1989; Mayer, 1991; McNeal, 1997b; Rumberger, 1995; Rumberger & Thomas, 2000).

2.2.2 School resources

There is considerable debate in the research community about the extent to which school resources contribute to school effectiveness (Rumberger & Thomas, 2000). Several studies suggest that resources influence school dropout rates. Two studies found that the pupil/teacher ratio had a positive and significant effect on high school dropout rates even after controlling for a host of individual and contextual factors that might also influence dropout rates (McNeal, 1997b; Rumberger & Thomas, 2000). One of those studies found that the higher the quality of the teachers as perceived by students, the lower the dropout rate, while the higher the quality of teachers as perceived by the principal, the higher the dropout rate (Rumberger & Thomas, 2000).

2.2.3 School structure

The extent to which structural characteristics (e.g., size, location), particularly type of control (public, private), contribute to school performance. This issue has been most widely debated with respect to one structural feature—public and private schools (Bryk et al., 1993; Chubb & Moe, 1990; Coleman & Hoffer, 1987). Although widespread achievement differences have been observed among schools based on structural characteristics, what remains unclear is whether structural characteristics themselves account for these differences or whether they are related to differences in student characteristics and school resources often associated with the structural features of schools. Most empirical studies have found that dropout rates from Catholic and other

private schools are lower than dropout rates from public schools, even after controlling for differences in the background characteristics of students (Bryk & Thum, 1989; Coleman & Hoffer, 1987; Rumberger & Thomas, 2000). Yet empirical studies have also found that students from private schools typically transfer to public schools instead of before dropping out, meaning that student turnover rates in private schools are not statistically different than turnover rates in public schools (Rumberger & Thomas, 2000). School size also appears to influence dropout rates both directly (Rumberger & Thomas, 2000) and indirectly (Bryk & Thum, 1989), although the largest direct effect appears to be in low SES schools (Rumberger, 2000). This latter finding is consistent with case studies of effective dropout prevention schools that suggest small schools are more likely to promote the engagement of both students and staff (Rumberger, 2000).

2.2.4 School policies and practices

Despite all the attention and controversy surrounding the previous factors associated with school effectiveness, it is the area of school processes that many people believe holds the most promise for understanding and improving school performance. Several studies found academic and social climate—as measured by school attendance rates, students taking advanced courses, and student perceptions of a fair discipline policy—predict school dropout rates, even after controlling for the background characteristics of students as well as the resource and structural characteristics of schools (Rumberger & Thomas, 2000). Another study using one of the same data sets, but using different sets of variables and statistical techniques, found no effect of academic or social climate on

high school dropout rates after controlling for the background characteristics of students, social composition, school resources, and school structure (McNeal, 1997b).

Current research literature on school dropouts suggests two ways that schools affect student withdrawal. One way is indirectly, through general policies and practices that are designed to promote the overall effectiveness of the school. These policies and practices, along with other characteristics of the school (student composition, size, etc.), may contribute to voluntary withdrawal by affecting conditions that keep students engaged in school. This perspective is consistent with several existing theories of school dropout and departure that view student engagement as the precursor to withdrawal (Finn, 1989; Wehlage, Rutter, Smith, Lesko, and Fernandez, 1989).

Another way that schools affect turnover is directly, through explicit policies and conscious decisions that cause students to involuntarily withdraw from school. These rules may concern low grades, poor attendance, misbehavior, or being overage that can lead to suspensions, expulsions, or forced transfers. This form of withdrawal is school-initiated and contrasts with the student-initiated form mentioned above. This perspective considers a school's own agency, rather than just that of the student, in producing dropouts and transfers. One metaphor that has been used to characterize this process is discharge: "students drop out of school, schools discharge students" (Riehl, 1999). Several studies, mostly based on case studies, have demonstrated how schools contribute to students' involuntary departure from school by systematically excluding and discharging "troublemakers" and other problematic students (Bowditch, 1993; Fine, 1991; Riehl, 1999).

2.2.5 Students Discrimination by Teachers

Blackmore and Cooksey (1981) observe that when a student is admitted into secondary school, there are certain routine procedures that take place. The student is subject to command from the teachers. Fatuma and Sifuna (2006) and Obura (1991) pointed out that in the African Society, there was the general misplaced perception that girls have to be socialized to be wives, homemakers, dependants and secretaries while boys are to be husbands, breadwinners, defenders and pilots. This provides a reminder of the influence of gendered thinking in education material of practice, which the study will seek to investigate.

Brigeon (2005) in his survey on making school safe for girls in Rift valley revealed that girls and their families may find little reason to attend school if they are tracked to low paid occupations considered traditional for women. He observed that many developing countries practice gender streaming in secondary school, directing girls away from Mathematics and Sciences. Teaching practices like giving boys more opportunities than girls to ask and answer questions, use learning materials and lead groups may further discourage girls in actively participating in educational activities. A study conducted by Mwandosya (2001) in Kenya and Tanzania on girls education revealed that over 2000 teachers who participated maintained separate rows for boys in class and asked them male questions compared to girls. The extent of gender discrimination by teachers will be investigated in this study.

While in school performance of girls is hampered by gender stereotyped attitudes among teachers, parents and students about the capacity of girls. These stereotyped roles that make girls easily misused in school include preparing tea and lunch for teachers at break time and lunchtime respectively, washing utensils and fetching water for teachers (Eshiwani, 1985). Abagi (1992) also observed that girls waste a lot of teaching time when they are sent to teachers' houses to take books which creates room for sexual harassments. While performing such roles the girls sacrifice their studies hence end up performing poorly in class. This can lead to girls dropping out of school. The study seeks to establish the relationship between gender roles and drop out.

Abidha (1998) raised a great concern on unsatisfactory performance and achievement of girls across the education system. The survey carried out in K.C.P.E results in Kenya revealed that girls perform poorly in almost all subjects compared to boys. This becomes even worse as they move up in the education ladder. This is also supported by Fatuma and Sifuna (2006). The fact that the curriculum fails to address the needs of the girls who acts the role of mothers and are mostly absent from school is a great concern. This makes them also suffer from chronic fatigue, lack of concentration in school and forced repetition in classes. Their academic performance is hence impaired and self image lowered and eventually these girls drop out of school (UNESCO, 2002). The study will therefore confirm whether the drop out of female students is related to discrimination by teachers in Laikipia West District.

2.2.6 Sexual Harassment

There have been a number of reported cases on teachers harassing female or male students sexually. It is disturbing to realize that the teachers entrusted with the care of children are responsible for impregnating girls. A survey carried in Turkana by Brigeon (2005) indicated that girls were subjected to harassment from male's peers and predation by male teachers. He compares this with the survey carried out in Cameroon which revealed that 27 percent of girls who were interviewed reported had sex with teachers. In conclusion Brigeon (2005) recommended the need to change behavior pattern which involves significant cultural changes.

Sexual harassment was noted as a factor leading to female students drop out in school in co – educational schools. This was by both the boy's counterparts and teachers (UNESCO, 2002). Fatuma and Sifuna (2006) noted that there was high drop out among girls compared to boys (5.1 % and 4.6 % respectively) nationally. This was attributed to pre-marital pregnancies whereby most of these pregnancies involved teachers. This is supported by Wamahiu (1997). According to MOE (2007) gender insensitive school environment include attitudes of the key stakeholders in the school leads to many reported incidents of sexual harassment and gender based biases. An educational brief of 2006 indicated that an investigation was being done in a primary school in Nyanza after eight girls dropped out of school due to pregnancy in one year (Daily Nation, 2006). This is also supported by Abagi (1992) in his report on gender gap in education and emerging democratic society in Kenya. What is yet to be known is the extent in which school based factors leads to female students dropping out of secondary school in Laikipia West District.

2.2.7 Other Schools based determinants

According to Rumberger (2000) schools in which students have limited opportunities for academic success appear to have higher dropout rates. He notes that one of the strongest links of early school dropout in studies among students is the lack of academic success. Students who more often get low grades, fail subjects, and are retained in grade are more likely to leave school prior to graduation. Students experiencing difficulty meeting the academic demands of the school tend to leave rather than continue in the face of the frustration of failing to achieve good grades (Rumberger, 2000). The lack of opportunities for success can be viewed as an imbalance between the academic demands of the school and the resources students have to meet those demands (Thomas, 2000). The availability of such resources appears to be related to the structure and organization of schools. In 2000 Russell W. Rumberger and S. L. Thomas found that public, urban, and large schools and those with higher student–teacher ratios tended to have higher dropout rates.

The failure of students to find positive social relationships in schools and the lack of a climate of caring and support also appear to be related to increased rates of dropping out. Positive relationships between teachers and students and among students and a climate of shared purpose and concern have been cited as key elements in schools that hold students until graduation. In 1994 Nettie Legters and Edward L. McDill pointed to organizational features of schools conducive to positive social relations including small school size, teacher and student contacts focused on a limited number people within the school, and teachers who have been prepared to focus on the needs of students and their

families and communities. In 2001 Robert Croninger and Valerie E. Lee found lower dropout rates in schools where students report receiving more support from teachers for their academic work and where teachers report that students receive more guidance about both school and personal matters.

In addition to issues of access to academic success and social acceptance within schools, in some contexts there is an issue of the availability of schools. This is primarily an issue in the developing world where secondary schools are not widely available. Although this situation tends to be more prevalent in the developing world, there are areas within developed countries, such as sparsely populated or geographically isolated areas, where access to schooling is not readily available. Completing high school in such circumstances often takes students far from home and from family and community support and so makes dropping out more likely.

2.3 Socio cultural determinants that lead to education wastage in public secondary schools

Social cultural factors leading to education wastage in secondary schools are viewed under family set up and beliefs, early marriage and family economic status. Child labour, boy-child bereavement, emphasis on girl-child at the expense of boy-child, family background and lack of role-modeling for boy-child are major socio-cultural factors leading to drop-out.

2.3.1 Child labour

The most prevalent types of child labour appear to be domestic and household-related duties (girls) and agricultural labour (boys), which are for the most part unpaid, under-recognized, and take up substantial amounts of time. Labour of this sort does not necessarily impede educational access (Admassie, 2003), with students frequently combining household/agricultural duties with some schooling. Studies indicate forms of child labour create pressure on a child's time. For example, children who combine work with school, depending on the nature and volume of work, can have erratic school attendance, regular school absences or increased instances of lateness (Guarcello et al, 2005).

While still having educational access, low attendance in particular is seen as a precursor to dropping out. Similarly, agricultural work is often seasonal with clashes with schooling timetables, leading to seasonal withdrawals from school. While these withdrawals are 'temporary', research suggests they may lead to more permanent withdrawals from school (Boyle et al, 2002). While still in school, children who are falling behind due to regular absences, temporary withdrawals and heavy out of school workloads, could be members of the silently excluded, those who attend, but fail to engage adequately in teaching and learning processes (Rose & Al Samarrai, 2001).

Child labour can be disabling, and an active factor leading to drop out. Specific work-related tasks, for example, full time child care and work in peak agricultural times are less easy to reconcile with schooling. Child labour is seen as: the prime reason for non-enrolment and drop out in Ghana according to Fentiman et al (1999); a cause of 50% of

drop outs in Delhi (Municipal Corporation of Delhi, 1999 cited in Juneja, 2001); a 'prime cause for absenteeism, repetition and most particularly drop-out rates' in Tanzania (Dachi & Garrett, 2003: x); the most important reason for the drop out of rural children in Ethiopia (World Bank, 1998); and leading to two years less schooling in Bolivia and Venezuela (Psacharopoulos, 1997 cited in Ravallion & Wodon, 1999). Colclough et al's (2000) research in Ethiopia and Guinea showed child labour to be a significant reason for dropping out in both countries.

2.3.2 Family set up and Beliefs

World Bank (1996) acknowledges that in developing countries including Africa, there are socio-cultural norms which permeate the school's functioning. Wanjiru (2007) states that girls are socialized to know that their brothers education is much more important than theirs and they are ready to drop-out of school for the sake of their brothers. Wanyoike (2003) concurs with Wanjiru and observed that the way the family foundations are laid down, it is difficult to erase the attitudes and behaviour patterns that are formed about girls and boys. He further observes that the boys and girls are received differently at birth thus attaching diverse value to them. Boys are valued to be superior to girls and hence even in education they are given a priority in some societies. The study will determine whether this is applicable in public secondary schools in Laikipia West District.

A research study carried out by Wanjiru (2007) in Mombasa on factors contributing to school drop out in public secondary schools revealed that 52.4% of the parents interviewed valued boy's education more than that of girls. Families which cannot easily afford to send both sons and daughters to school reckon that financial returns on the expenditure for girl's education are a good deal smaller than those of boys. The argument being that girls will eventually leave their parents on getting married, therefore their education is seen as a financial asset to the in-laws rather than blood relatives (UNESCO, 2002). The study will seek to establish whether girls are discriminated at home leading to drop out from school.

Brown (1980) indicates that some children are withdrawn by parents in rural areas to assist in household chores like babysitting younger children, accompanying parents to hospital or public gatherings, collect firewood and water, caring for the sick relatives among others. The girl – child does most of this work but where there are no girl siblings, the boys are used to perform these tasks. This clearly shows gender disparity in that boys assist at home only when there are no girls, which affect girl's education to an extent of dropping from school due to constant absenteeism (Wanjiru, 2007). The different role at home to boys and girls affects girl's performance in school. The girls have less time to do supplementary reading for school compared to the boys (Wamahiu, Opondo & Nyagah 1992). This Study will therefore determine the extent in which family set up leads to female students dropping out in public secondary schools in Laikipia West District.

2.3.3 Age, Marriage and Notions of Adulthood

While the pressure on students to leave school tends to increase as they grow older and their opportunity costs rise (Colclough et al, 2000), there are other age related factors which can influence schooling access and dropping out. There are also cultural notions around adulthood and age which may in some circumstances affect access to schooling. Research highlights a number of important points with regard to education and rites of passage ceremonies which mark the move from childhood to adulthood. Firstly, the ceremony and preparations for it may overlap with the school calendar, which can increase absenteeism and potential dropouts from school (Boyle et al, 2002; Kane, 2004;). Boys in Guinea undertaking initiation ceremonies had schooling disrupted, with ceremonies sometimes taking place in term time, absenteeism lasting up to one month, and sometimes leading to drop out, while for girls it was often considered ‘shameful’ for them to return to school (Colclough et al, 2000). Secondly, money available for schooling might be used for the initiation event (Kane, 2004). And lastly, this move into adulthood at times means that ‘new’ adults can think themselves too grown up for schooling (Kane, 2004). Nekatibeb (2002) describes how communities in Ethiopia accept these girls as ‘adults’, but teachers or schools continue to consider them as children and this may create tension. Initiation ceremonies thus affect girls’ and boys’ access differently in different contexts.

Nekatibeb (2002) highlights a link between age and drop out for girls. For example, when girls start to menstruate or reach ‘maturity’/puberty, they might be withdrawn from schools (Nekatibeb, 2002). In some cases this might be to ensure the girls’

reputations are kept 'intact' (Nekatibeb, 2002). In other cases girls are withdrawn from school at this time to marry (Brock & Cammish, 1997).

In certain communities girls in particular are encouraged to marry as they reach puberty and/or become sexually mature (or even in some contexts even earlier). The early marriage of girls is linked to drop outs in certain contexts (Boyle et al, 2002). In areas where girls marry early, and/or go to other households, drop out is often high. Having said this, where marriage is concerned in some contexts such as India, education levels can work both ways, as schooling might get girls a 'better' marriage, but this may also raise the cost of the marriage for parents – in this case parents might be inclined to remove their daughter from school (Boyle et al, 2002).

2.3.4 Early Marriage

Traditionally initiation, circumcision and early marriage should not cause girls to drop – out of school. Wanyoike (2003) states that some students who drop-out of school especially girls end up in early marriages and prostitution. However survey carried out among Samburu community indicates that girls are forced to early marriage at a tender age of 13 years. Threats of curses befalling those who refuse to get married make it difficult for girls to resist early marriages. Some continue with schooling after marriage but when they get pregnant they have to quit school (Wanyoike, 2003). This however disadvantages the girls as the boys are left to continue with their education. The study will establish whether this is an issue in Laikipia West District.

2.3.4 Family Economic Status

Okumu (1995) points out that both in Kwale and Nairobi, respondents of situation analysis survey, gave poverty as the most important factor for students dropping out of school (33 percent and 64 percent respectively). In Nairobi 42 percent of the respondents indicated that they would send their son to school in case of economic crunch in contrast to only 8 percent when decisively stated they would prefer to send their daughters. Report by MOE (2007) indicates that 58% of the Kenyan population is living below the poverty line. This however leads to inability of the poor to meet education cost for their children. Consequently, this becomes a barrier to the education for both boys and girls who withdraw from school to engage in domestic work, a factor which the study seeks to investigate.

Murugi (2008) observed that over one million children are out of school in Kenya due to poor backgrounds. Some have been forced to drop out of school to earn a living for their families due to rising poverty. This is worsened by post-election violence. In the Totally Integrated Quality Education and Training (TIQET) and Koech reports, it is evident that child labour keeps children out from school (Republic of Kenya, 1989). The labour engaged by the children depends on the geographical region for example touting, fishmongers, beach boys, caring for younger siblings, picking tea or coffee (Reche, 1982). The study will seek to investigate whether drop out of school is related to child labour.

Psacharopoulos and Woodhall (1997) say that some young children from poor families are kept out of school because their families need additional income that they may generate. Some families are so poor such that they cannot afford to hire labour. Hence, such families may decide to use their children as laborers. However this affects both boys and girls depending on the family status. Adu (2007) observed that child labour was rampant in miraa, tea and coffee growing areas in Meru, Embu and Meru North. Lack of economic alternatives in the labour market is a factor that influences girls to drop-out of school prematurely. Many girls perceive marriage as an escape from family poverty (Wamahiu, Opondo & Nyagah 1992). Girls sometimes offer to go and work as house helps so as to raise money for their brothers' education (Wanjiru, 2007). Furthermore the education in Kenya fails to address the special circumstances of working children. It should also be noted that with the subsidized secondary education, still parents have a responsibility of providing the students with learning materials and other resources (MOE, 2008). Depending on the family financial level, the education of both boys and girls from poor households are disadvantaged. In those cultures where they believe it's wiser to invest in education for boys than girls, the later drops from school (Wamahiu, Opondo & Nyagah 1992). This is also supported by UNESCO (2003). The study will therefore determine whether the drop out of students is related to economic factors in Laikipia West District.

2.3 Student's personal determinants that lead to education wastage in public secondary schools

The student personal attributes that leads to dropout from school includes peer group influence and attitudes towards school, absenteeism, repeating classes and poor academic performance, individual behavior and pregnancy

2.3.1 Peer group influence and attitudes towards school

Peer group influence plays an important role in school dropout among adolescents. It is well recognized that the extent to which an adolescent succeeds in meeting the schools expectations has an important and direct bearing upon his status in the peer group (Carter & McGoldrick, 2005). The peer group of an adolescent constitutes a world of its own with its customs, traditions, manners, and even its own language. Peers can exert extraordinary influence over each other particularly in regard to school dropout and attitudes towards school (Gara & Davis, 2006).

Peer group influence upon secondary school students' attitudes towards school can be supportive of the formal organizational norms concerning the importance of academic achievement. The more cohesive the peer group is, the greater the influence on its members (Dougherty & Hammack, 1990).

Lindgren (1980) observed that, individuals need to relate to their peers for they are dependent on their attitudes, feelings, and expectations to help them construct their own views of the world. Farmer (2010) also affirms that peers are not inherently positive or negative; they can be both good and bad.

But Burton, Ray, & Mehta (2003) noted that these peers pose an influence that is a common source for negative activities for students like experimentation with drugs, drinking, vandalism and stealing. It was noted that some students often perceive the school as another symbol of adult authority, full of restrictions and rules, and quite often they decide to drop out (Namugembe, 1999). It is worth mentioning that individual students who hold negative views towards school and drop out of school bring emotional frustration and shatter the expectations people had in them for their future success.

Lindgren (1980) further observed that an individual's attitudes towards school initially tend to be positive; learning becomes an exciting adventure as new skills are discovered and vistas open, but later something happens. Perhaps learning tasks are increasingly repetitive, teachers become less supportive and permissive, or perhaps children themselves develop goals and motives that are in conflict with those of the school. It is at this stage that peer group influence begins to set goals that compete with those of the school. The school becomes less interesting and attractive, and negative peer group influence sets in which finally culminates to dropping out.

However, in a report that was compiled which was code-named, Raising the Educational Achievement of Secondary School Students (REASSS, 1995), it was observed that high dropout rates of students, poor attendance, and frequent conflicts between students and teachers and among students themselves often signal alienation among students as peers and need to build their commitment to schooling. Those who

drop out of school often attribute this to teachers who do not care about them. Teachers are potentially builders of students attitudes towards school. This is in agreement with what Hinds, et al. (1999) noted, that teachers wield great potential to shape students attitudes towards school. This means that peer groups may not only be the ones who influence students attitudes to school, but also teachers and parents have that potential.

2.3.2 Pregnancy

The problem of school pregnancies is related to rape and sexual harassment. Mutumbai (2005) pointed out that there are reported cases of girls 14 - 18 years, dropping out of school every year due to pregnancy and this sometimes leads to early marriages. According to Ministry of Health (1988) report, the incidence of school drop-out among females was slightly in rural than urban areas. The Nairobi study listed pregnancy as the third most common reason cited by respondents for female dropping out of school (Okumu, 1995). The study sought to establish whether pregnancy was a factor leading to female students drop out of school.

In majority of African culture child bearing is associated with adults. This means pregnant girls are viewed as 'adults' and have no business being in school. Therefore these pregnant girls are expelled from school (Okumu, 1995). Fatuma and Sifuna (2006) attributes high drop out among girls due to pre-marital pregnancies which were characterized by frequent sexual harassment particularly in unaided harambee schools. There were reported cases of teachers preying on female students, threatening to fail them or publicly humiliating them to prod them in sexual relationships. Teachers are

reported to reward female students who “co-operate” with grades and tuition fees waivers, (Abagi, 1992). Such students end up being frustrated if they don’t comply or if they do, they may be victims of early pregnancy and tend to withdraw from school prematurely. This is also supported by Wanyoike, (2003) and Wrigley (1995). Ngwe’no (1994) observed that early withdrawal from school by girls due to pregnancy is a sexist’s societal attitude manifested in gender insensitive pregnancy policies, which the study intends to highlight.

The national policy of education in MOEST (2005) requires girls who are pregnant to enroll back to school. However this is a challenge due to cultural backgrounds and the parents may be demotivated to take the girls back to school. A recent survey on the policy of pregnant girls required to re-enroll back to school faced a lot of challenges as reported by Mutambai (2005). It was reported that the policy lacked proper monitoring evaluation mechanisms (Fatuma & Sifuna, 2006). Worse still in some communities is where such girls are viewed as adults and are forced to early marriages. In MOE (2007) recommendations are made that a country must critically assess existing policies to determine their impact on the survival of girls in schooling and then either review them or devise new ones that will help to promote gender equality and reduce female school drop-out.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter is a blueprint of the methodology that was used to find answers to the research questions which is presented in the following order: research design, target population, sampling procedure, data collection methods, instruments of data collection, reliability and validity and finally the data analysis.

3.2 Research Design

For the purposes of this study, the researcher employed descriptive research design. A descriptive study is concerned with determining the frequency with which something occurs or the relationship between variables (Bryman & Bell, 2003). Descriptive research design is a valid method for researching specific subjects and as a precursor to quantitative studies. The design was deemed suitable since it helped to describe the state of affairs as it existed without manipulation of variables which was the aim of the study.

3.3 Location of the Study

Laikipia West District is one of the districts in Laikipia County. It has a population of approximately 300,000 persons. It has 23 public secondary schools (2 boys boarding, 1 Girls boarding, 20 mixed days) (AEO'S Office, 2012). The District was chosen for the study since there are claims from parents, members of public, stake holders and other beneficiaries of education that education wastage in public secondary schools in the area is on the increase.

3.4 Target Population

According to Ngechu (2004), a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. The target population for this study was 2000 respondents which consisted of 150 teachers and 1849 students and one Area Education Officer. Mugenda & Mugenda (2003) explain that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study.

3.5 Sampling Techniques study

The study sampled 20% of the target population of 2000 respondents which made a sample size of 400 respondents. Simple stratified random sampling was used to select schools where the students sample size came from. Stratified sampling is suitable when dealing with subgroups like schools which form several segments or strata's. The sample size of the study was 20 head teachers from 20 public secondary schools, 40 form four class teachers from 20 public secondary schools, 344 form four students' from the 20 public secondary schools and 1 Area Education Officer.

3.6 Data Collection Instruments

Data Questionnaires are cheap to administer to respondents who are scattered over a large area. It is convenient for collecting information from a large population within a short span of time. The questionnaire had both open and closed ended questions. The structured questions were used in an effort to conserve time and money as well as to facilitate in easier analysis as they are in immediate usable form; while the unstructured

questions were used to encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information.

3.6.1 Validity of the Instrument

Validity of the questionnaire was established by peers and a panel of experts from the Department of Educational Management, Policy and Curriculum Studies at Kenyatta University. The research instrument were availed to the experts and peers, who established its content and construct validity to ensure that the items were adequate representative of the subject area to be studied.

3.6.2 Reliability of the Instrument

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Nsubuga, 2000). This research study used test-rest method which involves administering the same scale or measure to the same group of respondents at two separate times. This was after a time lapse of one week. A pilot study was conducted in the district. 2 schools were used for pilot study where 2 head teachers, 4 form four class teachers from the 2 public secondary schools, 30 form four students' from the 2 public secondary schools were picked for the pilot study. Test re-test method was used to test for reliability of the instrument. The instruments were administered to the respondents and re-administered to the same respondents after one week. This was in line with Shuttleworth (2009) who stated that the instrument should be administered at two different times and then the correlation between the two sets of scores computed.

A correlation coefficient of above 0.7 was deemed to mean that the instrument were reliable thus the questionnaire was used for data collection.

3.6.3 Data Collection Method

The researcher administered questionnaires to 20 head teachers from 20 public secondary schools, 40 form four class teachers from 20 public secondary schools, 344 form four students' from the 20 public secondary schools and 1 Area Education Officer through drop and pick later method. The support of a trained research assistant was sought to assist in data collection owing to the expansiveness of the area to be covered. Filled in questionnaires were later collected at the agreed upon time.

3.7 Data Analysis

The researcher perused the completed research instruments and document analysis recording sheets. Quantitative data collected using questionnaires was analyzed by the use of descriptive statistics using Statistical Package for Social Sciences (SPSS).

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents findings and analysis of data collected by the study. The results were presented on the determinants of education wastage in public secondary schools in Laikipia West District, Laikipia County based on the following specific objectives; to establish the school based determinants that lead to education wastage in public secondary schools in Laikipia West District, Laikipia County; to establish the socio-cultural determinants that leads to education wastage in public secondary schools in Laikipia West District, Laikipia County; and to establish student's personal determinants that leads to education wastage in public secondary schools in Laikipia West District, Laikipia County.

4.2 Demographic Information

Out of a targeted sample of 20 head teachers, 40 form four class teachers and 344 form four students, only 20 head teachers, 35 class teachers and 300 form four students responded and returned their questionnaires, which account to a response rate of 100% for the head teachers, 87.5% for the class teachers and 87.2% for the students. This response rate was sufficient and representative, which conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good while a response rate of 70% and over is excellent.

4.2.1 Head teachers by Gender

Data collected using questionnaires from 20 public secondary school principals; an item which sought information on the gender of the head teacher revealed that out of the 20 head teachers, 60% were male and 40% were female.

4.2.2 Class teachers Gender

In the study, a total of 35 class teachers responded to the questionnaires. The gender distribution among the teachers was presented in Table 4.1.

Table 4.1: Class teachers Gender

Gender	Frequency	%
Female	15	45
Male	20	55
Total	35	100

Table 4.1 shows that out of 35 class teachers, 55% were males and 45% were females.

These findings reveal that majority of the class teachers were males.

4.2.3 Head Teachers' Experience

The study sought information on head teachers experience as presented in Table 4.2.

Table 4.2: Head Teachers' Experience

Teaching Experience in years	Frequency	%
1 – 5	0	0
6 – 10	4	20
11 – 15	10	50
Above 16	6	30
Total	20	100

Table 4.2 shows that 50 % of the head teachers had a teaching experience of between 11–15 years, 30 % had over 16 years while 20% had a teaching experience of between 6-10 years. Therefore they had been running the school for long enough to provide credible information on determinants of education wastage in public secondary schools.

4.2.4 Class Teachers' Experience

The study sought information on class teachers' experience as presented in Table 4.3.

Table 4.3: Class Teachers' Experience

Teaching Experience in years	Frequency	%
1 – 5	5	15
6 – 10	13	35
11 – 15	14	40
Above 16	3	10
Total	35	100

Table 4. 3 shows that 40% of the respondents had a teaching experience of between 11 – 15 years, 35% were between 6 – 10 years while 20% were between 1 – 5 years. The study revealed that majority of the respondents had a teaching experience of between 6 to 15 years. This experience makes them understand the challenges facing students better and the possible determinants of education wastage. Besides their experience the class teachers are better placed to give proper guidance to enhance retention of students in school.

4.2.5 Head Teachers Experience in Administration

The study also sought information on head teachers' leadership experience as presented in figure 4.1.

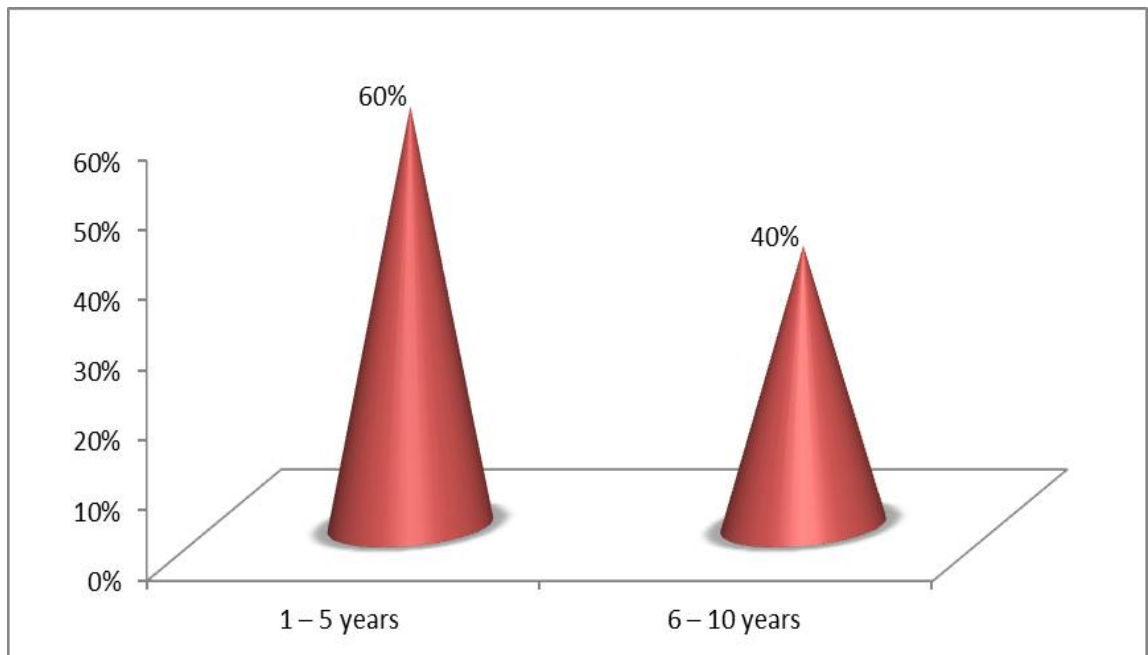


Figure 4.1: Head teachers Experience

Figure 4.1 shows that 40% of the head teachers had a leadership experience of between 6 – 10 years and 60% of them between 1 – 5 years. This means that majority of the head teachers had adequate duration of leadership experience to offer insights on determinants of education wastage.

4.2.6 Class Teachers by Work Experience

Data collected on the class teachers by their work experience was resented in Figure 4.2. Figure below presents information on class teachers work experience.

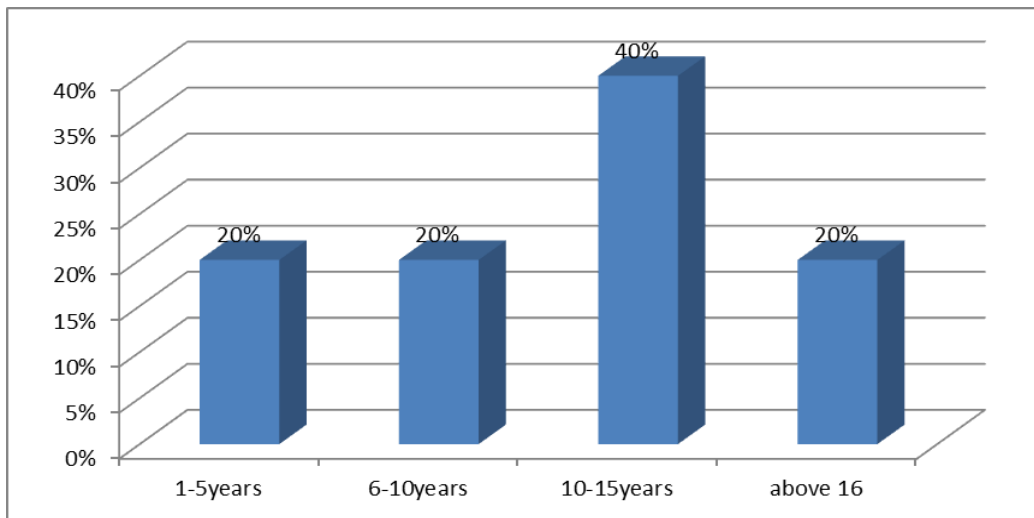


Figure 4.2: Class Teachers Experience

Figure 4.2 revealed that 20% of the respondents had a work experience of between 1 to 5 years, 20% between 6 to 10 years, 40% between 10 to 15 years and 20% had work experience of above 16 years. This means that majority of the teachers had worked as class teachers for between 10 to 15 years. The long work experience can make them create and sacrifice more of their time in handling factors leading to drop out among students. These teachers can also give more counseling to the students.

4.2.7 Duration of operation as AEO in the district

The study inquired on how long educational officer had performed his duties as the AEO in the district. The educational officer indicated that they he had worked as an AEO in the area for three years. This depicts that the educational officer was acquainted with the educational situation of Laikipia District and could provide useful insights on the determinants of education wastage in public secondary schools in Laikipia West District, Laikipia County.

4.2.8 Students by Gender

The study sought to establish the students by gender as presented in Figure 4.3.

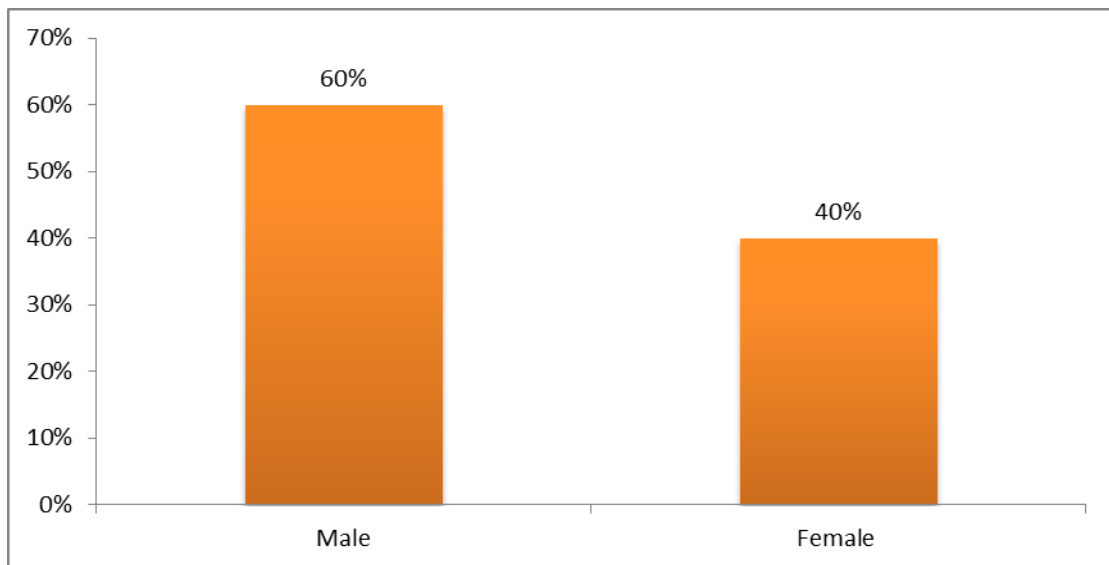


Figure 4.3: Students by Gender

Figure 4.3 shows that 60% of the students were male while females were 40%. This means that majority of students were males.

4.3 School Based Determinants of Educational Wastage

The first objective of the study sought to determine the extent of education wastages, data inquired from the teachers, head teachers and educational officer about the number of boys and girls that have transited from form one up to form four was summarized in Table 4.4.

Table 4.4: Education Wastage in Secondary Schools

Year	Enrolment	Retention	Dropout	% Dropout
2009	39,005	34,246	4,759	12.20
2010	43,652	36,493	7,159	16.40
2011	45,673	36,219	9,454	20.70
2012	47,863	36,567	11,296	23.60
2013	48745	36,461	12,284	25.20

Table 4.4 shows that enrolment and dropouts have been increasing since 2009 as opposed to retention which has been stagnant at about 35,000 students. The schools in the district had the highest dropout rate in 2013 represented by 25.20% as compared to 2009 which had the lowest retention rate of 12.20%. This data would help to determine the rate of school drop out for their schools. Respondents accounted the high levels of educational wastage to students drop out (45%), transfer to other schools (36%), and repetition (19%). From the findings, students are likely to transfer from boarding schools to day schools in and out of the district, while those who dropped out of school may have been due to lack of school fees, indiscipline, alternative economic activities

or peer influence. Students are likely to have repeated due to early pregnancies, lack of school fees or pressure to perform better. Money related issues are therefore the main causes of wastage among students.

According to UNESCO (2010), the rising level of poverty among parents makes them unable to feed their children properly and provide adequate health services. In these circumstances, children whose parents cannot afford costs of instructional materials, school uniforms, tuition fees, and activity fees tend to go to school irregularly and, in the long run, drop out of school. Faced with limited resources, and reduced returns from education, parents are not only unable but also unmotivated to educate their children.

4.3.1 Students and other Siblings in School

Data collected on the number of sisters and brothers to the respondents in other educational institutions was summarized in Table 4.5.

Table 4.5: Students and the Number of Siblings

Siblings	Primary	Secondary	University	Total	%
None	11	43	67	121	40.3
1 or 2	54	158	79	291	97.0
More than 2	39	43	17	99	33.0
Total	104	244	163	-	-

Data in Table 4.5 was a way of determining whether students' wastage was due to the cost burden of educating many children per family. The table shows that 97% of the respondents had one or two sisters and brothers at different levels of education. The table also shows that most of the respondents' siblings were at secondary school level, identified by 244 respondents. This means that the burden of educating many children affected almost all the students at secondary school. Further to this, since majority of the respondents were at secondary school level which is more costly than primary school level, some students were likely to drop out of school to give other siblings a chance to acquire education as parents were overstretched in catering for the cost of education for the children in the family.

4.3.2 Category of school and Students Wastage

Data collected from principals on the on the way the nature of the school influenced wastage of students was summarized in Table 4.6.

Table 4.6: Category of school and Students Wastage

School category	Low dropout (0 – 5%)	%	High dropout (Over 20%)	%
Mixed day	1	5	12	60
Mixed boarding	2	10	3	15
Boys/ girls day	0	0	0	0
Boys/ Girls Boarding	2	10	0	0

In Table 4.6, wastage among students was classified into either low wastage where wastage rate was below 20%, and high wastage s among From the findings, majority of the schools with high wastage rates (60%) posited that their schools were mixed day. And mixed schools had higher wastage rates than pure sex schools. This shows that the nature of the school influenced educational wastage as learning in mixed day is likely to be disrupted by absenteeism, domestic duties, early pregnancies and early marriages compared to the boarding schools. These findings concur with an earlier study by Abagi (1997) that category or nature of the school influence educational wastage as learning in day schools is likely to be disrupted from time to time as opposed to boarding schools. Mixed schools may also expose students especially girls to coupling and eventual teenage pregnancies and early marriages.

4.3.3 Other School Determinants of Education Wastage

Asked to identify other school factors that determine education wastage in their schools, the findings were summarized in Table 4.7. In the table, responses to the given statements were summarized in a frequency distribution table using a 5 point Likert scale. The responses were then awarded cumulative scores such that responses that indicated strongly agree were awarded 5 points, agree warded 4 marks, tend to agree awarded 3 marks, disagree awarded 2 marks and strongly disagree awarded 1 mark. The results were entered in statistical package for social sciences data editor and analyzed using descriptive statistics to determine the minimum and maximum value of responses, mean and standard deviation for each statement.

Table 4.7: School Determinants of Education Wastage

School Determinant	Min	Max	Mean	Std. Dev
Heavy curriculum workload.	2	5	4.30	0.656
Poor staffing in schools/ High teacher: student ratio	1	5	4.35	0.884
Strict school policies on promotion and repetition	2	5	4.26	0.771
Sexual harassment by teachers or fellow students	2	5	4.09	0.903
Poor quality of school facilities.	1	5	4.26	0.708
Long distance from home to school.	2	5	4.29	0.739
Un-accommodative school rules and regulations.	1	5	3.76	0.962
Weak career guidance policies.	2	5	4.06	0.808

Table 4.7 shows that the mean of all the responses were 3.76 and above. This means that all the respondents agreed with the given statements. All the same, majority of the respondents felt that heavy curriculum workload was the main school determinant of education wastage as denoted by a high mean of 4.30, as compared to un-accommodative school rules and regulations which had a mean of 3.76. From the study findings, it can be argued that the high response rates to all the statements means that school factors influence wastage in the secondary schools covered in the study. The low standard deviation (≥ 1) to all statements signifies that majority of the respondents rated the statements almost the same. These findings concurs with Sifuna (2006) who identified school factors behind dropouts as heavy students' workload, school selection policies based on grades, poor quality of school facilities and long distances from home to school.

In the cost-sharing policy, while the burden of paying teachers lies with the government, erecting physical structures and purchasing instructional related materials is done by communities and parents. Most parents are not in a position to meet these costs. As a result, lack of some school requirements like uniforms and set books hinders many children from attending school regularly. In the end, these children feel frustrated and give up on education.

According to World Bank, (2009), the overloaded 8-4-4 curriculum is one of the factors which affect students' completion in school. Students work under pressure taking eight or nine examinable subjects. They get to class latest from 7 a.m. to 5 or 6 p.m., and have short holidays or no holidays. This has affected their motivation for learning and consequently their performance deteriorates. In the process, some children give up on education and, in the long run, drop out of school.

Teachers' negative attitude towards their work and pupils make their classroom management and their interaction with pupils poor, which greatly impact on the academic achievement and retention in school, particularly girls. These students are sometimes neglected, abused, mis-handled, and sent out of class during learning periods. This atmosphere is not conducive to learning and makes some children hate school. This results to absenteeism, poor performance, and non-completion of the education cycle. Sexual harassment and pregnancies among school girls in Kenya are limited but the few cases recorded posing a great threat to girls' participation and retention in education (Njau & Wamahiu, 1996). Reports by the Forum for African

Women Educationalist (FAWE) indicate that more than 12,000 girls drop out of Kenya's schools yearly due to pregnancy. Such a hostile environment discourages parents from sending their daughters to or pulling them out of school, while students lose interest in education and, if pregnant, are kicked out of the school system altogether.

4.4 Socio-Cultural Determinants to Education Wastage

Teachers were required to give their opinion on whether selected socio-cultural factors contributed to education wastage among students and their responses were summarized in Table 4.8.

Table 4.8: Teachers' Rating of Socio-Cultural Determinants of Education Wastage

Socio-Cultural Determinant	Min	Max	Mean	Std. Dev
Female genital mutilation	1	5	2.45	1.179
Early marriages	2	5	4.11	0.767
Teenage pregnancies	2	5	4.30	0.953
Gender prevalence against girl child education	1	5	2.11	1.077
Religious beliefs against western education and civilization.	1	5	2.08	1.000
Society politics against secondary education.	1	5	2.41	1.148
Opinion of community leaders against a school	1	5	2.31	1.211
Alternative routes like village polytechnics, jua kali	2	5	3.80	0.897
Cultural activities like grazing, child rearing etc	1	5	2.44	1.098
Negative role models	2	5	4.08	0.998

Table 4.8 shows that the statements with the highest mean of responses were teenage pregnancies with a mean of 4.30, which is related to early marriages which had a mean of 4.11. The lowest mean was recorded in religious beliefs with a mean of 2.08. Most of the standard deviations were above one, which means that respondents had diverse feelings. From the findings, one can argue that since majority of the statements (6 out of 9 statements) had a mean of 2.00 to 2.50 (which denotes that they range from disagree to tending to agree), the respondents are aware of the cultural activities, but the impacts of the cultural activities on education is reducing. As a result, the cultural activities that need to be addressed are early marriages, teenage pregnancies and alternative routes from education, for instance polytechnics and informal sector (jua kali). Cultural activities therefore have little impact on secondary education in the area.

These findings coincide with other studies, for instance RoK (2011) says that students from families earning low income are likely to be sent home for school needs. When students are continuously sent back home, they may end up dropping out of school. Duties assigned to students by their parents or guardians at home deny them adequate time to learn while at home. This would instigate educational wastage as majority of the students may not fully exploit their potential in academics as their attention is shared between academics and household chores. Some of the students are even overworked by their parents with household chores like fetching water and firewood, looking after cattle, farming, running home errands and engaging in income generating activities to supplement the family sources of income.

UNESCO (2005), as the level of poverty rises, child labour has become crucial for family survival. Child labour is increasingly employed in domestic activities, agriculture, and petty trade rural and urban Kenya. Poor households, and in some cases children themselves analyse the opportunity costs of education, for instance boys from the coastal region and in rich agricultural areas abandon school in order to earn money as beach-boys and tea or coffee pickers, respectively.

In other situations, parents and children have negative attitude towards education. This results in high drop-out rates. Social-cultural and religious factors also lead to students' failure to complete their education. In areas where traditional circumcision is still practiced, some students are pulled out of school to participate in initiation ceremonies. Once initiated, some of them develop negative attitudes towards teachers and school. Circumcised boys are not ready to be taught by women, and girls now feel grownup women who should get married to meet traditional expectations.

4.5 Student's Personal Determinants of Education Wastage

Students were also required to give their opinion on whether personal factors among students contributed to education wastage as summarized in Table 4.9.

Table 4.9 shows that the main student's personal determinants are indiscipline and peer influence, which had a mean of 4.45 and 4.30 respectively. The factor with the lowest mean is physiological and psychological challenges which had a mean of 1.87. The standard deviations were also low below 1.000. From these findings, all the responses had a mean of 3.8 and above, which means that they agreed and strongly agreed with

the given statements. From these findings, it can be argued that wastage among students can be attributed more to individual student's personal attributes than the school and cultural determinants. From the findings, student's personal factors lead to education wastage.

According to Sifuna (1988), students' lateness to school which occur due to household chores, truancy and indiscipline, child labour, distance covered from home to school and to negative attitude towards learning and low motivation. Lateness make students miss crucial learning opportunities and were also subjected punishment which also rob them learning opportunities leading to poor academic performance which was likely to instigate school dropout. Students' absenteeism due to lack of school fees, engaging in casual work, helping at home, sickness, caring for sick relatives, caring for younger siblings and helping in the school. Absenteeism is a precursor of educational wastage as it leads to poor academic performance which consequently instigate school dropout.

Laziness leads to lack of commitment to attending school, doing homework and working hard in school. When one is so lazy in school matters, he is likely to lose interest in schooling and drop out of school.

Table 4.9: Student's Rating of Personal Determinants of Education Wastage

Student's personal determinant	Min	Max	Mean	Std. dev
Indiscipline	2	5	4.45	0.941
Laziness/ Lateness/ Poor time management	2	5	4.21	0.839
Immorality	2	5	4.11	0.808
Peer conformity/ gangs	2	5	4.30	0.943
Physical and psychological challenges	1	5	1.87	0.996
Wrong aspirations like early jobs, business, farming	2	5	4.08	0.767
Absenteeism	2	5	4.06	0.658
Sickness	1	5	3.50	1.002
Orphans	2	5	3.85	0.993
Domestic responsibilities	2	5	3.93	1.012

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section is divided into summary, conclusions and recommendations.

5.2 Summary of Findings

The present study sought to determine the school based, socio cultural determinants and students' personal determinants that lead to education wastage in public secondary schools in Laikipia West District. In a target population of 2000 respondents consisting of 150 teachers and 1849 students and one Area Education Officer, a sample of 20 head teachers, 40 class teachers, and 344 form four students was used. With a response rate of 88%, data was collected and analyzed using descriptive statistics, and the following is the summary of the study findings.

Education wastage in the district was 12.20% in 2009, 16.40% in 2010, 20.70% in 2011, 23.60% in 2012, and 25.20% in 2013. This was attributed to transfer of students to other schools, and repetition.

The school based determinants of education wastage were poverty among parents, nature of school, heavy curriculum workload, high teacher: student ratio, poor school policies on promotion and repetition, sexual harassment by teachers or fellow students, poor quality of school facilities, long distance from home to school, unfavourable school rules and regulations and weak career guidance policies.

The socio-cultural factors that contribute to education wastage among students in the district were female genital mutilation, early marriages, teenage pregnancies, gender prevalence against girl child education, religious beliefs against western education and civilization, society politics against secondary education, opinion of community leaders against a school, alternative routes like village polytechnics and jua kali, cultural activities like grazing and child rearing, negative role models, and parents and children's negative attitude towards education.

The personal determinants of education wastage among students in the district were indiscipline, laziness, lateness or poor time management, immorality, peer conformity or gangs, physical and psychological challenges, wrong aspirations like early jobs, business and farming, absenteeism, student's sickness, situation where students become orphans, and domestic responsibilities.

5.3 Conclusion of the Study

The study concludes that enrolment and dropouts have been increasing as opposed to retention which has been stagnant at about 35,000. The high level of education wastage in the district was attributed to transfer to other schools, repetition and dropping out of school.

School based factors influence education wastage in Laikipia West District through parents' inability to finance education, nature of the school, heavy curriculum workload, high teacher: student ratio, poor school policies on promotion and repetition, sexual harassment by teachers or fellow students, poor quality of school facilities, long

distance from home to school, unfavourable school rules and regulations and weak career guidance policies.

The influence of socio-cultural factors on education wastage in the district is lowering as people abandon retrogressive activities like female genital mutilation, gender prevalence against girl child education, and religious beliefs against western education and civilization. However, the impact of early marriages, teenage pregnancies, society politics against secondary education, opinion of community leaders against a school, alternative routes like village polytechnics and jua kali, cultural activities like grazing and child rearing, negative role models, and parents and children's negative attitude towards education was noted.

The students' personal determinants of education wastage in the district were indiscipline, laziness, lateness or poor time management, immorality, peer conformity or gangs, physical and psychological challenges, wrong aspirations like early jobs, business and farming, absenteeism, student sickness, students who are orphans and domestic responsibilities.

5.4 Recommendations for the Study

The study recommends that teachers, parents and students be involved in efforts to address the school based factors leading to wastage in the district. Opinion leaders and intellectuals in the local community should be involved in addressing socio-cultural factors that contribute to education wastage. Finally, guidance and counseling services should be intensified to address the students' personal attributes that leads to education wastage.

5.5 Suggestions for Further Research

The study suggests that a further research be carried out on possible ways to reduce wastage among students in public secondary schools in Nyahururu district.

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APPENDICE

APPENDIX I

Introduction Letter

Kenyatta University,

P.O Box 43844,

Nairobi.

Date.....

Dear Sir/Madam/Student,

RE: LETTER OF INTRODUCION

I am a student at Kenyatta University taking a Master of Education (MED) degree course. As a requirement for the fulfillment of the Master's degree, I intend to carry out a study on "DETERMINANTS OF EDUCATION WASTAGE IN PUBLIC SECONDARY SCHOOLS IN LAIKIPIA WEST DISTRICT, LAIKIPIA COUNTY, KENYA." Kindly spare some of your time to complete the questionnaire attached herein. The information given will be handled with utmost confidentiality.

Yours faithfully

Mutahi Nancy Wanjiku

APPENDIX II

Form Four Students' Questionnaire

Instructions:

(Please read the instructions given and answer the questions as appropriately as possible). It is advisable that you answer or fill in each section as provided. Make an attempt to answer every question fully and honestly.

SECTION A: GENERAL QUESTIONS

1. Which is your sex Male Female

2. Indicate your age bracket.
13-14yrs 15-18yrs > 18 years

3. Kindly indicate your class (tick (√)).
a) Form 1 b) form 2 c) form 3 d) form 4

4. The type your school
Provincial District

5. Category of your school
Girls boarding Boys boarding
Mixed day and boarding Mixed boarding

6. How many of you are there in your family?
Girls Boys

7. How many of your sisters have completed

Primary school []

Secondary school []

College and university []

8. How many of your brothers have completed

Primary school []

Secondary school []

College and university []

9. How many of your sisters started schooling and later dropped out of secondary school?

Please give reasons for this

.....

10. How many of your brothers started schooling and later dropped out of secondary school?

Please give reasons for this

11. How often are you late in getting to school? (Tick the appropriate box).

Always [] Sometimes [] Never []

12. If you were late to get to school what were the reasons for this?

.....

13. Have you ever been absent from school? Yes [] No []

14. If yes above what were the reasons for this? (you can tick more than one reason)

Helping at home [] Helping in the school []

Caring for younger siblings [] Sickness []

Engaging in casual work [] Caring for sick relatives []

Others specify

15. Who pays for your school fees?

16. How much money do you estimate for your family income per month? Kshs...

.....

17. When at home how many hours do you spend per day reading or doing homework?

..... hours.

18. Are you assigned duties at home by your parent / guardian?

Yes [] No []

If yes state approximately how many hours you spend doing these duties

.....Hours.

19. What activities occupy you at home that keep you from studying?

.....

20. Have you ever repeated a class?

Yes [] No []

If yes, which class did you repeat and why?

21. Reasons for repeating (you may tick \surd more than one reasons)

Poor performance [] Forced by parents []

Forced by teachers []

Others specify

22. What is your level of agreement with the following statements on the causes of students dropping out in this school? Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3-tend to agree, 4-agree and 5= strongly agree

Causes of students' school drop out	1	2	3	4	5
Mistreatment by teachers causes students to drop out of school.					
Family attitude and beliefs has a major role to play in students dropping out of school.					
Pregnancy and early marriages plays a major role in girls who drop out of school.					
Sexual harassment by teachers is a factor that causes students to drop out of school.					
Lack of school fees is the major cause for students to drop out of school.					
Discriminated both at school and home is a major cause for students to drop out of school.					
Sickness contributes to students dropping out of school.					
Repetition is a major contributor of students dropping out of school.					

APPENDIX III

Form Four Class Teacher Questionnaire

Instructions:

(Please read the instructions given and answer the questions as appropriately as possible). It is advisable that you answer or fill in each section as provided. Make an attempt to answer every question fully and honestly.

SECTION A: GENERAL QUESTIONS

1. Which is your sex a) Male [] b) Female []

2. For how long have you taught in this school? (in years)
1-5 [] 6- 10 [] 11- 15 []
16 and above []

SECTION B: Issue related to students drop outs from this school

3. How many girls students were admitted in your class in form one?

4. How many of the original number of girls students admitted in form one are currently in form four?

5. How many boys students were admitted in your class in form one?

6. How many of the original number of boys students admitted in form one are currently in form four?

7. If the number of students is less, what do you think caused the difference? (Tick (√) appropriate reason)

Transfer to other schools [] Repetition []
 Drop out []

8. What is your level of agreement with the following statements on the causes of students dropping out in this school? Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3- Tend to agree, 4-agree and 5= strongly agree

Causes of students' school drop out	1	2	3	4	5
Mistreatment by teachers causes students to drop out of school.					
Family attitude and beliefs has a major role to play in students dropping out of school.					
Pregnancy and early marriages plays a major role in girls who drop out of school.					
Sexual harassment by teachers is a factor that causes students to drop out of school.					
Lack of school fees is the major cause for students to drop out of school.					
Discriminated both at school and home is a major cause for students to drop out of school.					
Sickness contributes to students dropping out of school.					
Repetition is a major contributor of students dropping out of school.					

APPENDIX IV

Questionnaire for the Area Education Officer

SECTION A: Background Information

1. What is your Gender?

Male []

Female []

2. For how long have performed your duties as the AEO in this district? [] Years.

SECTION B: Issues related education wastage in public secondary schools

3. How do you compare the dropout of students from school for the last five years in this district?

Year	Number of students
2012	
2011	
2010	
2009	
2008	

4. What is your level of agreement with the following statements on the causes of students dropping out of school in this district? Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3-Tend to agree, 4-agree and 5= strongly agree

	1	2	3	4	5
Mistreatment by teachers causes students to drop out of school in this district.					
Family attitude and beliefs has a major role to play in students dropping out of school in this district.					
Pregnancy and early marriages plays a major role in girls who drop out of school in this district.					
Sexual harassment by teachers is a factor that causes students to drop out of school in this district.					
Lack of school fees is the major cause for students to drop out of school in this district.					
Discriminated both at school and home is a major cause for students to drop out of school in this district.					
Sickness contributes to students dropping out of school in this district.					
Repetition is a major contributor of students dropping out of school in this district.					

APPENDIX V

Head Teacher Questionnaire Instructions:

(Please read the instructions given and answer the questions as appropriately as possible). It is advisable that you answer or fill in each section as provided. Make an attempt to answer every question fully and honestly.

SECTION A: GENERAL QUESTIONS

1. Which is your sex

Male []

Female []

2. For how long have you been the Head Teacher in this school? [] (in years)

1-5 [] 6- 10 []

11- 15 [] 16 and above []

SECTION B: Issues related education wastage in public secondary school

3. How do you compare the dropout of students from school for the last five years in this school?

Year	Number of students
2012	
2011	
2010	
2009	
2008	

4. What is your level of agreement with the following statements on the causes of students dropping out of school in this district? Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3-Tend to agree, 4-agree and 5= strongly agree

	1	2	3	4	5
Mistreatment by teachers causes students to drop out of school.					
Family attitude and beliefs has a major role to play in students dropping out of school.					
Pregnancy and early marriages plays a major role in girls who drop out of school.					
Sexual harassment by teachers is a factor that causes students to drop out of school.					
Lack of school fees is the major cause for students to drop out of school.					
Discriminated both at school and home is a major cause for students to drop out of school.					
Sickness contributes to students dropping out of school.					
Repetition is a major contributor of students dropping out of school.					