# FACTORS INFLUENCING PARTICIPATION OF STUDENTS IN MIXED PUBLIC SECONDARY SCHOOLS IN KAJIADO NORTH SUB-COUNTY, KENYA 

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## DECLARATION

This research project is my original work and has not been presented for examination or award in any other university

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This research project has been submitted for examination with our approval as University Supervisors

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## DEDICATION

This research project is dedicated to my wife Mary Kalungu, my daughter Esther Mawia, my sons James Kaula and Isaac Kalungu; my parents and siblings for the support, love and understanding.

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## TABLE OF CONTENTS

Content Page
Title page ..... i
Declaration ..... ii
Table of contents ..... v
List of tables ..... ix
List of figures ..... x
Abbreviations and acronyms ..... xi
Abstract ..... xii
CHAPTER ONE
INTRODUCTION
1.1 Background to the study ..... 1
1.2 Statement of the problem ..... 5
1.3 Purpose of the study ..... 6
1.4 Objectives of the study ..... 6
1.5 Research questions ..... 7
1.6 Significance of the study ..... 7
1.7 Limitations of the study ..... 8
1.8 Delimitations of the study ..... 8
1.9 Definition of terms ..... 9
1.10 Organization of the study ..... 9

## CHAPTER TWO

## RELATED LITERATURE REVIEWED

2.1 Introduction ..... 11
2.2 Overview of participation in secondary school education in Kenya ..... 11
2.3 Educational policies influencing participation schools ..... 13
2.4 Gender issues in secondary school participation ..... 15
2.5 Effect of family source of income on participation in secondary schools ..... 17
2.6 Influence of teaching and learning resources on participation ..... 18
2.7 Summary of literature review ..... 20
2.8 Theoretical framework ..... 21
2.9 Conceptual framework ..... 23
CHAPTER THREE
RESEARCH METHODOLOGY
3.1 Introduction. ..... 25
3.2 Research design ..... 25
3.3 Target population ..... 25
3.4 Sample size and sampling procedures ..... 26
3.5 Research instruments ..... 27
3.5.1 Validity of the instruments ..... 27
3.5.2 Reliability of the instruments ..... 28
3.6 Data collection procedures ..... 28
3.7 Data analysis procedures ..... 29
3.8 Ethical considerations ..... 29
CHAPTER FOURDATA ANALYSIS AND INTERPRETATION
4.1 Introduction. ..... 30
4.2 Response rate ..... 30
4.3 Characteristics of the respondents ..... 31
4.4 Level of enrollment in mixed public secondary schools ..... 33
4.5 Dropouts in mixed public secondary schools ..... 39
4.6 Socioeconomic factors affecting participation in public mixed secondary schools ..... 42
4.7 Adequacy of teaching and learning resources ..... 47
4.8 Effect of gender status of mixed schools on participation ..... 52
4.9 Effects of education policies on participation in mixed public secondary
schools ..... 55
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS
5.1 Introduction. ..... 58
5.2 Summary of the study ..... 58
5.3 Conclusion ..... 61
5.4 Recommendations ..... 63
5.5 Suggestions for further research ..... 64
REFERENCES ..... 65
APPENDICES ..... 68
Appendix 1 Letter of introduction ..... 68
Appendix 2 Questionnaire for Class Teachers ..... 69
Appendix 3 Questionnaire for Secondary School Principals ..... 74
Appendix 4 Interview Schedule for PTA Members ..... 79
Appendix 5 Research authorization permit (NACOSTI) ..... 80
Appendix 6 Research Authorization (Ministry of Education) ..... 81

## LIST OF TABLES

Table 4.1 Response rate ..... 30
Table 4.2 Gender of the respondents ..... 31
Table 4.3 Highest level of education ..... 32
Table 4.4 Duration in the current station ..... 33
Table 4.5 Total enrollment in mixed public secondary schools ..... 34
Table 4.6 Boys' enrollment in mixed public secondary schools ..... 35
Table 4.7 Girls’ enrollment in mixed public secondary schools ..... 35
Table 4.8 Total enrollment per class in mixed public secondary schools ..... 36
Table 4.9 Boys' enrollment per class in the mixed public secondary schools ..... 37
Table 4.10 Girls’ enrollment per class in the mixed public secondary schools ..... 38
Table 4.11 Number of male dropouts in mixed public secondary schools over the past year ..... 39
Table 4.12 Number of female dropouts in mixed public secondary schools over the past year ..... 40
Table 4.13 Were there any cases of dropouts in the class over the past year? ..... 41
Table 4.14 Effect of the level of parents' education. ..... 42
Table 4.16 Effect of availability waged jobs on participation ..... 43
Table 4.17 Effect of family conflicts ..... 44
Table 4.18 Effect of the large distances to school ..... 44
Table 4.19 Effect of school levies on participation ..... 45
Table 4.20 Effect of socio-cultural factors on participation ..... 46
Table 4.21 Level of adequacy of teaching and learning resources in mixed public secondary schools ..... 47
Table 4.22 Provision of teaching and learning resources ..... 50
Table 4.23 Extent to which gender related factors affect participation in mixed secondary schools ..... 53
Table 4.24 Effects of policy issues in education on participation in mixed public secondary schools ..... 56

## LIST OF FIGURES

## Figure 2.1 Conceptual framework 23

Figure 4.1 Adequacy of teaching and learning resources .................................... 51

# ABBREVIATIONS AND ACRONYMS 

| EFA | Education for All |
| :--- | :--- |
| FPE | Free Primary Education |
| FSD | Financial Sector Deepening |
| GER | Gross Enrollment Ratio |
| IPAR | Institute of Policy Analysis and Research |
| MDGs | Millennium Development Goals |
| NER | Net Enrollment Rate |
| OECD | Office of Economic Cooperation and Development |
| TFSE | Tuition Free Secondary Education |
| UNESCO | United Nations Educational, Cultural and Scientific Organization |
| UNICEF | United Nations Children's Education Fund |


#### Abstract

Comparative estimates of secondary school participation indicate that in the developing world no more than 39 per cent of children of secondary-school age are attending secondary school. In Kenya, the Tuition Free Secondary Education (TFSE) Policy was launched at the beginning of 2008 to expand and enhance access to secondary school education in the country by ensuring that children from poor households acquire quality education and benefit from the opportunity of self-advancement and eventually become productive members of society. In a nationwide study by the Education Policy and Data Centre (EPDS) (2007), it was found that the gross enrollment rate in Kajiado County was about 22 percent for boys and 18 percent for girls, both proportions of which were lower than the national averages stated as 60.1 percent by 2009 , or 57 percent for girls and 63.1 percent for boys respectively (World Bank, 2009). This study therefore sought to establish the factors that affect the participation of students in the mixed public secondary schools, considering that participation rates in the County are lower than the national average. The research utilized the descriptive survey, and used the random sampling method to select the respondents. Data was collected using questionnaires and interviews guides. The study had a response rate of $85.7 \%$, composed of male and female head teachers, teachers and members of the Parents' and Teachers' Associations. It was found that various policy interventions have an effect on participation in mixed secondary schools, and on the participation of male and female students. It was also found that the gender status of the mixed schools had a significant effect on participation, just as do socioeconomic factors. The study concludes that the legal and policy interventions have a significant effect on the participation of learners in mixed public secondary schools. Policies addressing matters of school enrollment and retention such as re-entry, repetition, Tuition Free Secondary Education programme and bridging of the gender gap have a great effect on the participation rates in the mixed public secondary schools. The study also concludes that the gender status of the mixed schools has a significant effect on participation. This effect especially affects the rate of enrolment among female learners.


## CHAPTER ONE <br> INTRODUCTION

### 1.1 Background to the study

Education is a key driver of economic growth, productivity, national and social development, as well as reducing social inequality. The Human Rights Charter regards education as one of the fundamental human rights, while the Universal Declaration of Human Rights of 1948 states in Article 26 that everyone has the right to education (United Nations, 2014). The international community pledged to meet the targets of Education for All (EFA) and the Millennium Development Goals (MDGs) by the year 2015. Governments around the world and particularly in sub-Saharan Africa have adopted diverse strategies to promote access and participation in secondary education. This is partly due to the domestic and international demand to achieve EFA and the MDGs.

Despite concerted efforts to increase opportunities and participation in the secondary school, attendance is still too low in many developing countries, with only 13 developing countries and territories having secondary school participation ratios of 90 per cent or more (United Nations Children Education Fund, 2007). Non-completion of secondary schooling continues to be a matter of concern for policy makers and practitioners worldwide (Gray \& Hackling, 2009).

However, Universal secondary school enrollment has been achieved nearly in all industrialized countries of western Europe and North America which have Gross Enrollment Rates (GERs) exceeding 100 percent. This has been
attributed to the free schooling policies initiated by the respective governments to enhance primary education. In the United States of America (USA), Congress passed the 'No child left behind Act' that sought to commit the nation to provide quality education to every child regardless of background, which resulted in high enrollments (Spelling, 2005).

Secondary education completes the provision of basic education that begins at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers. Comparative estimates of secondary school participation indicate that in the developing world no more than 39 per cent of children of secondary-school age are attending secondary school. According to the World Bank (2011), over 543 million students were enrolled in secondary schools worldwide, representing a rise up from 510 million in 2005 and 451 million in 2000. Of all enrollments, 38 percent of total secondary enrolments are in China (18\%) and India (20\%). While attendance in Central and Eastern Europe and the Commonwealth of Independent States was found to average 70 percent, the rate in sub-Saharan Africa was found to be a mere 20 per cent of children of the appropriate secondary school age.

In East Asia/Pacific and Middle East/North Africa broadly half of children are in secondary school while in Latin America/Caribbean and South Asia the ratios were 44 per cent and 40 percent, respectively (UNICEF, 2005). By 2010, 62.5 percent of secondary school age students were enrolled the world over, which was a 9.4 percentage point improvement over 2000 . Overall, the

Sub-Saharan Africa region lags far behind other regions in secondary enrollments with just over a quarter of students enrolled in 2010. These statistics suggest that there are challenges that impede access to secondary schools in the region. In Kenya, the Tuition Free Secondary Education (TFSE) Policy was launched at the beginning of 2008 with the aim of enhancing participation in the secondary school by primary school graduates, many of whom have been unable to access secondary school due to a range of factors, including school fees.

The main aim of the new programme was to expand and enhance access to secondary school education in the country by ensuring that children from poor households acquire quality education and benefit from the opportunity of selfadvancement and eventually become productive members of society. According to Ohba (2009), the basis for the introduction of free secondary education in the country included Government commitment to the achievement of EFA and the MDGs, with the promise to achieve a 70 percent transition rate from primary to secondary by 2008.

A report by UNESCO (2000) documented some interventions in basic education as including an annual rise in investment in basic education through school buildings and infrastructure by 7.3 percent annually, establishment of local community schools and one-class schools with the aim of narrowing the gap found in girls education, with emphasis on reaching population of the villages, hamlets and remote areas.

Socio-economic factors are considered to bear on the Ability of families to enroll their children in school. According to Suliman and El-Kogali (2003), households incur additional direct costs on school tuition, books and supplies, school uniforms, private lessons, and transportation, which may squeeze the household limited budget and make school costs unaffordable for poor households. Such resource constrains may bear significant gender implications on parents' decision to send girls to school. Participation in schooling is a joint process that involves the home and school, as suggested by Lockhead et al (1991). This is evident in the early years of formal schooling. Family background affects the probability that children would go to school, attend and complete various levels of education.

Some studies have linked school quality to children's schooling. For example, Lloyd (2001) using data from Egypt found that school quality (such as time available for learning, teacher's qualifications, treatment by teachers and teacher attitudes) is associated with retention. Another study conducted in India by Dre`ze, and Kingdon (2001) found that school participation and/or grade attainment are positively influenced by several school quality variables, including infrastructure quality, teacher regularity, parent-teacher cooperation, and number of teachers per child.

Some of the major policy reforms and innovations in the education sector in Kenya include the implementation of Free Primary Education (FPE) and Tuition Free Secondary Education (FDSE), which have accelerated enrollment
of students in both primary and secondary schools (Republic of Kenya, 2012). These programmes have resulted in the improvement of access, retention, equity, quality, relevance, and overall efficiency of the education sector at national level (Odhiambo, 2010, Republic of Kenya \& UNESCO, 2012). However, other studies suggest that quality education for all children, youth and adults is far from being achieved (Republic of Kenya \& UNESCO, 2012). Other challenges identified include significant geographical disparities in access and achievement amongst the marginalized groups, such as those living in informal urban settlements and the Arid and Semi-Arid (ASAL) regions.

### 1.2 Statement of the problem

One of the aims of education in Kenya is to promote national development. This aim demands that issues such as quality, equity and participation are enhanced at all levels of the education system from the lowest levels to the highest. Through the Tuition Free Secondary Education which was declared in 2008, the government intended to meet the component of direct costs that had hindered participation at the secondary school level in Kenya. Many studies on effects of gender-composition matters for student learning have focused on the role of social interactions between genders at school on academic achievement and career choices. While it could be difficult to develop a comprehensive framework on the determinants of school participation, various factors are acknowledged to hinder learners' participation in secondary education in particular. In a nationwide study by the Education Policy and Data Centre (EPDS) (2007), it was found that the gross enrollment rate in Kajiado County
was about 22 percent for boys and 18 percent for girls, both proportions of which were lower than the national averages stated as 60.1 percent by 2009 , or 57 percent for girls and 63.1 percent for boys respectively (World Bank, 2009). The enrollment rates in Kajiado County was found to be 21 percent for boys and 18 percent for girls (EPDS, 2007), which are also lower than the transition rates recorded during the transition from primary to secondary school which is 49.98 percent nationally (World Bank, 2009). Mixed public secondary schools form more than half of the public secondary schools by type in Kajiado North Sub-county, in which the larger proportion of the residents in Kajiado County reside. It is for this reason that this study therefore sought to establish the factors that affect the participation of students in the mixed public secondary schools, considering that participation rates in the County are lower than the national average.

### 1.3 Purpose of the study

The main purpose of the study was to investigate factors influencing participation of students in mixed public secondary schools in Kajiado North Sub-County, Kenya.

### 1.4 Objectives of the study

The study sought to achieve the following objectives:
i. To establish the extent to which educational policies on access influence the participation of students in mixed public secondary schools in Kajiado North Sub-County.
ii. To determine the extent to which mixed gender status of the school influences participation of students in mixed public secondary schools.
iii. To assess the extent to which family level of income influences participation.
iv. To examine the extent to which the availability of teaching and learning resources influence participation in mixed public secondary schools.

### 1.5 Research Questions

The study was guided by the following research questions:
i. To what extent did policies on access students influence participation in mixed public secondary schools in Kajiado North Sub-County?
ii. To what extent did the mixed status of the school influence participation of students in mixed public secondary schools?
iii. To what extent did the family source of income influence participation of students in mixed public secondary schools?
iv. To what extent did the availability of teaching and learning resources influence the participation of students in mixed secondary schools?

### 1.6 Significance of the study

The findings of this study are of benefit the present and prospective parents and guardians of secondary school students by informing them on the
dynamics that prevail in mixed public secondary schools. The findings of the study are of benefit to mixed public secondary school teachers and head teachers who may use these to enhance the participation rates in their respective schools. The findings are expected to sensitize policy makers on the factors that may be important in enhancing the policy framework governing access, transition, participation in mixed public secondary schools. Further, the Ministry of Education and County Government of Kajiado officials may find the results of the study useful in pointing out some of the issues related to mixed public secondary schools in the area.

### 1.7 Limitations of the study

The study was only conducted in Kajiado North Sub-County of Kajiado County, and the prevailing circumstances may be unique to the area, and therefore not generalizable to the rest of the County or country. Moreover, the current literature on the participation rates in the country is inconsistent, and varies depending on source. The researcher was therefore forced to resort to use of data that may not be very accurate in some cases.

### 1.8 Delimitations of the study

The study was carried out in Kajiado North Sub-county of Kajiado County. It was conducted among principals, teachers and learners in mixed public secondary schools across the Sub-county, who were considered to be knowledgeable about the factors affecting participation. The findings are relevant to secondary schools within the Sub-county. Even though there were
a wide range of issues related to secondary school education, this study intended to specifically focus on those factors related to participation of learners in the Mixed public secondary schools, as these formed the largest number of secondary schools by type in Kajiado North Sub-county.

### 1.9 Definition of terms

Dropout refers to withdrawal or discontinuation from school before completing the terminal stage of education.

Enrollment refers to the number of children registered in a school at a given year.

Mixed public secondary schools refers to the secondary schools that are maintained or assisted out of public funds from the government, parents and community according to Cap 211 and Cap 212 of the Laws of Kenya, and which enroll both male and female students.

Participation refers to the chance an individual has to enroll and fully get involved in education opportunity within a formal setting, with emphasis on completion of education level or cycle.

Participation rate refers to the increase or decrease in enrolment/ attendance and students' progress to completion of an education cycle.

### 1.10 Organization of the study

The study is organized into five chapters. Chapter one consists of the introduction, background to the study, statement of the problem, purpose of the study, research objectives, research questions, significance of the study,
limitations and delimitations of the study as well as definition of terms. Chapter two is on the review of related literature on retention and enrolment in mixed public secondary school programmes, while Chapter three addresses the research methodology, research design, target population, sample size and sampling procedure, research instruments, data collection procedures, data analysis techniques and ethical considerations. Chapter four presents the data analysis and interpretation and chapter five is on summary of the study, conclusions, recommendations and suggestions for further research.

## CHAPTER TWO RELATED LITERATURE REVIEWED

### 2.1 Introduction

This chapter comprises a review of related literature reviewed during the study. The literature review highlights related studies and what they have focused on. This section is based on the following thematic areas: Overview of the secondary school level of education in Kenya; retention and enrolment in the Secondary schools; parental factors affecting participation in secondary school education and Socio-economic factors and their impact on secondary school education.

### 2.2 Overview of participation in secondary school education in Kenya

Education is considered as a basic human right and an instrument used for achieving social equality and higher economic growth (UNICEF, 1992). National governments have embraced the idea of education for all as a matter of priority in both developed and developing countries, and therefore allocate much of their resources to education. UNESCO (2005), states that this has resulted in the considerable growth of educational activities the world over. However in developing countries such as Kenya, socio-economic factors affect the students' participation and they end up failing to reap from the fruits of education.

According to the Kenya Government Economic Survey Report (2012), the gross total allocation of funds to the Ministry of Education has continued to
increase over the years, but studies by UNESCO (2007), reported that the level student participation in developing countries is still low despite increases in investments to the secondary schools in developing countries. While the Kenya government has continued to show much commitment to education sector by allocating more of its national resources to education every year with the aim of increasing participation, this is still far from achievement. A summary of participation rates in Kajiado County revealed that transition to secondary from primary schools, the gross enrollment rates as well as the gender gaps in the secondary levels was much lower than that of the national average. According to the EPDC Kenya District Profile for Kajiado (2007), the gross enrollment rate for girls was $17 \%$ while that of boys was $23 \%$. Efforts by the government of Kenya such as the Tuition Free Secondary Education have been targeted at increasing access to secondary education. According to the Ministry of Education (2009), approximately 92 percent of the Form I class in 2004 reached Form 4 in 2007, which represented a significant improvement over the previous year where the progression rate for the cohort was $87 \%$. Rumberger and Thomas (2000), found that students who more often get low grades and fail subjects are more likely to leave school prior to graduation.

Researchers have also concerned themselves with issues of access, participation, completion and performance in the secondary schools. For example, Apida (2010), observes that factors leading to poor performance in KCSE in public day secondary schools in Nairobi County are low student participation which can be deduced from chronic absenteeism, truancy and
withdrawal or dropout before sitting for the form four examinations. Several reasons have therefore been advanced to attempt to explain the determinants of participation in education at this level (ADEA, 2003; UNESCO, 2012). These can be broadly categorized as school based factors, home-based factors, government policy and a combination of the all these.

### 2.3 Educational policies influencing participation schools

At the household level, decisions relating to enrollment of children in schools may depend on the costs and benefits of education. The costs, in turn, depend both on the opportunity cost of a child's time, and on the direct costs of schooling (e.g. expenditure on fees, books and stationery). The benefits include tangible economic returns, mainly in the form of improved earning opportunities as well as more productive work within the household. Other possible benefits of education include better health, higher self-esteem, improved social status, greater bargaining power, and the joy of learning, among others.

The Government of Kenya and other partners in education development are committed to access to education to Kenyans. An analysis of enrolment figures of students in the Kenyan educational system from pre-primary to university reveals wide disparities especially at secondary and post-secondary institutions. Stakeholders are looking for viable cost effective and sustainable strategies, which would enhance the development of education in the country (Weerdt, 2006).

While tremendous increases in primary school access have been recorded since the declaration of the FPE policy in Kenya, secondary school access remains low. In 2009, the secondary school net enrollment rate was approximately 50\% (World Bank, 2009), while the primary-to-secondary school transition rate was equally low at 55\% (Ministry of Education, 2010). This is in spite of the abolition tuition fees in secondary public secondary schools. The 2005 Kenya Integrated Household budget shows that on average secondary school expenditures accounted for approximately $55 \%$ of annual per capita household expenditures. Enrollment in secondary schools is not automatic. Transition from the primary school to the secondary school mainly depends on performance in the Kenya Certificate of Primary Education (KCPE), and enrollment in a particular school is further determined by the quota system implemented by the Ministry of education as a factor of the ratios allocated to both public primary and private primary schools.

Universal secondary school enrollment has been achieved nearly in all industrialized countries of western Europe and North America which have Gross Enrollment Rates (GERs) exceeding 100 percent. This has followed fee free policies initiated by governments to enhance primary education since 1830, when near universal primary education was limited to a few states in the United States (Kenny, 2001). In South Africa, user fees are identified as a barrier to education (Veriava, 2002). The cost-benefit view of education assumes that schooling decisions are made by parents (children are unlikely to be motivated by cost-benefit calculations). In practice, school participation is
effectively a joint decision of parents and children, whose interests may not coincide.

Kenya declared free day secondary education in 2008 by allocating Kshs 10,265 per student. Free tuition was provided to support funding so that tuition costs would no longer prevent poor families from achievement of affordable access to secondary education (UNICEF, 2009). The Sessional Paper No. 10 of 1965 (Republic of Kenya, 1965), which provides guidelines about the aims of Kenyan society, point out the most systematic policy statements on Kenyan egalitarian principles to be pursued within the framework of African Socialism. In the Development Plan of 1979-1983, the government stated that during this period the educational opportunities would have to be substantially improved to reach target groups such as the pastoralists, small scale farmers, landless rural workers and urban poor (Republic of Kenya, 1979).

### 2.4 Gender issues in secondary school participation

In gender terms, the low retention of girls in secondary schools subsequently results in lower enrollments of females at the university and other postsecondary educational institutions. Male students have continued to dominate enrollments in Technical Training Institutes and Institutes of Technology where they accounted for $55 \%$ and $45 \%$ respectively in the years 2008 and 2009. Generally, schooling decisions are likely to depend not only on the perceived interests of individual household members, but also on how
differences of interest are resolved within the family (Ministry of Education, 2010).

Chimombo (2005) observed in her studies in Malawi that basic education in developing countries reveals that the necessity for children to engage in tasks that support household survival limits their school participation. This is especially in rural and urban squatter groups. Further, even where schools are accessible and affordable households have to realize a net benefit to them, apart from the domestic activities school age children at times engage in economic activities.

Studies by Murai (2008), in Gatundu District found that parents feel that the journey to school is perilous and too long, putting girls at risk of sexual assaults and other forms of violence. School distance adds unnecessary costs incurred by parents on bus fare given to students as they commute every day to school hence a reason for students' absenteeism. For example, about $38 \%$ of Egyptian mothers believe that parents should send the son to the university if they could afford to send only one child, compared with $7 \%$ who believe that the daughter should be sent (EDHS, 2000).

In a survey conducted in India, it was found that most parents would like their children (particularly sons) to be educated, and favour compulsory education for all children. However, they have a dim view of the schooling system, which they blame on low teaching standards. In yet another study, it was
concluded that parents often consider that they have no direct stake in the education of a daughter, based on the perception that educating a daughter may facilitate her marriage, and/or reduce its costs. Some other parents may send a daughter to school out of genuine concern for her own well-being, even if they have little to gain from it themselves (Dreze, 1999).

### 2.5 Effect of family source of income on participation in secondary schools

Students' participation in schools has been correlated to their socio-economic backgrounds. Studies have attempted to establish whether there is a relationship between these two factors. For example, studies by Kamwilwa (2007) found that parents who are unskilled are more often than not of low educational attainment, and they take little interest in the education of their children or their children's school work. Besides, they have large families and live in grossly overcrowded homes lacking amenities and tend to send their children to schools which are ill-equipped and this affects their participation. Households incur additional direct costs on school tuition, books and supplies, school uniforms, private lessons, and transportation, which may squeeze the household limited budget and make school costs unaffordable for poor households. Such resource constrains may bear significant gender implications on parents' decision to send girls to school (Suliman \& El-Kogali, 2003).

In a study on enrollment trends in Egypt, Suliman and El-Kogali concluded that in terms of household wealth, there is a positive association with school attendance and a negative association with non-attendance and dropout. That
is, school attendance increases monotonically with household wealth while non-attendance and dropping out systematically decreases with household wealth. The gender gap is biggest among the poor. The choice of school in which to enroll children is dependent upon the parents' level of information. Even though free education initiatives enhance enrollment, a number of challenges are realized in the process of implementation in relation to the prevailing socio-economic factors in relation to the particular state or government.

There is substantial evidence in the literature that consumers are sensitive to the cost of education (Holla \& Kremer, 2008) and that fees remain a major barrier for many families. Prior to the introduction of the TFSE, Kenya Integrated Household Budget Survey (KIHBS) (2005), had shown that household expenditures on a secondary school student averaged close to Ksh. 25,000; accounting for approximately $55 \%$ of annual per capita household expenditures.

### 2.6 Influence of teaching and learning resources on participation

Kenya has three tiers of public secondary schools. The National Schools are considered to be the most prestigious secondary schools in the country, and admit the top primary school candidates from across the nation (Lucas \& Mbiti, 2011). They have better facilities, offer a larger variety of courses, and provide a higher quality peer group when compared to the other schools. The county schools (formerly provincial schools), admit at the second tier those
top remaining students from within the Counties, while the approximately 3,000 sub-county Schools, many of which are mixed, day schools, mainly admit at the bottom tier those students who could not gain admission into national or provincial schools.

A poor learning environment in developing countries has been identified as one of the factors that lead to poor learning in public secondary schools (UNICEF, 2010). A school should adequately utilize the available resources and facilities to facilitate effective learning processes. The responsibility of the head teacher to ensure that there is adequate classroom space to enable teaching learning process to take place without any problem and should ensure that the facilities are efficiently and effectively utilized. This implies that providing individuals with more information on the benefits of education, the quality of secondary schools and on the school selection process could boost secondary school enrollments and also allow students from poorer backgrounds to access better quality schools.

The implementation of TFSE has been coupled with many challenges including inadequacy of funds, overstretched classrooms in public schools have also been noted, text-book ratio is still high as compared to the Ministry intention of 1:1 by 2010. This has led to inadequacy of physical facilities and instructional materials (UNICEF, 2010). There is also a challenge of teacher availability. At secondary school level, teacher distribution in Kenya has not been equitable or adequate and the most hit are the newly established Sub-
county schools which are mainly day. This has affected enrollment by reducing or maintaining at lower numbers (Republic of Kenya, 2008). According to Kimanzi (2013), the government's provision of funds to buy resources have been inadequate to cater for effective teaching/learning resources. Schools have been faced with challenges in providing free secondary education due to scarcity of resources and inadequate facilities, while OECD (2005), states that school characteristics such as school resources including physical resources (infrastructure and school size) and human resources, school policies and school climate influence the success of school programmes and performance of students.

### 2.7 Summary of related literature reviewed

This section has provided a review of related literature on the factors affecting the implementation of the secondary school programme in different parts of the world. It has reviewed the policy behind the expansion of secondary schools, socio-economic factors affecting enrollment, influence of gender and the influence of teaching and learning resources on access and retention in education. Even though related studies have been conducted elsewhere, none of these studies have been specific to the mixed public schools category. Therefore this study seeks to determine the factors that affect the participation rates in the mixed public day secondary schools in Kajiado North Sub-county.

### 2.8 Theoretical framework

Systems theory assumes that organizations operate like systems within a supra system. In this regard, mixed public secondary Day schools can also be presumed to be functioning within a wider socio-economic and political context mainly subject to the prevailing governance structures and policy frameworks. Both in-school and out-of-school factors play determinant roles and influence the learners' and parental choice to enroll and keep their children in the mixed public secondary after their primary education. Wayne and Miskel (2008), define systems theory as a complexity of elements standing in interaction. This entails an exchange of matter with their environment; either importing from it or exporting to it from the surrounding. The advantage of this theoretical framework is that it recognizes interdependence of personnel, the impact of environment on organizational structure and function, the effect of outside stakeholders on the organization and also focuses on the environment and how changes can impact the organization. It has the benefit of seeking to explain "synergy" \& "interdependence", as well as broadening the theoretical lens. However, its drawbacks are that it may not focus on specifics, or directly explore the impact of relationships on productivity. Changes in environment directly affect the structure and function of the organization. The mixed public secondary schools in that context import raw materials from the environment in form of learners, human resources, time, capital, technology, information etc. and after the teaching-learning process, produce learners with the acquired skills, knowledge and attitudes that would be needed for the socio-economic,
technical, political or other requirements in the society they come from. Even though all public secondary schools receive government support in the form of facilities, human and financial resources under the TFSE, there are great disparities between the participation rates of learners between boarding and day secondary schools. Kajiado North Sub-county presents a unique case in comparison to most other Sub-Counties because it has more mixed secondary schools than single sex ones.

### 2.9 Conceptual framework for factors influencing participation of students in mixed public secondary schools



Figure 2.1: Conceptual framework: Relationship between factors influencing participation in mixed public secondary schools and participation rates.

The conceptual framework shown in Figure 2 reflects the relationship between the variables in relation to participation of students in mixed public secondary schools. Components which have been conceptualized as independent variables include: policies in relation to access such as TFSE Funding, Curriculum Based Establishment (CBE), Teachers' employment and quality assurance standards. Family income factors lay emphasis on factors such as level of parental educationt, parents' attitudes towards education and level of family income. Teaching and learning resources relate to aspects of the schools such as facilities, school infrastructure and teachers as a component of the human resources; while the gender composition of students in secondary schools will address issues such as gender peer effects, inter-student interactions and the classroom environment. The independent variables interplay with other variables (moderating variables) such as the management of the mixed secondary schools in order to determine students' participation in mixed secondary schools. These will then determine the level of participation in the schools.

# CHAPTER THREE RESEARCH METHODOLOGY 

### 3.1 Introduction

This section gives the outline of the proposed methodology that was used in the study. The components of the methodology include the proposed research design, target population, target sample and sampling procedure, data collection procedure, data analysis techniques and ethical considerations.

### 3.2 Research design

The design utilized the descriptive survey. According to Mugenda and Mugenda (2008), the descriptive survey attempts to measure the status of variables without questioning why they exist. The aim of survey is to obtain information that describes existing phenomena by asking individuals about their perceptions, attitudes, behaviour or values. The design hence is therefore useful in describing events as they are, and will be suitable for this study as it will describe the factors that affect participation in mixed public secondary schools in Kajiado North without attempting to influence the subjects in any direction.

### 3.3 Target population

According to Borg and Gall (1989), the target population of a study is defined as all the members of real or hypothetical set of people, event or objects to which the investigator wishes to generalize the results of the study. The target population for the study comprised of all the 23 mixed public secondary
schools in Kajiado North Sub-county. According to the Ministry of Education office in Kajiado North Sub-County education office, these schools have 23 principals, 345 teachers and 92 members of the Parents, Teachers Association. This target population was considered to be rich on the factors that influence participation; this is because the teachers and principals are responsible for implementation of education activities in the schools while the parents are responsible for enrolling and supporting the student's attendance to school.

Table 3.1 Target respondents

| Category | Number | Percent |
| :---: | :---: | :---: |
| Principals | 23 | 5 |
| Teachers | 345 | 75 |
| PTA members | 92 | 20 |
| Total | 460 | 100 |

Table 3.1 shows the target respondents during the study. The study targeted the 23 principals, making up $5 \%$ of all the 460 target respondents; 345 teachers or $70 \%$ of all the respondents, and 92 members of the Parents, Teachers Association (PTA), and constituting $20 \%$ of all the target respondents.

### 3.4 Sample size and sampling procedures

Mugenda and Mugenda (2008) define a sample as a small group obtained from an accessible population. Each member in a sample is referred to as a
participant. A random sampling method was used to select the schools from which the respondents were be obtained. Kajiado North Sub-county has 23 are mixed public secondary schools. Seven schools (30\%) from among all the mixed public secondary schools will be randomly selected. According to Mugenda and Mugenda (2008), a thirty percent sample size is deemed to be representative and can be used to generalize on a population. The principals of each of the schools sampled, as well as four class teachers of forms three and form four and four PTA members from form three and form four classes were sampled for the study, giving a total of sixty three respondents.

### 3.5 Research instruments

This researcher utilized two main methods for collecting the data: questionnaires and interviews guides. Kothari (2008) explains that questionnaires are commonly used to gather important information about a population. The advantage of questionnaire is that they can cover large populations within a short time using few personnel. The questionnaires contained five sections, and had items addressing background information, socioeconomic factors, teaching and learning resources, gender issues and policy.

### 3.5.1 Validity of the instruments

Content validity is determined by expert judgments. Validity concerns itself with establishing whether the research instrument is measuring what it is supposed to measure. Njeru and Orodho (2003), define validity as the degree
to which results obtained from the analysis of data actually represents the phenomenon under investigation. It is a non-statistical method used to validate the content employed in the questionnaire; therefore questions in this study was scrutinized and approved by the supervisor to determine whether the items in the questionnaire were validly representative.

### 3.5.2 Reliability of the instruments

Gay (1976), defined reliability as the degree to which a test consistently measures whatever it measures. An instrument is reliable when it can measure a variable accurately and consistently and obtain the same results under the same conditions over time. In this study the researcher used the split-half method recommended by researchers such as Nachmias and Nachmias (1996), for measuring reliability of a test. The advantage of this technique is that it required only one session, and involves splitting the instrument into two; one half of even numbered items and the other of odd numbered items.

### 3.6 Data collection procedures

Before embarking on data collection, the researcher applied for a research permit from the National Commission for Science Technology and Innovation (NACOSTI) and seek authorization from the Sub-county Education Office in Kajiado North Sub-county to conduct study. Further, permission to conduct the study in sampled mixed public secondary schools was sought from the respective principals. The interview schedule were self- administered to PTA members of each of the sampled schools. This tool was suited to parents since
it is flexible, adaptable and can be used on many people. Kombo and Tromp (2006) observe that interview schedules give in-depth information on specific issues.

### 3.7 Data analysis procedures

Analysis of data refers to the process of inspecting, cleaning, transforming, and modeling data with the aim of highlighting useful information, suggestions, conclusions, and supporting decision making. It is aimed at consolidating into an orderly structure and meaning the enormous information collected. Once all the data was obtained, the data was analysed quantitatively using the Statistical Package for Social Sciences (SPSS) Version 18 software. The data was then used to compute statistical measures of central tendency, and tables of frequency used to present the data.

### 3.8 Ethical considerations

There were ethical issues related to the study and they were addressed by assuring the respondents that the data obtained from them would only be used for academic purposes. The respondents were also requested not to write their names or those of their institutions anywhere in the data collection instruments, with personal details limited to general information only.

## CHAPTER FOUR

## DATA ANALYSIS, INTERPRETATION AND DISCUSSION

### 4.1 Introduction

This chapter covers an analysis and interpretation of the data obtained from the respondents in the study, as well as the findings and related discussions. The chapter further presents conclusions for each research question.

### 4.2 Response rate

The questionnaires were issued to the sampled respondents drawn from among principals and class teachers in mixed public secondary schools in Kajiado North Sub-county, while the members of the PTA in each of the sampled schools were interviewed. The results are shown in Table 4.1.

Table 4.1 Response rate

| Category | Target sample | Responded | $\%$ |
| :--- | :---: | :---: | :---: |
| Principals | 7 | 5 | 71.4 |
| Class teachers | 28 | 26 | 92.9 |
| PTA Members | 28 | 23 | 82.1 |
| Total | $\mathbf{6 3}$ | $\mathbf{5 4}$ | $\mathbf{8 5 . 7}$ |

Table 4.1 indicated that out of the 7 principals in the schools that were sampled for the study, a total of 5 respondents, representing $71.4 \%$ returned the completed questionnaires, while 26 class teachers out of the sampled
population of 28 , or $92.9 \%$, returned the completed questionnaires, while 23 PTA members, out of the sampled 28 participated in the study.

### 4.3 Characteristics of the respondents

The head teachers and teachers were requested to provide information regarding their gender, age, highest level of education and duration of work in their current stations.

### 4.3.1 Gender of the respondents

Table 4.2 Gender of the respondents

| Category | Frequency | Percent |
| :--- | :---: | :---: |
| Male | 28 | 51.8 |
| Female | 26 | 48.2 |
| Total | 54 | 100 |

The data on Table 4.2 shows that the respondents comprised of both male and female participants. The males were 28 ( $51.8 \%$ ) while females made up 26 (48.2\%) of all the participants in the study. This shows that there was a balanced representation of either gender in the study.

### 4.3.2 Highest level of education

The respondents were requested to state their highest level of education. This is shown in Table 4.3.

Table 4.3 Highest level of education

| Category | $\mathbf{f}$ | \% |
| :--- | :---: | :---: |
| Secondary | 16 | 29.6 |
| Diploma | 1 | 1.9 |
| Bachelors degree | 30 | 55.5 |
| Masters degree | 6 | 11.1 |
| PhD | 1 | 1.9 |
| Total | $\mathbf{5 4}$ | 100 |

The findings on Table 4.3 shows that those respondents holding a PhD which was the highest recorded level of qualification were only one ( $1.9 \%$ ), while the lowest recorded was a secondary school certificate, as indicated by sixteen $(29.6$ \%) of the respondents. It was also found that a majority of the teachers held a Bachelors degree. These results show that the opinion of respondents with different educational qualifications was obtained.

### 4.3.3 Duration in the current station

The participants were requested to state how long they had been working in their present stations. The results are presented in Table 4.4.

Table 4.4 Duration in the current station

| Duration | $\mathbf{f}$ | \% |
| :--- | :---: | :---: |
| Below 5 Years | 35 | 64.8 |
| $5-10$ Years | 7 | 13.0 |
| $11-15$ Years | 3 | 5.6 |
| Above 15 Years | 9 | 16.7 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0 . 0}$ |

The findings on Table 4.4 shows that a majority of the respondents; thirty five (64.8\%) of all participants, had been working in their current stations for 5 years or less. Seven (13\%) of the respondents who had been in the stations for between 5 and 10 years while nine ( $16.7 \%$ ) had been in the same schools for more than 15 years. This data shows that a significant proportion of the respondents were well versed with the factors that influence participation of learners in their schools on account of their having been in the institutions for a considerable duration of work.

### 4.4 Level of enrollment in mixed public secondary schools

The study sought to find out the level of enrollments in each of the schools. The respondents were requested to state the total enrollments in the respective schools, as well as the disaggregated enrollment data by gender; while the class teachers were asked to state the enrollment in their respective classes, as well as the enrollment rates by gender.

### 4.4.1 School enrollment in mixed public secondary schools

The participants provided data on the total enrollments in their schools. Table 4.5 shows the total enrollments in the mixed public schools during the study.

Table 4.5 Total enrollment in mixed public secondary schools

| Category | $\mathbf{f}$ | $\boldsymbol{\%}$ |
| :--- | :---: | :---: |
| $101-200$ | 2 | 40.0 |
| $201-300$ | 2 | 40.0 |
| $301-400$ | 1 | 20 |
| Total | $\mathbf{5}$ | $\mathbf{1 0 0}$ |

The findings on Table 4.5 shows that none of the secondary schools had an enrollment of less than 100 students, while two schools had between one hundred and one and two hundred students accounting for $40 \%$, with a similar proportion having between two hundred and one and three hundred students. Only one school had between three hundred and one to four hundred students. However, no school in the study was reported to have more than four hundred learners.

### 4.4.2 Boys' enrollment in schools

The study sought to establish the level of enrollment of male students in the mixed secondary schools. The results are shown in Table 4.6.

Table 4.6 Boys' enrollment in mixed public secondary schools

| Category | $\mathbf{f}$ | $\boldsymbol{\%}$ |
| :--- | :---: | :---: |
| $101-200$ | 3 | 60.0 |
| $201-300$ | 2 | 40.0 |
| Total | $\mathbf{5}$ | $\mathbf{1 0 0}$ |

The results on Table 4.6 shows that none of the schools had less than a hundred male students, or more than four hundred. A majority of the schools +had between a hundred and two hundred students, as three schools (60\%) reported that they had this proportion of boys enrolled. Two schools (40\%) of the sample size had between two hundred and one to three hundred male students.

### 4.4.3 Girls' enrollment in mixed public secondary schools

The study sought to establish the level of enrollment of male students in the mixed secondary schools. The results are shown in Table 4.7.

Table 4.7 Girls' enrollment in mixed public secondary schools

| Category | $\mathbf{f}$ | $\%$ |
| :--- | :---: | :---: |
| $0-100$ | 4 | 80.0 |
| $101-200$ | 1 | 20.0 |
| Total | $\mathbf{5}$ | $\mathbf{1 0 0}$ |

The findings on Table 4.7 shows the level of girls' enrollment in mixed public secondary schools. The data revealed that four schools ( $80 \%$ ) of all had less than a hundred female students enrolled. Only one school had between one hundred and one and two hundred female students enrolled. None of the mixed secondary schools in the study had a female enrollment of two hundred and one to three hundred or more than four hundred students. These findings reveal that girls' enrollment is significantly lower than that of boys in the mixed public secondary schools.

### 4.4.5 Class enrollment in mixed public secondary schools

During the study, class teachers who participated were requested to provide data relating to enrollments in their respective classes.

### 4.4.6 Total enrollment per class in mixed public secondary schools

Data was collected on the total enrollment rates per class in the schools in which the study was conducted, the findings are shown in Table 4.8.

Table 4.8 Total enrollment per class in mixed public secondary schools

| Category | Frequency | Percent |
| ---: | :---: | :---: |
| $21-30$ | 2 | 7.1 |
| $31-40$ | 11 | 39.4 |
| $41-50$ | 13 | 46.4 |
| More than 50 | 2 | 7.1 |
| Total | $\mathbf{2 8}$ | $\mathbf{1 0 0}$ |

The results on Table 4.8 shows the findings of enrollment per class. A majority of the classes were found to have an enrollment rate of between forty one and fifty learners, as this was represented by thirteen classes (46.4\%) of all the classes in the study. Those classes with between thirty one and forty learners formed the second largest category, as this had eleven classes ( $39.4 \%$ ). None of the classes was found to have less than twenty learners, while only two classes (7.1\%) had more than fifty students.

### 4.4.7 Boys' enrollment per class in the mixed public secondary schools

The study sought to establish the level of enrollment of male students per class in mixed secondary schools. The results are shown in Table 4.9.

Table 4.9 Boys' enrollment per class in the mixed public secondary schools

| Category | f | \% |
| :--- | :--- | :--- |
| Less than 20 | 7 | 25 |
| $21-30$ | 17 | 60.7 |
| $31-40$ | 4 | 14.3 |
| Total | $\mathbf{2 8}$ | $\mathbf{1 0 0}$ |

The data on Table 4.9 shows the findings on the enrollment of boys in the mixed secondary schools. It shows that while none of the classes had between forty one and fifty learners, or more than fifty boys in the respective
classrooms; seven classes, $(25 \%)$ of all, had less than twenty male students in each class, while four (14.3\%) had an enrollment of thirty one to forty learners. The findings therefore show that a majority of the classes had a male student enrollment of between twenty one to thirty students.

### 4.4.8 Girls' enrollment per class in the mixed public secondary schools

The study sought to establish the level of enrollment of female students per class in mixed secondary schools. The results are shown in Table 4.10.

Table 4.10 Girls' enrollment per class in the mixed public secondary schools

| Category | f | \% |
| :--- | :---: | :---: |
| Less than 20 | 27 | 96.4 |
| $21-30$ | 1 | 3.6 |
| Total | $\mathbf{2 8}$ | $\mathbf{1 0 0}$ |

The results on Table 4.10 shows that an absolute majority of the classes in mixed secondary schools had less than twenty female students. This was represented by twenty seven classes $(96.4 \%)$ of all the classes in the study. Only one class, representing ( $3.6 \%$ ) of the sample, had between twenty one and thirty learners enrolled. None of the classes had thirty one to forty students, forty one to fifty or more than fifty students enrolled in their classes.

These findings reveal that the female enrollments are low in mixed public secondary schools.

### 4.5 Dropouts in mixed public secondary schools

The respondents in the study were asked to state whether or not they had recorded any cases of dropouts in their respective schools over the past year.

### 4.5.1 Dropouts per school in mixed public secondary schools

The respondents in the study were requested to provide information on dropouts in their respective schools within the last one year. The number of dropouts among females as well as among males was obtained from the respondents. This is shown in Table 4.11.

Table 4.11 Number of male dropouts in mixed public secondary schools over the past year

| Category | Frequency | Percentage |
| :--- | :---: | :---: |
| Less than 10 | 3 | 60 |
| $11-20$ | 1 | 20 |
| $31-40$ | 1 | 20 |
| Total | $\mathbf{5}$ | $\mathbf{1 0 0}$ |

The data on Table 4.11 shows that cases of male students who dropped out of the schools over the past year had been recorded. One school, representing $20 \%$ of the sample, had registered thirty one to forty cases of drop outs among male students. This is a significantly high proportion. Three schools (60\%) of
all the schools had less than ten cases of male dropouts, with one school also indicating that they had registered between eleven and twenty cases. These findings show that cases of dropouts among male students in mixed secondary schools in Kajiado North Sub-county are significantly high.

### 4.5.2 Number of female dropouts in mixed public secondary schools over the past year

The cases of dropouts among females was obtained from the respondents. This is shown in Table 4.12.

Table 4.12 Number of female dropouts in mixed public secondary schools over the past year

| Category | $\mathbf{f}$ | \% |
| :--- | :--- | :--- |
| Less than 10 | 2 | 40 |
| $11-20$ | 1 | 20 |
| $21-30$ | 1 | 20 |
| $31-40$ | 1 | 20 |
| Total | $\mathbf{5}$ | $\mathbf{1 0 0}$ |

The findings on Table 4.12 show that two schools or $40 \%$ of the schools, indicated that they had recorded less than 10 female students dropping out over the past year, while one school (20\%) in each case stated that the dropout cases were between eleven to twenty; and twenty one to thirty respectively. None of the schools stated that they had recorded more than forty students dropping out among female learners. These findings suggest that school
dropouts in the mixed secondary schools affect the participation rates in Kajiado North Sub-county as almost all institutions had registered some cases of dropouts among the learners.

### 4.5.3 Were there any cases of dropouts per class in mixed public

 secondary schools over the past yearThe respondents were asked to state whether or not they had registered any cases of dropouts among learners in the respective classes. This is shown in Table 4.13.

Table 4.13 Were there any cases of dropouts in the class over the past year?

| Category | Frequency | Percent |
| :--- | :---: | :---: |
| Non response | 1 | 3.6 |
| Yes | 25 | 89.3 |
| No | 2 | 7.1 |
| Total | $\mathbf{2 8}$ | $\mathbf{1 0 0 . 0}$ |

The results on Table 4.13 shows cases of dropouts per class in the past year. The study found that a majority of the schools; twenty five ( $89.3 \%$ ), had recorded cases of dropouts in the past year, with only two schools (7.1\%) stating that there had been no dropouts. One participant did not provide a response to the question. These findings reveal that participation in mixed secondary schools may be significantly affected by the cases of learners dropping out of the schools in which they are initially enrolled in.

### 4.6 Socioeconomic factors affecting participation in public mixed secondary schools

The study sought to establish the extent to which some of the socioeconomic factors are deemed to affect the participation of learners in mixed public secondary schools in Kajiado North Sub-county. Some of the factors considered included the level of parents' education, domestic chores, availability of waged jobs, family conflicts, large distance to school, school levies and socio-cultural practices.

### 4.6.1 Extent to which socioeconomic factors affected participation in public mixed secondary schools

The respondents were requested to state their opinions on the extent to which socioeconomic factors affected participation. The findings are shown in Table 4.14.

Table 4.14 Effect of the level of parents' education

| Category | f | Percentage |
| :--- | :---: | :---: |
| Very great | 17 | 30.8 |
| Great | 23 | 42.3 |
| Don't know | 10 | 19.2 |
| Less | 4 | 7.7 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0}$ |

The results on Table 4.14 show that the factors were deemed to have varying extents to which they affected participation. The level of parents' education
was considered by twenty three of the respondents (42.3\%), to greatly affect participation, with seventeen (30.8\%) stating that this affected participation greatly. None indicated the effect to be least.

Table 4.15 Effect of domestic chores on participation

| Category | Frequency | Percentage |
| :--- | :---: | :---: |
| Very great | 8 | 15.4 |
| Great | 31 | 57.7 |
| Don't know | 6 | 11.5 |
| Less | 8 | 15.4 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0}$ |

The findings in Table 4.15 on the effect of domestic chores show that thirty one respondents $(57.7 \%)$ identified it to greatly affect participation, with $15.4 \%$ indicating that this affected participation very greatly, and $11.5 \%$ stated that they did not know.

Table 4.16 Effect of availability waged jobs on participation

| Category | Frequency | Percentage |
| :--- | :--- | :--- |
| Very great | 8 | 15.4 |
| Great | 21 | 38.5 |
| Don't know | 8 | 15.4 |
| Less | 17 | 30.7 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0}$ |

The results shown on Table 4.16 on effect of waged jobs on participation rates showed that while $38.5 \%$ identified waged jobs as greatly affecting participation, $30.8 \%$ said that this factor had a 'less' effect on participation, with another $15.4 \%$ of the respondents stating that these waged jobs greatly affected the level of participation in mixed public secondary schools.

Table 4.17 Effect of family conflicts

| Category | Frequency | Percentage |
| :--- | :---: | :---: |
| Very great | 23 | 42.3 |
| Great | 25 | 46.2 |
| Don't know | 2 | 3.8 |
| Less | 2 | 3.8 |
| Least | 2 | 3.8 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0}$ |

The findings Table 4.17 on the effect of family conflicts on participation show that these were regarded by a significant proportion of the respondents to affect participation, as these were stated as having a very great effect by twenty five ( $46.2 \%$ ) and great by 27 ( $46.2 \%$ ). Those who stated that they don't know, less or least were three (3.8\%) in each case.

Table 4.18 Effect of the large distances to school

| Category | Percentage | Total |
| :--- | :---: | :---: |
| Very great | 10 | 19.2 |
| Great | 27 | 50 |
| Less | 12 | 23.1 |
| Least | 4 | 7.7 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0}$ |

The results on Table 4.18 on the effect of large distance to school showed that twenty seven ( $50 \%$ ) percent of the respondents felt that the distance to school greatly affects participation, with ten (19.2\%) stating that this had a very great less effect, and twelve (23.1\%) indicating that this had the least effect. The findings show that large distances to schools affect participation in mixed public secondary schools significantly.

Table 4.19 Effect of school levies on participation

| Category | Frequency | Percentage |
| :--- | :---: | :---: |
| Very great | 15 | 26.9 |
| Great | 21 | 38.5 |
| Don't know | 4 | 7.7 |
| Less | 10 | 19.2 |
| Least | 4 | 7.7 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0}$ |

The results on Table 4.19 on the effect of school levies found that it was regarded by fifteen results ( $26.9 \%$ ) as very great, while twenty one (38.5\%) stated that this was great.

Table 4.20 Effect of socio-cultural factors on participation

| Category | Frequency | Percentage |
| :--- | :---: | :---: |
| Very great | 4 | 7.7 |
| Great | 6 | 11.5 |
| Don't know | 2 | 3.8 |
| Less | 23 | 42.3 |
| Least | 19 | 34.6 |
| Total | $\mathbf{5 4}$ | $\mathbf{1 0 0}$ |

The results on Table 4.20 on the socio-economic factors showed that of all those factors investigated, socio-cultural practices were regarded by a majority as having the least effect on participation. This is because twenty three (42.3\%) felt that their effect was less, while 19 (34.6\%) stated that these had a very great effect on participation.

### 4.6.2 What socio-economic measures can be undertaken to enhance participation in mixed sec schools?

The participants in the study were requested to suggest some of the possible socio-economic measures that could be undertaken to promote participation. Several suggestions were made, including enlightening the society. This is
related to the perception that the parents' level of education had an effect on their children's educational participation. Another measure was the reduction of school levies and provision of more funding to schools so as to assist those who are unable to raise the requisite levies attend school. Other propositions included promoting equality of both males and females in school, encouraging girls to compete with boys, encouraging use of guidance and counseling, advocacy in the communities, increasing the student tuition fee allocation amount, construction of more boarding schools to address the issue of long distances to schools as well as the establishment of more secondary schools in the sub-county.

### 4.7 Adequacy of teaching and learning resources

The study sought to establish the level of adequacy of teaching and learning resources in the sampled schools during the study. The resources investigated included textbooks, exercise books, reference books, classrooms, teachers, desks and chairs, laboratories and lab equipment.

### 4.7.1 Level of adequacy of teaching and learning resources in mixed public secondary schools

The findings on the level of adequacy of various resources are summarized in Table 4.21.

Table 4.21 Level of adequacy of teaching and learning resources in mixed public secondary schools

| Category | More than adequate |  | Adequate |  | Not <br> Adequate |  | Quite inadequate |  | Nonexistent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | f | \% | f | \% | f | \% |  | \% |  |  |
| Textbooks | 2 | 7.7 | 14 | 53.8 | 8 | 30.8 | 2 | 7.7 | - | - |
| Exercise books | 5 | 19.2 | 19 | 73.1 | 2 | 7.7 | - | - | - | - |
| Reference books | 2 | 7.7 | 6 | 23.1 | 16 | 61.5 | 2 | 7.7 | - | - |
| Classrooms | 1 | 3.8 | 18 | 69.2 | 6 | 23.1 | 1 | 3.8 |  | - |
| Teachers | 2 | 7.7 | 8 | 30.8 | 16 | 61.5 |  |  |  | - |
| Desks and chairs | 1 | 3.8 | 22 | 84.6 | 2 | 7.7 | 1 | 3.8 | - | - |
| Laboratories and lab equipment | 2 | 7.7 | 9 | 34.6 | 12 | 46.2 | 3 | 11.5 | - | - |

The findings in Table 4.21 shows the results of how respondents ranked the level of adequacy on a scale ranging from more than adequate to non-existent. Textbooks were considered to be adequate by fifty three percent while thirty percent said that these were inadequate, with seven percent stating that the textbooks were more than adequate. A similar proportion indicated that that the text books were quite inadequate.

A majority of the respondents accounting for seventy three percent were of the opinion that exercise books were adequate, and nineteen percent indicated that these were more than adequate. Only seven percent felt that these were not adequate. Reference books were considered to be largely inadequate in the
schools that participated in the study. This is because sixty one percent of the respondents indicated that these were inadequate, and seven percent as quite inadequate. Only seven percent felt that they had more than adequate reference books. On the school infrastructure, classrooms were found to be adequate by sixty nine percent of the respondents, while twenty three and three percent respectively stating that classrooms were not adequate and quite inadequate.

A majority of the schools stated that they did not have enough teachers, as sixty one percent of the respondents stated that the teachers in the schools were not adequate. However, seven percent of the respondents indicated that they had more than adequate teachers. A significant proportion of those in the study, eighty four percent noted that desks and chairs were adequate, with only three percent noting that these were quite inadequate. While thirty four considered the laboratories and laboratory equipment to be adequate, a slightly larger proportion of forty six percent of the participants considered these to be inadequate.

These findings reveal that most of the mixed secondary schools have sufficient teaching and learning facilities, except for laboratories and laboratory equipment. This implies that participation in the schools may be related to or influenced by other factors other than adequacy of teaching and learning facilities.

### 4.7.2 Provision of Teaching and learning resources

The availability of teaching and learning resources wass considered to be an important factor in facilitating educational activities. The study therefore sought to establish those entities responsible for providing the teaching and learning resources in the mixed public secondary schools. Table 4.9 presents the findings on who provides teaching and learning resources in the mixed public secondary schools.

Table 4.22 Provision of teaching and learning resources

| Category | Frequency | Percent |
| :--- | :---: | :---: |
| Parent | 17 | 31.5 |
| Ministry of | Education | 37 |
| Total |  | $\mathbf{5 4}$ |

The results on Table 4.22 presents the findings on who provides the teaching and learning resources in the mixed public secondary schools. The results show that a majority of the schools rely on teaching and learning resources provided by the government through the Ministry of Education. This was indicated by thirty seven respondents (68.5\%), compared to thirty one (31.5\%) who identified parents as having the responsibility of providing these resources in the schools. The findings therefore show that the government is responsible to the largest extent for providing the necessary teaching and learning resources in the mixed public secondary schools.

### 4.7.3 Effect of teaching and learning resources

The respondents were asked to state their opinion on whether or not the level of adequacy of teaching and learning resources affects participation in mixed secondary schools in Kajiado North Sub-county. The responses are shown in Figure 2.

Figure 4.1 Does adequacy of teaching and learning resources affect participation in the school?


The results on Figure 4.1 shows that ninety two percent of the respondents were of the opinion that the level of adequacy of teaching and learning resources is an important factor in determining the participation in mixed secondary schools. When asked to explain their position, the respondents gave reasons such as that less resources hinder participation rates because they promote or hinder learner involvement in the learning process; learners stay in schools longer where there are adequate teaching and learning resources; they help to meet individual needs; less resources hinder efficient and effective
curriculum delivery; resources have a direct effect on the quality of teaching and that inadequate resources may lead to drop-outs or transfers.

### 4.8 Effect of Gender status of mixed schools on participation

The nature of mixed schools requires them to admit both male and female learners. The study therefore sought to establish whether the fact that these institutions are co-educational may have gender related issues that may affect participation. Those factors considered included data collection on gender, gender sensitivity in school management, gender planning, gender advocacy, gender sensitive teaching methodologies and gender sensitive learning environment.

### 4.8.1 Extent to which gender related factors affect participation in mixed secondary schools

Table 4.23 shows the findings on the extent to which gender related factors on the responses from the participants.

Table 4.23 Extent to which gender related factors affect participation in mixed secondary schools

| Category |  | Very great | Great |  | Don't know |  | Less |  | Least |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | f | \% | f | \% | f | \% | f | \% | f | \% |
|  | Data collection on gender | 2 | 7.7 | 9 | 34.6 | 9 | 34.6 | 2 | 7.7 | 4 | 15.4 |
|  | Gender sensitivity in school management | 5 | 19.2 | 13 | 50 | 1 | 3.8 | 4 | 15.4 | 3 | 11.5 |
| iii. | Gender planning | 3 | 11.5 | 12 | 46.2 | 5 | 19.2 | 4 | 15.4 | 2 | 7.7 |
| iv. | Gender advocacy | 6 | 23.1 | 11 | 42.3 | 3 | 11.5 | 4 | 15.4 | 2 | 7.7 |
|  | Gender sensitive teaching methodologies | 6 | 23.1 | 10 | 38.5 | 3 | 11.5 | 4 | 15.4 | 3 | 11.5 |
|  | Learning environment | 8 | 30.8 | 9 | 34.6 | 2 | 7.7 | 4 | 15.4 | 3 | 11.5 |

The findings on Table 4.23 presents the findings on the extent to which gender related factors were deemed to affect participation in mixed public secondary schools. The findings show that equal numbers of the respondents were of the opinion that the collection of disaggregated data on gender affected participation in mixed schools or did not know whether this had an effect or not. Another two respondents ( $7.7 \%$ ) felt that the effect of this was very great and a similar proportion that this was less. Four respondents (15.4\%) indicated that data collection had the least effect on participation.

With regard to gender sensitivity in school management, thirteen (50\%) of the respondents indicated that the effect of this on participation was great, while those who stated that this was very great were five (19.2\%). Gender planning was considered to have a great effect by twelve (46.2\%), which was a majority. Those who stated that they did not know whether this had an effect or not made up five ( $19.2 \%$ ), while those who indicated that this was very great comprised three respondents (11.5\%).

Gender advocacy was identified to have a great effect by eleven respondents (42.3\%), while six (23.1\%) felt that this had a very great effect. Only two respondents ( $7.7 \%$ ) stated that the effect of gender advocacy was least. Gender sensitive teaching methodologies was regarded as having a great effect by ten respondents $(38.5 \%)$, compared to nine $(34.6 \%)$ who stated that a gender sensitive learning environment had a similar effect.

Overall, the findings show that all the variables were regarded as having great to very great effect on participation of learners. This suggests that gender issues have a great impact on the participation of learners in mixed secondary schools.

### 4.8.2 Promoting participation of both male and female students in mixed secondary schools

The participants were requested to suggest some of the possible measures that could be used to promote participation of both male and female learners in mixed secondary schools. The responses were varied and included suggestions
such as enhancement of guidance and counselling programmes in mixed secondary schools, enhancement of gender equality in teaching and learning activities; encouraging both boys and girls to have self-esteem; launching gender equity campaigns in the schools and their neighbourhoods; enforcing equity during enrollment in secondary schools and increasing the amount of funding allocated per student in the Tuition Free Secondary Education programme. However, there those participants who felt that more single sex schools should instead be established.

### 4.9 Effects of education policies on participation in mixed public secondary schools

The respondents were asked to state their opinion on the extent to which gender policies in education affected participation in mixed secondary schools in Kajiado North Sub-county.

### 4.9.1 Effects of policy issues in education on participation in mixed public secondary schools

The findings are shown in Table 4.17.

Table 4.24 Effects of policy issues in education on participation in mixed public secondary schools

| Category | Very great |  | Great |  | Don't know |  | Less |  | Least |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | f | \% | f | \% | f | \% | f | \% | f | \% |
| i. Promotion of equality of participation | 3 | 11.5 | 18 | 69.2 | 2 | 7.6 | 1 | 3.8 | 2 | 7.7 |
| ii. Familiarity with TFSE | 2 | 7.7 | 11 | 42.3 | 11 | 42.3 | - | - | 1 | 3.8 |
| iii. Quotas for male and female learners | 2 | 7.7 | 18 | 69.2 | 1 | 3.8 | 3 | 11.5 | 1 | 3.8 |
| iv. Adherence to re-entry policy | 4 | 15.4 | 12 | 46.2 | 4 | 15.3 | 3 | 11.5 | 3 | 11.5 |
| v. Adherence to repetition policy | 5 | 19.2 | 9 | 34.6 | 5 | 19.2 | 4 | 15.4 | 3 | 11.5 |

The findings on Table 4.24 presents a summary of the findings on the respondents' opinions on the effects of policy issues in education on the participation of learners in mixed public secondary schools in Kajiado North Sub-county. According to the table, promotion of equality in participation was regarded by eighteen ( $69.2 \%$ ) as having a great effect, compared to two (7.7\%) who felt that this has the least effect. Another three (11.5\%) were of the opinion that promotion of equality of participation was very great. Familiarity with Tuition Free Secondary Education policy was also considered by a majority of the respondents to be great, as this was identified by eleven ( $42.3 \%$ ), with a similar proportion of the respondents stating that they did not know whether or not this affected participation. Quotas for male and female learners during admission was regarded by eighteen (69.2\%) of the
respondents as having a great effect, with two respondents (7.7\%) indicating that this was very great. Those who felt that the adherence to re-entry policy had a great effect were twelve ( $46.2 \%$ ), while four ( $15.4 \%$ ) stated that the effect was very great. Three respondents (11.5\%) indicated that the effect was less and least in each case. On the repetition policy, nine (34.6\%) of the participants in the study stated that the effect of this policy was great, with five $(19.2 \%)$ stating that the effect of this was very great. While four ( $15.4 \%$ ) and three (11.5\%) stated that the effect was less and least respectively, five ( $19.2 \%$ ) indicated that they did not know whether this had any effect on learner participation in mixed secondary schools.

### 4.9.2 Promoting participation through legal and policy measures

The study requested the respondents to state some of the ways in which legal and policy measures could be strengthened so as to promote participation in mixed secondary schools among learners. Some of the suggestions proposed included the involvement of all stakeholders in the process of policy formulation and implementation; adherence and enforcement of policies in place; promoting equality in education; ensuring the adherence to gender policy in education among all schools as well as creating awareness of the policies.

## CHAPTER FIVE

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

This chapter presents a summary of the study, conclusions, recommendations and suggestions for further research.

### 5.2 Summary of the study

The main purpose of the study was to investigate the factors influencing participation of students in mixed public secondary schools in Kajiado North Sub-county, Kenya. The research objectives sought to establish the extent to which educational policies on access influenced the participation of students in Mixed public secondary schools in Kajiado North County; to determine the extent to which gender status of the school influenced participation of students in mixed public secondary schools in Kajiado North Sub-county; to assess the extent to which family source of income influences participation in Kajiado North Sub-county and to examine the extent to which the availability of teaching and learning resources influenced participation in mixed public secondary schools in Kajiado North Sub-county. A review of literature on participation in schools was conducted in order to contextualize the variables and refine the study. The variables of the study were discussed in relation with the Systems Theory which assumes that organizations operate as systems within a supra system.

The study adopted the descriptive to survey design. The data for the study was collected using questionnaires among principals and 28 class teachers and 21 members of the school's PTA. The participants in the study were sampled using simple random sampling technique, and the data obtained was analysed and interpreted thematically.

The study found that educational policies have a very great effect on participation in mixed secondary schools, this is because more than fifty percent of the respondents indicated that the various legal and policy interventions have a significant effect on the participation of male and female students in education. Quotas for male and female learners during admission was regarded by sixty nine percent of the respondents as having a great effect, with seven percent indicating that this was very great. The re-entry policy was found to have a great effect by forty six percent, while fifteen percent stated that the effect was very great. The repetition policy was regarded by thirty four percent of the participants in the study to be great, with nineteen percent percent stating that the effect of this was very great.

The study found that the gender status of the mixed schools had a significant effect on participation. This is because the findings showed that seven percent and thirty four percent respectively, held that the data collection on gender had great and very great effects. There are more male students enrolled in mixed secondary schools than females, and more females drop out before completing their secondary school course than females. The gender sensitivity of the
school management and gender advocacy were also regarded by a significant proportion as having a very great to great effect on the participation.

The study found that socioeconomic factors are considered to affect participation in mixed public secondary schools. A majority of the respondents forty two percent were of the opinion that the level of parents' education affects their children's participation in the secondary school, with thirty percent stating that this had a very great effect. Other socioeconomic factors such as domestic chores, waged jobs and family conflicts were all found to have significant effects on participation in mixed secondary schools. Fifty seven percent of the respondents in the study identified domestic chores to greatly affect participation, with another fifteen percent stating that the effect of domestic chores was very great, with thirty eight percent indicating that waged jobs affected participation greatly, while a combined eighty eighty percent stated that the family conflicts had a great to very great effect on the students.

The study also concludes that the adequacy of teaching and learning resources does not significantly influence participation in mixed public secondary schools. The respondents ranked the level of adequacy on a scale ranging from more than adequate to non-existent. Most of the schools that participated in the study indicated that they had adequate teaching and learning resources such as textbooks and exercise, even though reference books were considered by a majority to be largely inadequate. On the school infrastructure, classrooms were found to be adequate by sixty nine percent of the participants
in the study. A majority of the schools stated that they did not have enough teachers, as sixty one percent of the respondents stated that the teachers in the schools were not adequate. However, seven percent of the respondents indicated that they had more than adequate teachers. A significant proportion of those in the study, eighty four percent noted that desks and chairs were adequate, with only three percent noting that these were quite inadequate. While thirty four percent considered the laboratories and laboratory equipment to be adequate, a slightly larger proportion of fourty six percent of the participants considered these to be inadequate. These findings reveal that most of the mixed secondary schools have sufficient teaching and learning facilities, except for laboratories and laboratory equipment. This implies that participation in the mixed public secondary schools may be related to or influenced by other factors other than adequacy of teaching and learning facilities.

### 5.3 Conclusion

Based on the findings of the study, it is concluded that the policy interventions on access have a significant effect on the participation of learners in mixed public secondary schools. Policies addressing matters of school enrollment and retention such as re-entry, repetition, Tuition Free Secondary Education programme and bridging of the gender gap have a great effect on the participation rates in the mixed public secondary schools. However, the effects of these policies could have greater effects if all stakeholders were involved in the process of policy formulation and implementation and by ensuring
adherence and enforcement of policies in place; promoting equality in education; ensuring the adherence to gender policy in education among all schools as well as creating awareness among learners and parents alike.

The study also concludes that the mixed gender status of the public secondary schools has a significant effect on participation. This effect especially affects the rate of enrolment among female learners. There are more male students enrolled in mixed public secondary schools than females, and the dropout rates among females is higher than that of males. The gender sensitivity of the school management and gender advocacy also have great effect on participation.

The study further concludes that family level of income affects participation in mixed public secondary schools by promoting or hindering access to schools. Aspects such as the level of parents' education, involvement in domestic chores, the availability of waged jobs and issues of family conflicts all have significant effects on participation in mixed secondary schools.

The study also found that most of the mixed public secondary schools in the Sub-county have adequate teaching and learning resources, most of which are provided by the government through the Ministry of Education, and concludes that there could be other factors other than the adequacy of teaching and learning resources that affect participation of learners in mixed public secondary schools. The schools have adequate textbooks, desks, chairs and
classrooms. However, most of them indicated that they do not have enough teachers, laboratory equipment and reference books.

### 5.4 Recommendations

Based on the findings of the study, the following recommendations are made:

- The government and the Ministry of Education should sensitize the parents of secondary school going children on the various policies and legislations that govern enrollment and participation in school so as to promote awareness and adherence on a much wider scale.
- More teachers should be posted to mixed public secondary schools, as the provision of teaching and learning resources as well as facilities alone may not necessarily promote participation on their own. Lack of adequate teachers may be a reason why learners discontinue their studies in the mixed secondary schools that they are enrolled in.
- Concerted efforts to increase female students' participation should be enhanced by the central government and devolved government to increase the participation of females in the secondary school. Continual efforts should be expended to promote the participation of female students from enrollment, retention, re-entry in case of drop outs to completion. This is because the participation rate among female learners is lower than that of males, besides the drop-out rate of females being higher than that of male students.
- The schools should work in conjunction with the Ministry of Education to ensure that the necessary teaching and learning resources that promote effective teaching and learning are provided in all mixed public secondary schools, as the respondents were unanimous that adequacy of teaching and leafing resources affects participation. Priority should be extended to the provision of laboratory facilities and equipment, classrooms and reference books.


### 5.5 Suggestions for further research

1. This study was only conducted in one Sub-county. A study could be undertaken to determine the overall participation rates in mixed public secondary schools in the entire county.
2. The study found that fewer female students are enrolled in mixed public secondary schools. A study could be done to determine the specific factors affecting girls' participation in secondary schools in the country despite the implementation of FPE and TFSE.
3. Since the study was only conducted in Kajiado North Sub-county, a similar study could be carried out in other Counties and Sub-counties to compare the results with those of Kajiado North Sub-county.
4. The study limited the respondents to those in schools only. A study should be carried out among mixed public secondary school dropouts to establish those factors leading to their premature withdrawal from the schools they are enrolled in.

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## APPENDICES

## Appendix 1: Letter of introduction

Paul Kaula

P.O Box 429,

Ngong' Hills.
Date: 12/11/2014

To the Principal<br>Dear Sir/Madam,

## RE: PARTICIPATION IN RESEARCH

I am a post graduate student at the University of Nairobi undertaking a Master of Education course in Educational Planning. I am carrying out research in Mixed public secondary Schools in Kajiado North Sub-county as a part of the course. The topic of study is 'Factors influencing participation of students In mixed public secondary schools in Kajiado North Sub-County, Kenya.' Your school has been randomly selected for this study. Please allow me to conduct research in the school among teachers, students and parents. This study is purely for academic purposes and therefore the information collected will be treated with strict confidentiality.

Thank you.

Yours Sincerely,
Paul Kaula

## Appendix 2

## Questionnaire for Class Teachers

Dear Respondent,
The purpose of this questionnaire is to enable the researcher to obtain information about Factors influencing participation of students in Mixed public secondary schools. Kindly answer the questions honestly and accurately by ticking $(\sqrt{ })$ the appropriate choice given.

## Section A: Background Information

1. What is your Gender? Male [ ] Female [ ]
2. What is your age bracket?

Below 21-30 years [ ] 31-40 years [ ]
$31-40$ years [ ] 41-50 years [ ]
51 year and above [ ]
3. Highest level of Education?

Diploma [ ] Bachelors degree [ ] Masters [ ]
Other (Specify) $\qquad$
4. For how long have you been a teacher in this school?

$$
\begin{array}{lll}
\text { Below } 5 \text { yrs [ }] 5-10 \text { yrs } \\
11-15 \text { yrs [ ] Above } 15 \text { years [ }
\end{array}
$$

4. What is the total number of students in your class? $\qquad$
5. Number of male and female students in class: Boys $\qquad$ Girls $\qquad$
6. a) Are there cases of students in your class who have dropped out over the past year of school before completing the secondary course?

Yes [ ] No [ ]
b) Please state the number of those who have left the class over the past year.

Boys $\qquad$ Girls $\qquad$

## SECTION B: Socioeconomic Factors Affecting Participation in Mixed

## Secondary schools

7. To what extent do the following socio-economic factors affect participation of students in the school? (Please tick he appropriate option). Please rate using the scale: VG- Very Great; G- Great; DN- Don’t know; LS - Less and LST- Least.

| Category | VG | G | DN | LS | LST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| i. Level of parent's education |  |  |  |  |  |
| ii. Domestic chores/labour |  |  |  |  |  |
| iii. Availability of waged jobs e,g Matatu' touts/house helps/farm hands |  |  |  |  |  |
| iv. Family conflicts e.g. separation, divorce |  |  |  |  |  |
| v. Large distance from home |  |  |  |  |  |
| vi. School levies |  |  |  |  |  |
| vii. Socio-cultural practices e.g early marriage, FGM |  |  |  |  |  |

8. What can be done to enhance participation in Mixed Secondary schools in the Sub-county?

## Section C: Teaching and Learning Resources

9. Please indicate the extent to which the following teaching and learning facilities are considered adequate for the teachers and learners in the school.

Please use the rating scale: MTA: More than Adequate; A- Adequate; NANot Adequate; QIA-Quite Inadequate and NE: Non-existent.

| Classrooms | MTA | A | NA | QIA | NE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a) Text-books |  |  |  |  |  |
| b) Exercise <br> books |  |  |  |  |  |
| c) Reference books |  |  |  |  |  |
| d) Classrooms |  |  |  |  |  |
| e) Teachers |  |  |  |  |  |
| f) Desks and chairs |  |  |  |  |  |
| g) Laboratories and lab equipment |  |  |  |  |  |

10. Who provides instructional resources in the school?

Sponsor [ ] Parent [ ] Ministry of education [ ] Donors [ ]
Others (Please specify) $\qquad$
11. a) Do you think the adequacy of teaching and learning resources affects participation in the school? Yes [ ] No [ ]
b) Please explain

## Section D: Effect of Gender issues on the school participation

12. Please indicate the extent to which the following gender issues affect participation of girls and boys in mixed secondary schools. Please tick the appropriate box that best describes your opinion. Please rate using the scale: VG- Very Great; G- Great; DN- Don’t know; LS - Less and LSTLeast.

| Category | VG | G | DN | LS | LST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| i. Data collection on gender |  |  |  |  |  |
| ii. Gender sensitivity in school management |  |  |  |  |  |
| iii. Gender planning |  |  |  |  |  |
| iv. Advocacy on importance of education to both boys and girls |  |  |  |  |  |
| v. Gender sensitive teaching methodologies |  |  |  |  |  |
| vi. Gender sensitive learning environment |  |  |  |  |  |

13. What can be done to promote participation of both male and female students in mixed secondary schools?

## Section E: Effects of Legal and policy issues in education participation

14. Please indicate the extent to which the following legal and policy issues affect participation of girls and boys in mixed secondary schools. Please tick the appropriate box that best describes your opinion. Please use this rating scale: VG- Very Great; G- Great; DN- Don’t know; LS - Less and LST- Least.

| Category | VG | G | DN | LS | LST |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| i. | Familiarity with the <br>  <br> TFSE |  |  |  |  |  |
| ii. | Promotion of <br> equality in <br> participation |  |  |  |  |  |
| iii. | Quotas for male and <br> female students in <br> admission |  |  |  |  |  |
| iv. | Adherence to re- <br> entry policy for <br> those who drop out <br> due to pregnancy |  |  |  |  |  |
| v. |  |  |  |  |  |  |
| Adherence to <br> repetition policy |  |  |  |  |  |  |

15. In what ways can legal and policy issues in education be strengthened to promote participation in mixed secondary schools?

## Thank You

## Appendix 3

## Questionnaire for Secondary School Principals

## Dear Respondent,

The purpose of this questionnaire is to enable the researcher to obtain information about factors affecting participation of students in mixed public secondary schools. Kindly answer the questions honestly and accurately by ticking $(\sqrt{ })$ the appropriate choice given.

## Section A: Background Information

1. What is your Gender? Male [ ] Female [ ]
2. Age category
$\begin{array}{lrlll}\text { Below 21-30 years [ ] } 31-40 \text { years } & \text { [ ] } \\ 31-40 \text { years [ ] } 41-50 \text { years } & \text { [ ] }\end{array}$
51 year and above [ ]
3. Highest level of Education?

Diploma [ ] Bachelors degree [ ] Masters [ ]
Other (Specify) $\qquad$
3. For how long have you been a head teacher in this school?

| Below 5 years | $[$ | $]$ | $5-10$ years |
| :--- | :--- | :--- | :--- |
| $11-15$ yrs | $[$ | $]$ | Above 15 years [ ] |

4. What is the total number of students in your school? $\qquad$
5. Number of male and female students in the school:

Boys $\qquad$ Girls $\qquad$
6. a) Are there cases of students in your school who have dropped out over the past year of school before completing the secondary course?

Yes [ ] No [ ]
b) Please state the number of those who have left the school over the past year. Boys $\qquad$ Girls $\qquad$

## SECTION B: Socioeconomic Factors Affecting Participation in Mixed

## Secondary schools

7. To what extent do the following socio-economic factors affect participation of students in the school? (Please tick he appropriate option). Please rate using the scale: VG- Very Great; G- Great; DN- Don't know; LS - Less and LST- Least.

| Category | VG | G | DN | LS | LST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| i. Level of parent's education |  |  |  |  |  |
| ii. Domestic chores/labour |  |  |  |  |  |
| iii. To take up waged jobs e,g Matatu' touts/house helps |  |  |  |  |  |
| iv. Family conflicts e.g. separation, divorce |  |  |  |  |  |
| v. Large distance from home |  |  |  |  |  |
| vi. School levies |  |  |  |  |  |
| vii. Socio-cultural practices e.g early marriage, FGM |  |  |  |  |  |

8. What can be done to enhance participation in Mixed Secondary schools in the Sub-county?

## Section C: Teaching and Learning Resources

9. Please indicate the extent to which the following teaching and learning facilities are considered adequate for the teachers and learners in the school.

Please use the rating scale: MTA: More than Adequate; A- Adequate; NA-Not Adequate; QIA-Quite Inadequate and NE: Non-existent.

| Classrooms |  | MTA | A | NA | QIA | NE |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| i. | Text-books |  |  |  |  |  |
| ii. | Exercise books |  |  |  |  |  |
| iii. | Reference books |  |  |  |  |  |
| iv. | Classrooms |  |  |  |  |  |
| v. | Teachers |  |  |  |  |  |
| vi. | Desks and chairs |  |  |  |  |  |
| vii. | Laboratories |  |  |  |  |  |
| viii. | Lab equipment |  |  |  |  |  |
| ix. | Computers |  |  |  |  |  |
|  | enough |  |  |  |  |  |

10. Who provides instructional resources in the school?

Sponsor [ ] Parent [ ] Ministry of education [ ] Donors [ ] Others (Please specify) $\qquad$
11. Do you think the adequacy of teaching and learning resources affects participation in the school? Yes [ ] No [ ]

## Section D: Effect of Gender issues on the school participation

12. Please indicate the extent to which the following gender issues affect participation of girls and boys in mixed secondary schools. Please tick the appropriate box that best describes your opinion. Please rate using the scale: VG- Very Great; G- Great; DN- Don’t know; LS - Less and LSTLeast.

| Category | VG | G | DN | LS | LST |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| i. | Data collection on <br> gender |  |  |  |  |  |
| ii. | Gender sensitivity <br> in school <br> management |  |  |  |  |  |
| iii. | Gender planning |  |  |  |  |  |
| iv. | Advocacy on <br> importance of <br> education to both <br> boys and girls |  |  |  |  |  |
| v. |  |  |  |  |  |  |
| Gender sensitive <br> teaching <br> methodologies |  |  |  |  |  |  |
| vi. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Gender sensitive |  |  |  |  |  |  |
| learning |  |  |  |  |  |  |
| environment |  |  |  |  |  |  |$\quad$|  |
| :--- | :--- | :--- | :--- | :--- |

13. What can be done to promote participation of both male and female students in mixed secondary schools?

## Section E: Effects of policy issues in education participation

14. Please indicate the extent to which the following legal and policy issues affect participation of girls and boys in mixed secondary schools. Please tick the appropriate box that best describes your opinion. Please use this rating scale: VG- Very Great; G- Great; DN- Don’t know; LS - Less and LSTLeast.

| Category | VG | G | DN | LS | LST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| i. Familiarity with education rules on quality |  |  |  |  |  |
| ii. Promotion of equality in participation |  |  |  |  |  |
| iii. Quotas for male and female students in admission |  |  |  |  |  |
| iv. Adherence to re-entry policy for those who drop out due to pregnancy |  |  |  |  |  |
| v. Adherence to repetition policy |  |  |  |  |  |

15. In what ways can legal and policy issues in education be strengthened to promote participation in mixed secondary schools?

## Appendix 4 <br> Interview Schedule for PTA Members

## Please respond as truthfully as possible

1. How many of your children have ever attended/are attending mixed public secondary schools?
2. What factors influence your enrollment of your children in mixed public secondary schools?
3. Does the gender composition of the school affect your choice in any way? Please explain.
4. What is your opinion on the adequacy of teaching and learning resources in your child (children's) secondary school?
5. What do you think should be done to increase the level of enrolment and retention in secondary schools in the Sub-county?
6. Are there any policies or laws on participation that that you are familiar with? Please explain.

## Appendix 5

RESEARCH AUTHORIZATION PERMIT (NACOSTI)

THIS IS TO CERTIFY THAT:
MR. PAUL MUSYOKA KAULA
OF UNIVERSITY OF NAIROBI, 492-28
Ngong Hills,has been permitted to
conduct research in Kajiado County
on the topic: FACTORS INFLUENCING PARTICIPATION OF STUDENTS IN MIXED
PUBLIC SECONDARY SCHOOLS IN
KAIIADO NORTH DISTRICT, KENYA.
for the period ending:
31st December,2015


Permit No : NACOSTI/P/14/7598/4359 Date Of Issue : 17th December,2014 Fee Recieved :Ksh 1,000


National Commission for Science, Technology \& Innovation

## Appendix 6

## Research Authorization (Ministry of Education)

## MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY STATE DEPARTMENT OF EDUCATION

```
Email: kajiadocde@gmail.com
When replying please quote
Ref: KJD/C/R.3/VOL.I/103
And
Date: 144 July, 2015
Paul Musyoka Kaula
University of Nairobi
P.O. Box 30197-00100
NAIROBI
```



```
County Director of Education Kajiado County P. O. Box 33 KAJIADO
Date: \(14^{\text {th }}\) July, 2015
Paul Musyoka Kaula
P.O. Box 30197-00100
NAIROBI
```


## RE: RESEARCH AUTHORIZATION

The letter from National Commission for Science, Technology and Innovation dated $17^{\text {th }}$ December, 2014 refers.

This is to confirm to you that, you have been authorized to conduct your research on "Factiors influencing parčicipation oŕ stuáents int mixed pudific secondary schools in Kajiado North District, Kajiado County, Kenya" for a period ending 31 ${ }^{\text {st }}$ December, 2015.

The administrators of the Schools are required to co-operate and provide you with the relevant data and information for the research exercise.

```
    FOR: COUHTY DIRCCTOR OP EDJCATIOK
GEDION M. MBINDA
FOR: COUNTY DIRECTOR OF EDUCATION
KAJIADO COUNTY
```

