FACTORS AFFECTING TRANSITION OF STUDENTS FROM BOARDING AND DAY SECONDARY SCHOOL TO UNIVERSITIES IN MUTOMO SUB-COUNTY, KENYA

NGAATU ANGELINA KASUKI

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT FOR REQUIREMENT FOR AWARD OF THE DEGREE OF MASTERS IN EDUCATION, IN THE DEPARTMENT OF EDUCATIONAL FOUNDATION OF UNIVERSITY OF NAIROBI

DECLARATION

This research project is my original work and has not been submitted for a degree in any
other university.
Ngaatu Angelina Kasuki
E56/77831/2012.
This research project has been submitted for examination with my approval as university
supervisor.
Mackatiani Caleb.
University of Nairobi

TABLE OF CONTENTS

Content	Page
Declaration	ii
Table of contents	iii
List of figures	vi
List of tables'	vii
List of abbreviation	viii
CHAPTER ONE INTRODUCTION	
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Purpose of the Study	6
1.4 Objectives of the study	6
1.5 Research Questions	6
1.6 Significance of the Study	7
1.7 Limitations of the Study	7
1.8 Delimitation of the study	7
1.9 Basic Assumptions of the Study	8
1.10 Definition of Operational Terms	8
CHAPTER TWO	
LITERATURE REVIEW	
2.1 Introduction	10
2.2 Secondary education	10
2.3 Teaching/learning resources and transition rate	13
2.4 School internal efficiency and transition rates	15

2.5 Student's family socio-economic status and transition rates	16
2.6 Summary of literature review	. 17
2.7 Theoretical framework	. 19
2.8 Conceptual framework	. 21
CHAPTER THREE	
RESEARCH METHODOLOGY	
3.1 Introduction	. 23
3.2 Research design	. 23
3.3 Target population	. 23
3.4 Sample size and sampling techniques	. 23
3.5 Research instruments	24
3.6 Validity of the research instruments	. 24
3.7 Reliability of the research instruments	. 25
3.8 Data collection procedure	. 25
3.9 Data analysis techniques	. 26
CHAPTER FOUR	
DATA ANALYSIS, PRESENTATIONS AND DISCUSSIONS	
4.1 Introduction	. 27
4.2 Questionnaire return rate	. 27
4.3 Demographic data	. 27
4.3.1 Gender of the respondent	. 27
4.3.2 Highest professional qualification	. 28
4.3.3 School category	. 28
4.3.4 Experience of the principals	. 29

4.4 Provision for teaching materials	30
4.4.1 Physical facilities	30
4.4.2 Teachers evaluation on disbarment of funds and teaching /learning materials	33
4.6 Family socio- economic status of students' parents	34
4.7 Performance and transition rates in all school categories	36
4.7.1 Performance Rating by principals	38
CHAPTER FIVE	
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
5.1 Summary	39
5.2 Conclusion	40
5.3 Recommendation	41
5.4 Suggestion for further studies	42
REFERENCES	44
APPENDICES	
Appendix 1: Letter of transmittal for data collection	48
Appendix II: Questionnaire for principals	49
Appendix III: Class teacher's questionnaire	52
Appendix IV: Student's questionnaire	55
Appendix V: List of schools	57
Appendix VI: Transition rate	59
Appendix VII: Authorization letter	61
Appendix VIII: Research permit	62

LIST OF FIGURES

Figure 2.	1: Conceptual	Framework	
-----------	---------------	-----------	--

LIST OF TABLES

Table 1.1 KCSE grade achievements 2011 – 2013 Mutomo sub county	1
Table 4.1 Gender of the respondent	1
Table 4.2 Highest professional qualification of the respondent	2
Table 4.3 Cross tabulation of the respondent with school category	2
Table 4.4 Experience of the principals	3
Table 4.5 Physical Facilities	5
Table 4.6 Instructional materials	5
Table 4.7 Disbursement of funds	8
Table 4.8 Teaching/learning materials	9
Table 4.9 Whether the school type influence results of students in national	al
examinations4	0
Table 4.10 Whether the parents are able to pay for their students' school fee	es
efficiently4	1
Table 4.11 Whether the students are send home for school fees	1
Table 4.12 Adequacy of materials	2
Table 4.13 Whether the school has play ground	3
Table 4.14 Whether the play grounds are enough	3
Table 4.15 Mean grades of school for years 2011, 2012 and 2013 KCSE results 4	4
Table 4.16 Transition rates in (%) for 2011, 2012 and 2013 KCSE results 4	4
Table 4.17 Performance rating by principals	5

LIST OF ABBREVIATION

GOK Government of Kenya

HELB Higher Education Loans Boards

KCPE Kenya Certificate for Primary Education

KCSE Kenya Certificate of Secondary Education

KER Kenya Economic Report

KNEC Kenya National Examination Council

MOE Ministry of Education

MOEST Ministry of Education Science and Technology

NACOSTI National Council for Science Technology and Innovation

NASET National Alliance for Secondary Education and Transition

SEST Secondary Education Strategic Report

UK United Kingdom

UNESCO United Nations Educational Scientific and Cultural Organization

UNICEF United Nations Children's Funds

USAID US Agency for International Development

ABSTRACT

The purpose of this study was to find out factors influencing low transition rates from day secondary schools as compared to boarding secondary schools in Mutomo Sub-county, Kenya. It was guided by the following objectives: to determine the extent to which provision of teaching/learning resources influence the transition rate to universities of students in day and boarding secondary schools in Mutomo Sub-county; To examine the extent to which school's internal efficiency influence the transition rate to universities in day and boarding secondary schools in Mutomo Sub-county; and to determine the extent to which family socio economic status influences the transition rate to universities in day and boarding secondary schools.

The study was based on systems theory propounded by Scott (1987) who adopted a system perspective in analyzing organizations. A descriptive survey research design was adopted for the study. The study target population involved all principals, teachers and students in boarding and day schools secondary schools. Whereas, there are 15 secondary schools, 128 teachers and 15 principals and 925 form four students. Due to the small number of secondary schools all their principals were involved in the study. Simple random sampling was used to select ten students from each school making a total 150 who represented 10 percent of the total 925 students' population. A sample of 45 teachers was selected which represent 30 percent of the population. Questionnaires are the major tools of collecting data. Collected data was analyzed both qualitatively and quantitatively using descriptive statistics.

CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Globally, measures to improve education have been put in place to promote standards and quality in educational outcomes (Kenny, 2001). According to World Bank (2005), many countries over the world have embraced the notion of basic education to include secondary schooling that is significant of individual's future life. Transitional toolkits like the National Alliance for Secondary Education and Transition (NASET, 2005), articulate guide on secondary education for constructive change on transition practices and polices worldwide. Secondary education is a bridge between primary and university that caters for students of the age bracket of 15 – 18 years. It plays an important role in creating the country's human resource based at higher level than primary education.

Secondary education examination marks the termination of the four years of secondary education which is used for selection into universities and training in tertiary colleges (MOE, 2003). Secondary education is regarded to as the route to economic prosperity, the key to scientific and technological advancement, the means to combat unemployment and foundation for social equality. Transition from secondary education into University education is of great importance since higher education institutes plays a crucial role of building capacities for generation, adaptation, processing, dissemination and utilization of knowledge and innovation into social and economic development (G.O.K, 2006).

According to Makarevitch report (2007), transition from secondary to university in

modern Britain occurs mainly on meritocratic basis. However, the analysis suggests that a school type influences the educational selection process. More precisely students at selective schools are able to secure school leaving examination results than their equally talented and working counterparts at non-selective schools. This in turn increases their chances of being admitted in higher ranks universities as compared to non-selective school leavers. According to Abbas and Cleslik (2004), United Kingdom (UK) transition of young people from disadvantaged background face a range of barriers to their participation in higher education, which was reflected in high drop-out rates for those students. Harrison (2005),

According to World Bank 2001 in California, learning and teaching material were critical ingredient in learning and the intended curriculum could not be easily implemented without them. It was universally acknowledged that textbooks and instrumental materials were fundamental and essential because they were primary tools that school used to provide students with knowledge and skills were expected to learn (USAID 2002). Hence they contributed to students' academic achievement which determines the transition rate of student from secondary school to university. According to Psacharapoulos and Woodhall (2006), transition rates from secondary schools to university in Malawi is low, this is because they have open door admission policy accompanied by low fees and the high teacher student ratio. High university fee caused students to drop-out after secondary education since they could not afford the university education thus lowered transition rates. Performance in the open door admission secondary education has also a negative impact on transition rate in Malawi since students lack adequate time on task with their

teachers.

Transitional rates from secondary to public universities in Mali, Brazil and Malaysia is low due to high school fees which has caused private demand for education. Secondary education in Mauritius was free since 1977, however, parents have been paying substantial sums for private tuition fees because of the low quality of education in some schools and fierce competition for places in the best secondary schools. Although, the best secondary schools are costly, they produce better results in final examinations, thus most of their students have higher chances to transit to university education (OECD, 2003).

The high cost of secondary education and the introduction of cost sharing by Kamunge in Kenya 1988 increased household burden of financing secondary education and it is inhibitive mainly to poor families. Njeru and Orodho (2003), stated that more than half of Kenya's population is living below the poverty line, which in turn led to high school drop-out of students mainly in secondary school level to earn a living. This has led to low transition of students from secondary school to universities.

Student dropout phenomenon is prevalent in schools with ill-developed infrastructure and for the largest proportion of schools; it was the highest in form two classes where most students experienced multiple problems associated with adolescence and peer influence (Eisenmon, 1997). Upon completion of secondary school, students can choose to go to college or pursue other vocational fields. Students who do well in secondary school are admitted to college, and others join

teacher training institutions, technical training schools, or the job market. The competition for admission to colleges and Training Institutes is normally very high. The secondary school education programme is geared towards meeting the needs of both the students who terminate their education after secondary school and those who proceed to higher education (Republic of Kenya, 2003).

According to Malekela (1977), Kenyan education system was an examination results oriented, thus limiting students chances of transition to universities and learners are made to understand that success only comes when one was able to competitively pass well in national exams. This has been evidenced from the present education system (8-4-4) which was designed that the transition determinants are the national examinations done at the end of each phase. According to Eshiwani (1993), in most Kenyan schools, students are drilled to pass examinations as that was the only criteria for selection into jobs, courses for further studies or vocational training and those who failed to post impressive results were condemned as failures. These trends have for along time hindered students with good capacity from transiting to university education just because they failed in the national examinations. It also costs parents a fortune to ensure that their children pass national examination under all means in order to acquire university education.

To increase transition rates from secondary level to university level and to ensure completion of students' education in secondary and university, the ministry of education introduced secondary education bursary fee in (1994-1995) financial year, High Education Loans Board (HELB) in July 1995 and free day secondary

school in 2008. Though, this strategy still lag behind in the transition rates, since its only 8% of 70% of those who transit from primary to secondary transit to university.

According to MOE (2001), Day secondary schools were cheaper to develop and maintain than boarding schools. Therefore, the communities and parents were encouraged to develop day secondary schools and provide them with adequate facilities and equipment's to enable them to maintain high standards of teaching and learning. According to Secondary Education Strategic 2007 -2010 report noted that day secondary schools are cheaper to develop than boarding secondary schools by 40%. Though, provision of Day secondary education has been faced by so many inefficiencies lowering students' performance. Boarding schools are assumed to select pupils who have attained better grades in their K.C.P.E examination results. These bright students score the best grades in final examinations thus securing the limited slots available in public universities.

1.2 Statement of the Problem.

In Mutomo Sub-County, it has been observed that day secondary schools recorded dismal performance in their main examination over the years as compared to their boarding schools counterparts; the average number of students who transited to universities from 2011 to 2013 in secondary schools in Mutomo Sub-County is low. From these records it was evident that the day secondary schools are more than the boarding schools though they have few transition rates to universities. It showed that despite day secondary schools having very low enrolments majority of their

students did not transit to universities since only a handful score grade C+ and above, whilst in most cases no student attain this range. Therefore, the need for the study.

Table 1.1 KCSE grade achievements 2011 – 2013 Mutomo sub county

		2011		2012		2013	
Schools	School type	Mean	Grade	Mean	Grade	Mean	Grade
		score		score		score	
Mutomo girls	Boarding	6.61	C+	6.390	C+	7.129	B-
Voo Sec	Boarding	5.05	C-	5.487	С	5.444	С
Ikanga Boys	Boarding	4.981	C-	5.168	С	4.972	C-
Mutomo Mixed	Boarding	4.586	C-	5.539	С	4.768	C-
Kyatune Girls	Boarding	3.569	D+	3.931	D+	4.043	C-
Mathima Sec	Boarding	3.600		3.636	D+	3.938	D+
Ikanga Girls	Boarding	4.7147	C-	3.897	D+	3.884	D+
Kisayani sec	Boarding	3.0	D	3.455	D	2.604	D-
Kawelu Sec	Day	3.463	D+	3.608	D+	3.897	D+
Kitoo Sec	Day	2.677	D-	3.5	D	3.857	D+
Kyatune Boys	Day	5.265	С	4.595	C-	5.390	С
St.Partrick Mixed	Day	4.270	D+	4.295	D+	3.856	D+
Mutha Sec	Day	4.300	D+	3.300	D	3.818	D+
Enzou Sec	Day	4.147	D	3.897	D	3.706	D+
Kyaango sec	Day	-	-	-	-	3.385	D
St.Peter	Day	3.629	D+	3.68	D	3.680	D
Nduundune							

Source: DEO'S Office Mutomo Sub-County

1.3 Purpose of the study

The purpose of this study was to find out factors influencing low transition rates from day secondary schools as compared to boarding secondary schools in Mutomo Sub-county, Kenya.

1.4 Objectives of the study

- To determine the extent to which provision of teaching/learning resources influence the transition rate to universities of students in day and boarding secondary schools in Mutomo Sub-county.
- ii. To examine the extent to which school's internal efficiency influence the transition rate to universities in day and boarding secondary schools in Mutomo Sub-county.
- iii. To determine the extent to which family socio economic status influences the transition rate to universities in day and boarding secondary schools.

1.5 Research questions

- i. To what extent does the provision of teaching/learning resources influence the transition rate to universities of students in day and boarding secondary schools in Mutomo Sub-county?
- ii. How does school internal efficiency influence the transition rate to universities in day and boarding secondary schools in Mutomo Subcounty?
- iii. To what extent does family socio-economic status influence the

transition rate to universities in day and boarding secondary schools?

1.6 Significance of the study

The information from the study finding will be used to guide the ministry of education into ways of improving day secondary schools in order to improve performance and increase transitional rates to university. This may change the negative attitude of both parents and students towards day secondary schools. The findings of this study will form reference resources for future studies on factors influencing transition rates in schools and it will also form bases for further research.

1.7 Limitation of the study.

Limitations are conditions beyond the control of the researcher that may place restrictions on the conclusions of the study and their application to other situations. The study was not able to control the attitudes of the respondents hence affecting the validity. Some of the respondents may be reluctant in participating in the study due to ignorance. The study was constrained by the vastness of the district and the harsh weather conditions with transport challenges. To mitigate the challenges the researcher assured all the respondents that identity and information to be provided was to be treated with confidentiality. To overcome transport challenges the researcher hired a motor bike.

1.8 Delimitations of the study.

According to Mugenda and Mugenda (2003), delimitations are the boundaries of the study. Study only focused on the factors influencing transition rates to public universities from day and boarding secondary schools in Mutomo District. It also delimited itself to principals, teachers and students.

1.9 Basic assumption of the study

It assumed that:

- (i) All respondents had relevant information on the causes of disparities in the performance in boarding and day secondary school.
- (ii) That all the respondents gave genuine, truthful and honest responses to questionnaires.

1. 10 Definition of significant terms

Administration refers to the process of acquiring and allocating resources for the achievement of the organizational goals.

Boarding school refers to an institution where some or all people study and live during the school year with their fellow students and possibly teachers and/or administrators in secondary schools.

Day school refers to a school where learners go home after classes in secondary schools.

Dropout rate refers to those students who leave education system before completing the cycle

Efficiency The comparison of what is actually produced or performed with what can be achieved with the same consumption of resources (money, time, labor, etc.). It is an important factor in determination of productivity.

Enrollment refers to the number of students who registered as members of different grades at the beginning of each year.

Institution refers to any structure or mechanism of social order and cooperation governing the behavior of a set of individuals such as public secondary schools.

Internal Efficiency compares the costs of education to the outputs or effects within education, such as the acquisition of cognitive and non-cognitive skills. Education production is said to be more internally efficient when it can produce more desired outputs given the same resources.

Performance refers to the academic achievement of individual students through examination every end of education cycle.

Physical Facilities: Physical facilities for education include all material resources that are needed to impart formal education. It may include land, building, furniture, lab and library.

Resources A 'resource' is a source or supply from which benefit is produced. Typically resources are materials, energy, services, staff, knowledge, or other assets that are transformed to produce benefit and in the process may be consumed or made unavailable.

Transition refers to the point in education system that describes the flow of students between different stages from one level to the next.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter the researcher presents review of literature related to the study. The section covers the secondary education, teaching/learning resources, schools' internal efficiency, and students' family socio-Economic Status. It also presents theoretical and conceptual framework of the study.

2.2 Secondary education

According to secondary education strategy (2007-2010), secondary education provides a bridge between primary education and university. It prepares students to enter the labour market directly and therefore requires more specialized staff and more variety curricula and also broadens students' knowledge and experience from their basic level, thus preparing them for higher education. Secondary education caters for students in the age of 15 to 18 years. Secondary play important role of creating the country's human resource based at higher levels than primary Education.

According to GOK, (2006) the transition of students from secondary to university level is of great importance since higher education institutions play a crucial role in building capacities for generation, adaptation, processing, dissemination and utilization of knowledge and innovation for social and economic development. The capacity of the people to acquire knowledge and skills, competencies and appropriate attitudes to enable them to participate competitively and creatively at the national, regional and global level. It determines the character and rates at

which social and economic growth rates takes place. Thus secondary education is regarded to as the route to economic prosperity, the key to scientific and technological advancement, the means to combat unemployment and foundation for social equity (World Bank 2005).

According to Vision (2030), in Kenya improvement of access to secondary education as a strong vehicle towards reducing illiteracy and sets out to build and fully equip new schools as one of the flagship projects 2012. This is to cater for the mismatch of high number of students graduating from primary to secondary after the introduction of Free primary Education in 2003.

Secondary Education Strategies, (2010) states that the demand for secondary education has increased globally, due to the increasing private returns, that are associated with higher levels of education. This has made many parents to continuously make sacrifices to enable their children acquire secondary education. According to Global Education Digest (2005), secondary education has been divided into two categories; lower and upper secondary school. Countries consider lower secondary as part of compulsory education. In across national comparisons, lower and upper levels of secondary education are usually treated as a single category. However, in some countries lower secondary was the second stage of basic education and was provided in the same institution and often taught by the same teachers in other countries lower secondary education is clearly distinct from primary education.

World Bank (2005), asserted that there was social, political and economic benefits

associated with secondary education thus governments in Sub-Saharan Africa (SSA) are looking for ways that enable the poor to gain access to secondary education. For these and other reason, free day secondary education and state subside of tuition fee in boarding secondary schools are seen as potential strategies to expanding access to education for the poor.

Kenya declared free day secondary education in 2008 by allocating Kshs 10,265 per student. This incentive has drastically increased retention, equality and quality on the provision of secondary education thus, improving the transition rate to university. 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 fees paid by students in public schools were regulated by the Government and is used to buy teaching and learning resources. It was also used to buy boarding facilities and pay workers who assisted in the provision of services to the students. Free day secondary education and subsided boarding school tuition fee promoted joint responsibilities between parents, the government and sponsors of schools. Its implication was central to the national goal of poverty reduction, therefore calling for the spirit of partnership between the government, parents and stake holders. As the state meet the cost of items designated under that program, parents or guardians were still required to meet the cost of the following: Examination fee for form four examination (K.C.S.E),School meals for day scholars, School uniforms, Boarding fee for boarding schools, Transport to and from school, and Infrastructural

development including building and construction (Ministry of Education, 2008).

2.3 Teaching, learning resources and transition rate.

The management of material resources entails planning, acquisition, allocation, distribution and controlling the use and maintenance of the materials. Onyango (2001) states that planning for material resources involved the identification of the resource requirements, assessing quality in terms of the needs, establishing criteria for standards, determining the cost per unit and the use of the materials whether by individuals or groups. The availability and use of teaching and learning materials affects the effectiveness of teachers' lessons. Avalos (1991) suggested that the quality of education the learner received bears direct relevance to the availability or lack of instruction materials. All individuals have a right to a quality educational facility, a physical space that supports a multiple and diverse teaching and learning programs and pedagogies.

According to Ngugi (2006), learning resources can improve transitional rates from secondary to University because they are tools that enhance literacy, mathematics and science. Availability and the use of learning resources by teachers and students was evidenced by better learning. Without teaching and learning resources the learning process becomes rigid, rely heavily on rote learning which places learners on a passive role. Learning resources avail structural teachings which are a combination of directly instruction, guided practice and independence learning which create a child-friendly school environment.

USAID (2002), announced the reconstruction of Afghanistan by providing 1.7

million, Science, Maths and reading materials for Afghanistan students in grade 1 to twelve. The first lady Laura Bush noted that nothing more important for Afghanistan future than giving its children's the tools and skills they need to learn and succeed. (OECD) stipulates textbooks as an important international indicator for educational quality, therefore to achieve the goal of Universal declaration on education for all basic learning materials should be made available for teachers and students (UNESCO 2006).

According to the Global Monitoring Report on Education for All; students' access to teaching and learning was an important factor in what and how much they learned (UNESCO, 2008). Mwamwenda & Mwamwenda (1987), carried out a study that established that the availability of learning resources had an effect on quality education in Botswana. The study revealed that teaching/learning resources had a direct link to the education quality measured in terms of students' performance that determines transition rates from one level of education to the other. Education supplies should respond to the country's culture and local practices in education while encouraging the participation and active learning of students.

Obonyo (1987) notes that instructional materials such as textbooks, visual and audio materials not only enhanced communication between the teacher and the learner but also facilitated child centered learning and learning through discovery. They motivated and encouraged participation by learner in the learning process and helped to clarify concepts and add meaning to texts. However, schools that parents

pay school fees for the provision of learning resources are likely to register better performance leading to high transition of learners through educational levels.

According to Secondary Education Strategy Report 2007-2010, performance level of a school was mostly determined by the availability of teaching and learning resources. Low transition of students from secondary to university can be attributed to inequity in the distribution of learning resources. For instance national secondary schools are fully maintained by the government, provincial schools are partially government maintained and partly parents while district secondary schools are started through community initiatives or 'Harambee' spirit these has then seen difference in the transition from the three categories of schools.

2.4 School internal efficiency and transition rates

Internal efficiency of an education system was defined as the ability of education system to turn out its graduates at any level in the most efficient way without wastage, stagnation or repetition Psacharapoulous, (1980). Internal efficiency can be measured by class size and student ratio which provide a picture on learning and teaching environment in terms of overcrowding, student teacher contact and availability of teaching and learning resource. Pradhan (1981), states that efficiency is regarded as both the end and the process. The term efficiency was also regarded to as the reduction of expenditure with the same or higher production.

According to Omari & Mosha (1987) efficiency in education have generally been based on the cost at which the output is optimized. Lowe et al (1971) asserted that

the most efficient systems are the once that achieve a given output at the lowest cost or gets the greatest output from given input. However, having a progressive orientation raises the question about efficiency that, determining efficiency only on the basis of inputs and outputs might not provide an ideal or optimum concept. Determining efficiency only on the basis of output would be like ignoring the social benefits of education. Thus, it would be like supporting the capitalist ideology of an educational system, which is purported to enhance the class system in society by sorting out the deviants from the group. This internal efficiency of a school has a high effect on the future of its outcomes, thus school types vary in their input explaining their marginal difference in outcomes.

Efficiency in education is associated with learners' cognitive achievement, which is usually measured through examinations results. In this connection, it is based on a closed system model of analysis which deals with matching inputs (for example, availability of textbooks) and outputs (number of students completing, examinations scores) in education. However, since "efficiency" implies maximising inputs in an endeavour to produce optimum goods or services, the processes for which the available inputs are allocated and used are crucial. In a service sector like education, the processes themselves form part of the inputs (Owino, 1997).

According to MOE (2005), enrolment rates reflected in access to secondary education of previous standard 8 graduates. For instance, in 2000 the rate was 40% while an increase was realized by the year 2005 where 50% of class eight graduates enrolled in Form one. In order to increase transition rate from secondary to university, students' dropout rates at the form one entry point or during secondary

education needs to be comprehensively addressed. Efficiency and effectiveness in education have became part and parcel of the debate on reform in education and development.

Internal efficiency of education has been camouflaged by the desire to promote access to education by increasing education opportunities to school-age population. Many countries in Africa, had focused attention on increasing resources to the education sector in a bid to achieve universal primary education (UPE) by 2000, a goal which seems to be unattainable. Countries like Kenya are now faced with the problem of a trade-off between enhancing the efficiency of the education sector and increasing primary, secondary and tertiary education. Education/school efficiency entails is limited.

Internal efficiency indicators especially dropout rates in secondary schools is an emerging issue in Kenya and in most countries of the world today. This is because a large amount of resources in terms of time, money and other supportive materials are often committed to the provision of secondary school education. According to the Economic Survey (2007) the poverty level in Kenya has impacted negatively on the efficiency of the secondary education system.

Upon completion of secondary school, students can choose to go to college or pursue other vocational fields. Students who do well in secondary school are admitted to college, and others join teacher training institutions, technical training schools, or the job market. The competition for admission to colleges and Training Institutes is normally very high. The secondary school education programme is geared towards meeting the needs of both the students who terminate their

education after secondary school and those who proceed to higher education (Republic of Kenya, 2003).

On student dropout, a study by Eisenmon (1997) reported that this phenomenon was prevalent in schools with ill-developed infrastructure and for the largest proportion of schools; it was the highest in form two classes where most students experienced multiple problems associated with adolescence and peer influence. According to Republic of Kenya, (2003), despite the high demand for formal education in Kenya, the transition rate from primary to secondary cycle is low. A survey which was conducted by the Ministry of Education, Science and Technology (2003) revealed a trend which indicated that less than 60% of the pupils leaving primary schools have access to secondary education and the trend in recent years shows a decline to less than 50% (MOEST, 2006). In 1999, Kenya achieved a Gross Enrolment Rate of 88.6% in primary education and 76.5% in secondary education. However, over the years this rate declined to 84.1% and 72.5% in 2003 for primary and secondary education respectively (MOEST/UNICEF, 2003). Latest reports indicate that this rate has dropped for secondary education to about 68.9% (MOEST/UNICEF, 2006). From this percentage on GER in secondary education, Day schools accounted for 42% while Boarding schools contributed the rest.

2.5 Student's family socio-economic status and transition rates

Family socio-economic status affects children's education. School variables account for only a modest proportion of variance in academic achievement. Neither physical facilities nor characteristics of teachers match the strength of student's

socioeconomic status and other indices of the student's out-of-school environment (Coleman & Jencks, 2002). Heyneman (1979), states that children from poor and humble backgrounds in Uganda do not have equal chances of being selected to secondary school due to the fact that the elites have not yet developed a distinct culture for children from all backgrounds to be equally motivated to take the primary seven examinations. Other scholars, such as Cooksey (1981) and Kotele (2001)) has stated that it was evident that children from higher Socio-Economic Status had more chances of being selected than those from lower ones. Luecking & Crane (2002), found a similar situation in Ghana where children from higher Socio-Economic Status seemed to have cemented their advantage over others from lower Socio-Economic Status.

Governments in Sub-Saharan African countries are concerned that if the secondary education continues to charge fees, the majority of those who complete Free Primary Education will be unable to continue to secondary education. In many cases these are children from poor households whose parents are unable to afford the cost of secondary education, making the children dwell in the vicious cycle of poverty (UNESCO, 2003).

GOK (2006), states that in Kenya, it has been observed that access to higher education benefits the rich more than the poor. This is manifested through the way in which the increasing competition for transit to university and tertiary education is mediated. It has been observed that the ability to pay for high quality education in nursery and primary academics is giving students from these schools competitive

edge for entry into high quality secondary schools. Further they are in better positions to perform in their final secondary examinations leading them to secure slots in universities. These trends excludes students from low income families who will not afford the emerging of the self-sponsored programs for university education, which caters for the students who can afford to pay the prevailing market fees charged by the universities. Due to inadequate opportunities for government sponsorship in universities, many Kenyans are forced to shoulder their responsibility of financing the higher education of their children, a burden that is proving to be too heavy for most households. Therefore students from poor families are left out in the acquisition of better professions like engineering and medicine that are dominated by the students from able families who can afford to pay for quality education as early from preschool.

2.6 Summary of the literature review

According to secondary education strategy (2007-2010), Secondary education broadens students' knowledge and experience from their basic level and therefore prepares them for higher education.

G.O.K (2006) asserts that the transition of the students from secondary to university level is of great importance since higher education institutions play a crucial role of the building capacities for generations, adoption, processing, dissemination and utilization of knowledge and skills.

According to Ngugi (2006), learning resources can improved transition rates from secondary to university because they are tools that enhance literacy, mathematics

and science without teaching and learning resources the learning process becomes rigid as learners heavily relied on rote learning which places learner on a passive role.

Fuller and Heyneman (1989), asserts that the provision of textbooks and other instructional materials have positive impact on statement achievement which promotes the transition rate from secondary to university.

According to secondary education strategy report (2007- 2010), performance level of a school is mostly determined by the availability of teaching and learning resources hence low transition of students from secondary to university can be attributed to inequity in the distribution of learning resources.

In this case, national secondary schools are fully maintained by the government, provincial schools are partly government maintained and partly parents while district secondary schools are started by the community initiatives and these has been seen differences in the transition from the three categories of schools from secondary to university level. However, the school one attends is mainly determined by the social- economic status of students.

According to G.O.K (2006), access to higher education benefits the rich more than the poor because they have ability to pay for higher quality as early as from nursery and primary schools giving those learners competitive edge for entry into rough quality schools which are avenues of accessing public universities. These trends exclude students from low income families who cannot afford to pay and academy

primary schools hence they are left out in acquisition of better professions like engineering and medicine that are dominated by the students from able families.

2.7 Theoretical framework

The study was based on systems theory propounded by Scott (1987) who adopted a system perspective in analyzing organizations. The features of the theory are based on inter-relationship between internal components, structure of management, inputs and outputs. The theory is relevant to this study because schools, like other organizations may in this way be viewed as goal directed systems through interaction of people and resources available within a given context.

Schools are also structured as open system and are continuously in contact with their environments and the boundaries of the school systems are neither rigid. Schools operate within a wider society that impinges on their freedom to behave as they would like (through laws, and undertake exchanges of information and resources) with the outside world.

The researcher chose the theory because it is holistic in that all aspects of organization's activities are considered. The effects of changes in one element of a system can be traced through to changes in others. Again environment influences are explicitly recognized. The theory despite its advantages, have a major problem in that it suggests few tangible proposition about how exactly university entry should be conducted.

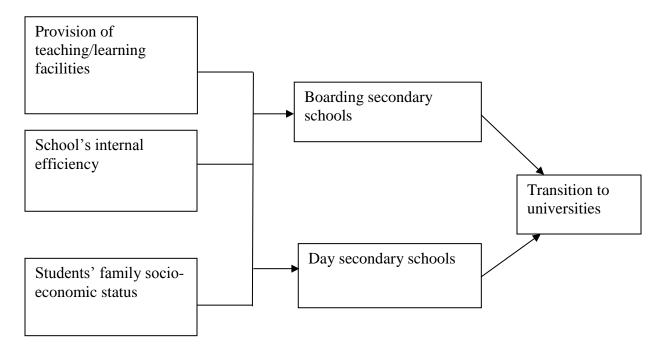
Since organization systems consist of and are run by people, interpersonal relations

might be more important than particular input. Different members of the same system may have entirely different interpretation of its structure and aims. An understanding of interrelationships between input/output and structure may help provide a context for improving school effectiveness and schools as organizations.

Structure refers to how the responsibilities towards achievement of goals are distributed within the organization. Input refers to human resources, physical resources equipment, raw materials, land and building and other monetary assets. Output refers to improved services, good enhanced efficiency of the system all three elements affect and are affected by each other, thus, success or failure determine the direction of the transition as the outcome of the whole system.

2.8 Conceptual framework.

Figure 2.1 Conceptual framework on factors influencing transition rate to public universities from day and boarding secondary education



The above factors in conceptual model on secondary school indicated that an institution operate in a systematic way. In the system, there is input, processing unit and output. Input in schools included provision of instructional materials like textbooks, laboratories apparatus and physical facilities. Student enrollment in an institution was the main input of a system thus, the higher the enrolment, the higher the transition rate. The process involved the activities undertaken in the system to obtain good output. The positive output will arise from provision of adequate instructional materials, and physical facilities, increased enrollment of student and good financial management by the principal. The negative output will arise from inadequacy of both instructional and physical resources. These processes finally affect the overall outcome where students either join or fail to join universities after their secondary education.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research design adopted for the study. It provided information regarding the target population, sample and sampling procedure, instrument validity, instrument reliability, and data collection procedure and data analysis techniques.

3.2 Research design

According to Best & Khan (2006), a research design is all the issues involved in planning and executing a research project, from identifying the problem through to reporting and publishing results. A descriptive survey research design was adopted for the study. According to Koul (1984), descriptive studies are concerned with gathering facts rather than manipulating variables. Thus the study focused on gathering information on factors influencing transition rate to public universities from boarding and day secondary schools.

3.3 Target population

The study involved all principals, teachers and students in boarding and day schools secondary schools. In Mutomo District there are 15 secondary schools, 128 teachers and 15 principals and 925 form four students (DEO's office Mutomo District, 2014). The total population was 1,068.

3.4 Sample size and sampling procedure.

Mugenda M & Mugenda G (2003), suggested that for descriptive studies, 10 to 30 percent or above of the accessible population is enough for the study. However,

where time and resource allowed, the researchers took a bigger sample. In the study there was 15 secondary schools, due to the small number all their principals were involved in the study, 128 teachers 15 principals and 925 form four students. The students were selected from form four because they had stayed in school the longest time and a simple random sampling was used to select students. Ten students from each school participated making a total 150 who represented 10 percent of the total 925 students' population. A sample of 45 teachers was selected which represent 30 percent of the population. All the 15 principals were involved in carrying out the study. Therefore the sample size was 210.

3.5 Research instruments

This study adopted questionnaires for the collection of data from the respondents.

3.5.1 Questionnaires

Questionnaires are the major tools of collecting data from the principals (Appendix II), teachers (Appendix III) and students (Appendix IV). Questionnaires were used because all those who took part in the study are literate and capable of answering the items. The questionnaires was used because of their ease and cost effectiveness in construction and administration (Mugenda & Mugenda, 2003). The questionnaires were self-administered. They consisted of both closed and open questions. Section A was having background information while Section B had information on factors influencing transition rates to public universities in both boarding and day secondary schools.

3.6 Validity of instrument.

Validity can be referred to as accuracy and meaningfulness of inferences which are

based on research results. The instruments are said to be valid when they measure what is purported to measure. The researcher conducted a pilot study which involved two principals, six teachers and 10 students that was five percent of target population. According to Mugenda & Mugenda (2003), a pilot study assisted the researcher to identify items in the instrument which were ambiguous and difficult. Amendments were then made on the instrument to improve quality and validity. The researcher sought advice and guidelines from the supervisor concerning the instruments and how to be ascertained to be valid and the researcher administered them in the actual research.

3.7 Reliability of instrument

Reliability can be referred to as the degree to which a research instrument can be depended upon to yield consistent results after repeated trial. It enhances accuracy, clarity and adequacy of instrument. To test reliability the researcher used test-retest method (Cohen & Manion, 2004). This involved administering the sample instrument twice to the principals, teachers and students in a lapse of one week, and the results were correlated, the higher the correlation co-efficient the higher the test-retest reliability. A correlation of -0.1 to + 0.1 was determined to be satisfactory.

3.8 Data collection procedures.

A research permit was obtained from the National Council for Science Technology and Innovation (NACOSTI). The researcher then obtained authorization from the District Education Office in Mutomo District to conduct research. Permission to conduct research in the school was sought from principals of schools. The researcher then administered the questionnaires to the respondents concerned and then organized with them when the questionnaires were to be collected back. The researcher, on the agreed date, collected the questionnaires directly from the respondents.

3.9 Data analysis techniques.

Analysis of data started with editing to identify errors made by the respondents such as spelling and any un-responded to items. Quantitative data derived from the demographic section and the closed questions was analyzed using descriptive statistics using percentages and frequencies to enable meaningful description of the distribution. Qualitative data generated from the open ended questions in the research an instrument was organized into themes and patterns categorized through content analysis.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND

DISCUSSIONS

4.1 Introduction

This chapter represents data findings of the study in demographics, key areas and

objectives. Each specific objective is analyzed in relation to main objective of the

study and conclusion made thereof. The presentation is done in simple descriptive

tables with frequencies and percentages.

4.2 Questionnaire return rate

The questionnaire return rate was 15, (100%), for the principals, forty five teachers

did return their questionnaires which represents 100% and for the students, 113

(75%) respondent to questionnaire. This was so since the questionnaires were

administered by the researcher with assistance from a research assistant, therefore,

realizing a satisfactory return rate.

4.3 Demographic data

4.3.1 Gender of the respondent

The study sought the gender distribution of principals, teacher and pupil in day and

boarding schools in Mutomo sub-county. The results of the findings are shown in

table 4.1.

30

Table 4.1 Gender of the respondent

School	Gender	Princip	oal	Teach	er	Student	t
type							
		Freq	Percent	Freq	Percent	Freq	Percent
Day	Male	6	40.0	6	13.3	20	17.7
	Female	2	13.3	17	37.8	21	18.6
Boarding	Male	4	26.7	9	20.0	21	18.6
	Female	3	20.0	13	28.9	51	45.1
	Total	15	100.0	45	100.0	113	100.0

From the results in the table 4.1, 66.7 percent of the principals are males, while 33.3 percent were females. The gender parity among principals does not differ too much in boarding schools like in day schools. Moreover female teachers are more than male teacher, though the gap between male and female teachers in day schools was wide than in boarding schools. The pupils' population also revealed that there were more girls than boys in both day and boarding schools though girls were more in boarding schools, 45.1 percent. This was due to the existence of three pure girls boarding schools in the area.

4.3.2 Highest professional qualification of the respondent

The study sought the age distribution of principal, teacher and pupil. The results of the findings are shown in table 4.2 below.

Table 4.2 Highest professional qualification of the respondent

	Principal					Teacher				
Qualification	I	Day	Boa	rding	D	ay	Boar	ding		
	F	%	F	%	F	%	F	%		
P1	0	0.0	0	0.0	13	28.9	14	31.1		
B.ED	5	33.3	6	40.0	6	13.3	6	13.3		
Diploma	3	20.0	1	6.7	4	8.9	2	4.5		
(PGDE)										
Total	8	53.3	7	46.7	23	51.1	22	48.9		

Table 4.2, 80 percent of the principals have Bachelors of education while a few 20 percent principals. This is an indication of qualified school managers with strong educational background. However, 60 percent teachers had only P1 qualifications.

4.3.3 School category

The study sought the age distribution of principal, teacher and pupil. The results of the findings are shown in table 4.3 below

Table 4.3 Cross tabulation of the respondent with school category

	Princip	oal	Teache	er	Student	t
	Freq	Percent	Freq	Percent	Freq	Percent
Day	8	53.3	23	51.1	41	36.3
Boarding	7	46.7	22	48.9	72	63.7
Total	15	100.0	45	100.0	113	100.0

The information in the table above, 8 (53.3%) principals were from day schools, 7 (46.7%) were from boarding schools. Majority of students were sampled from boarding schools 72 (63.7%) and from day schools 41 (36.3%). This was an indication that the boarding schools had more population than in day schools, since boarding schools enroll more students than their day school counterparts.

4.3.4 Experience of the principal

The study sought the experience of principal generally and the length of stay in the current school. The results of the findings are shown in table 4.4 below.

Table 4.4 Experience of the day school principals

	Overall experience		Duration	in current school
	Freq	Percent	Freq	Percent
3 years and below	1	6.7	3	20.0
4 to 7 years	7	46.7	5	33.3
8 to 10 years	0	0.0	0	0.0
Total	8	53.3	8	53.3

From the results in the table above, most principals in day schools, 46.7 percent have been in the post of principal for 4 to 7 years. Out of the 7 day school principals who have served as principals for 4 to 7 years 5 (33.3%) have been in their current station. This shows that they are in a position to give reliable information regarding their school. Further the boarding school principals' experience was presented in table 4.5 below.

Table 4.5 Experience of the boarding school principals

No. of years	Overall experience		Duration in curren		
			sc		
	Freq	Percent	Freq	Percent	
3 years and below	1	6.7	1	6.7	
4 to 7 years	4	26.7	6	40.0	
8 to 10 years	2	13.3	0	0.0	
Total	7	46.7	7	46.7	

Table 4.5 above shows that, most principals in boarding schools, 26.7 percent, have been principals for the 4 to 7 years. Moreover, 2 (13.3%) of principals in boarding schools have been principals for more than 8 years. On the duration they have been in the current station shows that 6 (40%) of them have been in the same station for 4 to 7 years. This was an indication that they were also in a position to give right information in regards to their work station.

The study sought to find out whether three specific variables were the causes of low transition of secondary school graduates in day and boarding schools in Mutomo Sub-County. These variables included provision of teaching and learning resources, schools' internal efficiency and students' family socio-economic status.

4.4 Provision of teaching/learning resources

To examine whether provision of teaching and learning resources, Objective I, the researcher sought to find out whether physical facilities and instructional materials in day and boarding secondary school influence students' transition into public

universities.

4.4.1 Physical facilities

The study sought to investigate whether the state of the physical facilities and institutional materials in the schools from the principals who normally have the whole information about such matters in the schools. They were provided for with statements and their responses on the extent their schools are faced with challenges concerning their two teaching and learning resources ranging from 1 = Very Serious Challenge (VSC) to 5 = Not Serious Challenge (NSC). The results of the findings are shown in table 4.6 and 4.7 respectively below.

Table 4.6 Physical Facilities

Physical Facilities			Day				Во	arding		
	VSC	SC	MSC	LSC	NSC	VSC	SC	MSC	LSC	NSC
Income generating	0	1	5	1	1	0	0	1	2	5
activities in the school.										
Procurement procedures in	0	2	3	2	1	0	1	2	2	2
the school.										
Competency in making	0	0	0	4	4	0	0	0	6	2
school budget.										
Proper bookkeeping in the	0	0	2	1	5	0	0	2	1	5
institution.										
Payment of fees by	0	3	4	1	0	0	0	4	3	0
students.										
Total count	0	6	14	9	11	0	1	9	14	14

From the results in the table above, income generating activities in day schools had a moderate challenge and slightly least serious challenge. Same case was happening to the procurement procedures in the same schools. Competency in making school budget, proper book keeping and school fees collection were mentioned by many principals to be a serious challenge or even having least serious challenge. In the contrary many principals in boarding schools indicated that they either did not have serious challenges or had least serious challenges in all the factors under consideration, though payment of school fees in many of this types of schools was a moderately serious challenge. This was an indication that physical facilities in boarding schools were better than in the day schools, implying that even though the government fund day secondary schools still much needs to be done to improve on them.

Table 4.7 Instructional materials

Teaching/learning materials	_		Day					Boardi	ng	
	VSC	SC	MSC	LSC	NSC	VSC	SC	MSC	LSC	NSC
Sufficient class text books.	5	2	1	0	0	4	1	1	1	1
Adequate audio aids	3	2	2	1	0	3	2	1	1	0
Sufficient students'	6	2	0	0	0	5	1	1	0	0
reference books.										
Adequate teachers'	7	1	0	0	0	1	2	2	1	1
reference books.										
Adequacy of computers.	8	0	0	0	0	6	1	0	0	0
Availability of charts and	2	2	4	0	0	3	1	1	2	0
maps.										
Availability of laboratory	3	4	1	0	0	0	1	2	2	2
chemicals.										
Suitability of laboratory	2	5	1	0	0	0	2	3	2	0
apparatus.										
Total count	36	18	9	1	0	23	11	11	9	4

Adequacy of teaching and learning materials overall in both types of schools had very serious challenge and serious challenge. Computers posed the most serious challenge followed by reference books for teacher as well as for students. Though boarding schools scored a higher count on not a serious challenge overall than day schools that didn't report any count in this scale on the adequacy of teaching and

learning materials. Therefore the findings were an indication that day schools are more faced by serious challenges in the provision of teaching and learning materials than boarding secondary schools in Mutomo Sub-County, implying that they are more susceptible to poor performance which eventually leads to low transition to secondary public universities.

4.4.2 Teachers evaluation on disbursement of funds and teaching/learning materials

The study sought to investigate the teachers' evaluation on funds disbursement of funds and state of teaching and learning materials. The results of the findings are shown in table 4.7 and 4.8 respectively below.

Table 4.8 Disbursement of funds

Disbursement of funds	VSC	SC	MSC	LSC	NSC
Adequacy of disbursed funds to school.	0	13	15	6	11
Students payment of school fees	5	17	9	12	2
Procurement procedures in the school.	0	13	14	6	12
Competency in making school budget.	4	16	10	14	1
Total count	9	59	48	38	26

Table 4.8 shows, many teachers in day schools indicated that adequacy of disbursed funds to schools, procurement procedure and competency in making school budgets in their schools were very serious challenges, while payment of school fees in this type of schools not a serious challenge since the day secondary schools are free.

However boarding schools are faced by very serious challenges in payment of school fees and adequacy of funds, though competency in making budgets and procurement procedures were faced with not serious challenges and moderately serious challenges respectively.

Table 4.9 Teaching/learning materials

Teaching/learning materials	VSC	SC	MSC	LSC	NSC
Sufficient class text books.	0	5	22	8	10
Sufficient learning references books	13	17	3	8	4
Preparation of timetable schedule.	0	5	19	9	12
Availability of Audio aids.	12	12	6	12	3
Adequate teachers reference books	0	5	29	11	0
Availability of laboratories chemicals	0	6	39	0	0
Suitability of laboratory apparatus.	0	21	24	0	0
Total count	25	71	142	48	29

From the results in the table above, sufficient learning references books were found to pose a very serious challenge with 13 teachers commenting so. Availability of audio aids was mentioned to be posing a very serious challenge with 12 mentions. Preparation of timetable schedule did not pose a serious challenge with 12 teachers citing such. Generally teaching/learning materials in both types of schools had moderately serious challenge.

4.5 Internal efficiency and transition rates

To establish whether school's internal efficiency influence the transition rates of day and boarding secondary schools, objective ii, the study sought to know whether the school type influence results of students in national examinations. The results of the findings are shown in table 4.10 below.

Table 4.10 Whether the school type influence results of students in national examinations

	Principal	s	Teachers	3
	Freq	Percent	Freq	Percent
Yes	15	100.0	40	88.9
No	0	100.0	5	11.1
Total	15	100.0	45	100.0

From the results in the table above, all principles said the type school did influence the performance of school in the K.C.S.E examination. This suggestion is in harmony with reality found by other studies since it obviously that school with sufficient resources are likely to have higher efficiency. Forty teachers said the type of school influences performance of the students. Only 5 (11.1%) said that the type of school does not influence the performance of students.

4.6 Family socio- economic status of students' parents

The study sought to know whether the parents of the students were able to pay for their school fees and whether students are send home for fees. The results of the findings are shown in table 4.10 and 4.11 below.

Table 4.10 Whether the parents are able to pay for their students' school fees efficiently

	Frequency	Percent
Yes	28	24.8
No	85	75.2
Total	113	100.0

Table 4.11 Whether the students are send home for school fees

	Frequency	Percent
Yes	98	86.7
No	15	13.3
Total	113	100.0

From the results in the table above, 85 (75.2%) of the students said that their parents are not able to pay their school fees efficiently. A very big proportion of students 98 (86.7%) said they are constantly send home for school fees. Movements in and out of school usually affect efficiency in learning process. When students are constantly moving out of school they are likely to miss classes and as a result their

performance is affected.

The study sought to know from the students about adequacy of materials in school. The results of the findings are shown in table 4.14 below.

Table 4.12 Adequacy of materials

	Adequate	Inadequate	None	No Response
Textbooks	40	63	8	2
Lockers	70	39	1	3
Classrooms	39	66	1	7
Laboratory	31	72	7	3
Library	12	31	66	4
Toilets	43	67	1	9

From the results in the table above, most materials were found to be inadequate. Sixty three students said text books were not enough; sixty six students said classrooms were not adequate; another 72 students and 67 students said laboratories and toilets respectively were inadequate. Only 70 students said desks were adequate and library was not categorized by 66 students

The study sought to know whether the schools had play grounds and whether they are enough. The results of the findings are shown in table 4.13 and 4.14 below.

Table 4.13 Whether the school has play ground

	Frequency	Percent
Yes	110	97.3
No	3	2.7
Total	113	100.0

According to majority of the students (97.3%) their schools have compounds. This was an indication that playgrounds were available in majority of the schools. Then the study sought to find out whether the available playgrounds were adequate and the findings presented in Table 4.14 below.

Table 4.14 Whether the play grounds are enough

	Frequency	Percent
Yes	37	32.7
No	72	63.7
Don't Know	4	3.5
Total	113	100.0

From the results in the table above, nearly all schools have at least a playground. Only 3 students said they had no play grounds in their schools. This is a good situation in schools since co-curricular activities are fundamental in development and education among our students. Although the fields are available 72 (63.7%) said they were not enough. This means there is need to improve the standards of the

play grounds in our schools.

4.7 Performance and transition rates in all school categories

The study computed the performance of schools as per each category for K.C.S.E results of 2011, 2012 and 2013 in order to investigate the trends. The results of the findings are shown in table 4.15 and 4.16 below.

Table 4.15 Mean grades of school for years 2011, 2012 and 2013 KCSE results

	2011	2012	2013	Average
Boarding	4.967	4.847	5.007	4.941
Day	4.706	4.246	3.870	4.274
Average	4.304	4.288	4.147	4.246

Table 4.16 Transition rates in (%) for 2011, 2012 and 2013 KCSE results

	2011	2012	2013	Average
Boarding	17.0	22.3	21.1	20.1
Day	11.2	12.1	5.0	9.4
Average	10.6	14.3	10.5	11.8

From the results in the tables above, the overall average grade of the district is 4.246. This is an average performance given that majority of the schools in this district is day and mixed. Boarding schools did best in the three years with an overall average grade of 4.941 for the three years. Boarding mixed schools

followed closely with 4.259 average grade of the three years. Day and day mixed schools did relatively well with 4.274 and 4.140 averages for the three years respectively.

Transition rates for boarding schools were high. In 2011 17% of the candidates in boarding schools qualified to join Universities, in 2012, 22.3% qualified as well and in 2013, 21.1% also went to University. This is a high transition rates.

4.7.1 Performance Rating by principals

The study computed the performance rating for KCSE results of 2011, 2012 and 2013 in order to investigate the scale. The results of the findings are shown in table 4.17 below.

Table 4.17 Performance rating by principals

Rating	2009	2010	2011	2012	2013
Excellent	0	0	0	0	0
Very good	0	0	7	1	3
Good	3	8	8	13	10
Fair	7	3	0	1	2
Poor	5	4	0	0	0
Total	15	15	15	15	15

From the results in the tables above, majority of the principals rated performance from 2009 to 2013 as good and fair. There is no year that was rated as excellent because as found in merit list from district education results there is no school with grade above 5.00.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND

RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, conclusions and recommendations generated from the research findings of the study. The chapter also presents suggestions for further study.

5.2 Summary of study

This study was purposed to find out factors influencing low transition rates from day secondary schools as compared to boarding secondary schools in Mutomo Subcounty, Kenya. This was done through use of the following specific objectives; to determine the extent to which provision of teaching/learning resources influence the transition rate to universities of students in day and boarding secondary schools in Mutomo Sub-county, to examine the extent to which school's internal efficiency influence the transition rate to universities in day and boarding secondary schools in Mutomo Sub-county and to determine the extent to which family socio economic status influences the transition rate to universities in day and boarding secondary schools.

Majority of the principals are males. The gender parity does not differ too much since males were 8 (53.3%) against females 7 (46.7%). Girl were majority among the students interviewed forming 63.7% of the entire students. Boys were fewer with only 36.3% presentation a characteristic that can be attributed to the fact that

most of the schools in this area are girls' schools. Most of the principals 12 (80%) have Bachelors of education while a few principals 3 (20.0%). This is an indication of qualified school managers with strong educational background.

Some teachers 20 (44.4%) had only P1 qualifications. The study found that 9 (60.0%) principals were from day schools, 4 (26.7%) were from boarding schools and 2 (13.3%) were from day & boarding schools. There was no principal from day mixed and boarding mixed schools. Most of students were sampled from boarding schools 47 (41.6%) and from day& boarding schools 65 (57.4%). There was no child from day mixed or boarding mixed. Twenty five teachers sampled were from day schools while 14 (31.1%) were from boarding schools.

5.3 Conclusions

The study meant the following conclusions from the findings;

Provision of teaching/learning resources influenced the transition rate to universities of students in day and boarding secondary schools in Mutomo Subcounty. This was proven by the fact that schools lacking some resources like; income generating activities in the school, good and effective procurement procedures in the school did not have good performance. This was the case in day school, mixed day schools and mixed schools.

Competency in making school budget, proper book keeping and school fees collection were mentioned by many principals not to have serious challenge.

Adequacy of teaching and learning materials overall had very serious challenge and serious challenge. Computers posed the most serious challenge followed by reference books for teacher as well as for students.

School's internal efficiency influence the transition rate to universities in day and boarding secondary schools in Mutomo Sub-county students' payment of school fees posed a very serious challenge with 5 teachers commenting so. Competency in making school budget also posed a very serious challenge with at least four teachers saying so. Adequacy of disbursed funds to school did not pose any.

Family socio- economic status of student's parents that is whether the parents of the students were able to pay for their school fees and whether students are send home for fees. Movements in and out of school usually affect efficiency in learning process. When students are constantly moving out of school they are likely to miss classes and as a result their performance is affected.

There are various factors inside and outside school that contribute for the quality of academic performance of students. This study only focused on some of the factors outside school that influence the student's achievement scores. The key aspect for the educators is to educate their students effectively so that they may be able to show quality performance in their academics. To achieve this objective it is necessary for the educators to understand better about the factors that may contribute in the academic success of students.

5.4 Recommendations of the Study

The study has revealed that;

- i. The government should put in place measures to increase budgetary allocation for funds disbursed to day secondary schools and subsidiary boarding fees. This will in turn improve the provision of teaching/learning resources which will translate to improved performance leading to higher transition rates to public universities.
- ii. Community participation in school programmes, for instance provision of building materials, renovation labour and other schools' development programmes helps to conserve the school's infrastructure rehabilitation, fund raisers for provision of resources thus the members of the community will gain the insight on the importance of school's facilities thus improving overall students' performance.
- iii. Stakeholders should be sensitized on their role in implementing and sustaining the free day secondary programme in their school communities.
- iv. Disbursement of funds calendar should be implemented as per the schedule to avoid education processes inconveniences.
- v. The community should come up with strategies of helping students' from low socio-economic status so as to ensure that they are not disadvantaged in educational opportunities due to their economic strengths.

5.5 Suggestions for Further Study

The researcher proposes further research in the following areas:

- i. This study needs to be replicated in other Sub-counties throughout the country in order to compare the results.
- ii. Further study should also be carried out on the influence of teachers' attitude towards implementation of free day secondary and students' performance.
- iii. A study should be carried out to investigate the influence of students' socioeconomic status on enrolment in day and secondary schools.

REFERENCES

- Abbass, A. & Cieslik M. (2004). Windening Participation in Higher Education: The Impact on Social Inclusion and Economic Regeneration. University of Tesside: England.
- Aloini, O. (2009) Country size, economic performance and the political economy of the Ero zone: An empirical study of the divide. Ph.D Theses Humboloit University
- Avalos, B., (1991). Teaching Children of the Poor: An Ethnographic Study in Latin America. Ottawa, Ontario: International Development Research Centre.
- Bell, L & Rhodes, C. (1996). The skills of primary school management, London:

 Routledge.
- Best J.W & Kahn. Research in education. India: New Delhi prentices Hall of India
- Cohen L, Manion, L., and Morr, K., (2000). Research Methods in Education (5thEd)

 Jomo Kenyatta Foundation, Nairobi. Kenya.
- Cooksey R. (1981) Socio-cultural and within-school factors that affect the quality of implementation of school wide programmes. Report No. 28. CRESPAR
- Eshiwani, G. (1993). Education in Kenya since Independence. Nairobi: East Arican Education Publishers.
- Global Education Digest (2003). Cmparing Education Statistics Across the World.

 Montreal: UNESCO Institute For Statistics
- Hymemann. S & Loxley, W. (1993). The effect of primary school quality on academic achievements across 29 high school and low income countries.

 American Journal of sociology

- Johnson, D. R., McGrew, K., Bloomberg, L., Bruininks, R. H., & Lin, H. C.
 (1997a). Policy research brief: A national perspective on the postschool outcomes and community adjustment of individuals with severe disabilities.
 Minneapolis: University of Minnesota, Institute on Community Integration.
- Kenny, C. (2001). The global expansion of primary education. Retrieved from http://charleskenny.blog.com/weblog/files/the global expansion.
- Kenya Economic Report (2010). EFA Global Monitoring Report. Available on http://portal.unesco.org/eductationreport/en/on/php
- Kotele, A. (2001). A study of what can be done to Assist principals in Lesotho Secondary and high schools to carryout their job more effectively. M.Ed. dissertation Unpublished. University of Bath
- Koul, H. (1984). Tests of Goodness of fit in linear Regression. USA. Cornell University Library.
- Lewin, K., and F. Caillods. 2001. Financing Secondary Education in Developing

 Countries. Strategies for Sustainable Growth. Paris: IIEP/UNESCO

 Publishing.
- Luecking, R., & Crane, K. (2002). Addressing the transition needs of youth with disabilities through the WIA system. *National Center on Secondary Education and Transition Information Brief*, 1(6). Minneapolis: University of Minnesota.
- M.O.E (2001) Report of the Education Commission (Ominde Report) Nairobi:

 Government Printers
- Malekela, G.C. (1977). Occupational expectations of primary seven pupils and their

- parents: A case study of *Nshara, Hai district,* Tanzania. Unpublished M.A. dissertation, University of Dar es Salaam,
- Ministry of Education (2003) Free primary education. Every child in school.

 Nairobi: Jomo Kenyatta Foundation, Kenya
- Ministry of Education Science and Technology. (2003). Report of the Education Sector Review. Nairobi: Government Printer
- MOE (2008) Kenya Education Sector Support Programme (KESSP)2007 2010 :

 Deliverng education and Training to all Kenyans. Nairobi: Government

 Printers
- Mugenda O.M & Mugenda A.G (2003) Research Methods: Quantitative and Qualitative Approaches, Nairobi: ACTS
- Nijhuis G (2005). British journal of education Technology. How can academic stay in control report.
- Njeru, E.H.N and Orodho, J.A. (2003). Access and Participation in Secondary

 Education in Kenya: Emerging Issues and Policy Implications IPAR:

 Nairobi.
- Obonyo, K. (1987). The impact of Teaching Aids in secondary schools and performance in KCSE Examination. A case study of selected governments and private schools in Kisumu municipality. Unpublished M.Ed Thesis Kenyatta University.
- OECD (2003). Hamburg Background Report for the Attracting Activity,

 Developing and retaining effective teachers. Retrieved from

 www.oecd.org/edu/teacherpolicy,

- Onyango, N. (2000). A study of factors that influence girls participation in Primary schools: A case study of Nginyang and Marigat Division of Baringo District, Unpublished M.Ed Thesis Kenyatta University, Nairobi.
- Psacharapoulous, G and Woodhall, M (2006) Education for development: An analysis of investment choices. New York: Oxford University Press
- Psacharopoulos, G. (1994). Return to Investment in Education: A Global Update.

 Washington: World Bank.
- UNESCO (2007). Enhancing Learning: From access to success. Report of the first experts' meeting: Defining areas of action (Paris, 26-28 March 2007). Paris: UNESCO.
- UNESCO. (2005). EFA Global Monitoring Report 2005: The quality Imperative.

 Paris: UNESCO
- UNESCO. (2008). World data on education: New Zealand. Retrieved romhttp://www.ibe.unesco.org/f ileadmin/user_upload/archive/Countries/WDE/2006/ASIA_andthe_PACIF IC/New_Zealand/New_Zealand.pdf
- UNICEF Report (2009) Education service delivery in Kenya Roles and Responsibilities of duty Bearers and stakeholders Nairobi: Government Printers.
- UNICEF, (2010). Governance, Management, and Accountability in Secondary Education in Sub-Saharan Africa. Washington, D.C.: World Bank.
- USAID 2002. Provision of learning textbook in secondary school. Basic education portfolio evaluation. Support for teacher education and training project (STEPP)

international for education and self-help(IFESH)

World Bank (2004). Challenges Facing the Implementation of FPE Programmes in Kenya Nairobi. World Bank Retrieved from http://www.worldbank.ord/ke.

World Bank. (2005). Education in Sub-Sahara Africa: Washington D.C, World B.

APPENDIX I. Letter of introduction

APPENDIX I: Letter	of introduction				
	ANGELINA K. NGAATU				
	UNIVERSITY OF NAIROBI				
	FACULTY OF EDUCATION				
	P.O BOX 30197				
	NAIROBI				
The Principal					
RE: REQUEST FOR PARTICIPATION IN RESEARCH					

I am a post graduate student at the University of Nairobi carrying out a research on factors influencing transition rates to public universities of KCSE graduates from day and boarding secondary education in Mutomo District. I kindly inform you that your school has been selected to participate in the above mentioned study. The researcher wishes to administer questionnaires. The research findings was used for the study. Individual respondent to this questionnaire was not identified in any manner.

Yours Faithfully,

Angelina.

APPENDIX II: Principal's questionnaire

You are kindly asked to respond to the questions underneath honestly. Please fill in the blank spaces or tick $(\sqrt{})$ the appropriate response from among the ones given. The questionnaire is meant for educational purpose only. Any information given will be treated with confidentiality. Please do not put your name.

Section A - Background Information

1.	What is your gender? Male () Female ()
2.	Please indicated your school type Day () Boarding () Day& Boarding
()	
	Day Mixed () Boarding Mixed ()
3.	What is your highest professional qualification?
	Diploma () B. Ed ()
	M. Ed () Others
4.	How many years have you worked as a Principal? (Years)
5.	How long have you been in your current station? (Years)
Sectio	n B – Information about institutional factors.
6.	How many students does your school have?
7. Plea	ase rate by ticking on the column box on the five point scale as follows:
(i) Vei	ry serious challenge (ii). Serious challenge (iii). Moderately serious challenge
(IV). I	Least serious challenge (v). Not serious challenge. Please indicate the correct
answe	r by putting a tick ($$) or writing in the spaces provided.

	Physical Facilities	VSC	SC	MSC	LSC	NSC
i	Income generating activities in the school.					
ii	Procurement procedures in the school.					
iii	Competency in making school budget.					
iv	Proper bookkeeping in the institution.					
V	Payment of fees by students.					

8.	Please	indicate	the	extent	to	which	1	and	2	Most	seriously	and	seriously
	challen	ges are co	pped	with									

- 9. Adequacy of resources.
- a) Instructional materials.

Please rate by ticking on the column box on the five point scale as follows:

(i). Very serious challenge. (ii). Serious challenge. (iii). moderately serious

Challenge. (IV). Least serious challenge. (v). Not serious challenge.

	VSC	SC	MSC	LSC	NSC
Sufficient class books.					
Adequate audio aids.					
Sufficient students' reference books.					
Adequate teachers' reference books.					

Ade	quacy of	computers.						
Ava	ilability	of charts and map						
Ava	ilability	of laboratory che	micals.					
Suit	ability of	f laboratory appar	atus.					
. 11. Tick	the aver	age KCSE perfor	mance of yo	ur sch	ool in the	last th	ee yea	rs by
assigning	a grade.							
	year	Excellent (A)	Very good	(B)	Good (C) Fai	r (D)	Poor (E)
	2013							
	2012							
	2011							
	2010							
	2009							
b).In your	opinion	what improvem	ent strategie	s shou	ld princip	oals put	in pla	ce to
influence l	oetter KO	CSE performance	in secondary	y schoo	ols			
12. Do yo	our schoo	ol's type of scho	ol influence	the re	sults of s	students	in nat	ional
examination	ons?	Yes []	No	[]				
b) Explain	your ans	swer						

Thank you for your participation.

APPENDIX III: Teachers' questionnaire

Section A – Background information.

Instructions

The questions herein indicated are designed to seek general information about yourself and the school. Please indicate the correct answer by putting a tick ($\sqrt{}$) or writing in the spaces provided. Do not put your name.

1)	What is your gender? Male () Female ()
2)	What is your professional qualifications?
	Diploma () B. Ed () M. Ed ()
	Others
3)	What is your teaching experience (years)
4)	Please indicate your school's type Day () Boarding () Day & Boarding ()
	Day Mixed () Boarding Mixed ()

Section B – Information about institutional factors.

- 5(a) Please rate by ticking $(\sqrt{})$ on the column box on the five point scale as follows:
- (i). Very serious challenge. (ii). Serious challenge (iii). Moderately serious challenge. (iv).Least serious challenge (v). Not a serious challenge.

Disbursement of funds	VSC	SC	MSC	LSC	NSC
Adequacy of disbursed funds to school.					
Students payment of school fees					
Procurement procedures in the school.					
Competency in making school budget.					
Proper book keeping in the institution.					
Other sources of finance to the school					
Specify					
Please indicate how you cope up with r	nost serious	and s	erious cl	 nallenge	s in

6). (i). Very serious challenge. (ii). Serious challenge iii. Moderately serious Challenge. (iv). Least serious challenge. (v). Not a serious challenge.

Teaching/learning materials	VSC	SC	MSC	LSC	NSC
Sufficient class text books.					
Sufficient learning references books.					
Preparation of timetable schedule.					
Availability of Audio aids.					
Adequate teachers reference books.					
Availability of laboratories chemicals.					
Suitability of laboratory apparatus.					

7. Have you ever attended form one selection in the county? Yes () No ()

b) Do you feel like it is fairly conducted Yes () No ()											
c) Explain your answer											
8. Tick the average KCSE performance of your school in the last three years by											
assigning a grade.											
Year	Excellent (A)	Very good (B)	Good (C)	Fair (D)	Poor (E)						
2013											
2012											
2011											
2010											
2009											
b) In y	our opinion what	t improvement stra	itegies should	principals a	and other						
stakehol	ders put in place	to influence bette	r KCSE perfo	rmance in s	secondary						
schools											
					•••••						
12(a).Do	o your school typ	pe of that is day of	or boarding inf	luence the	results of						
students	in national examin	nations? Yes []	N	o[]							

b)	Explai	n vour	answer	 	 	
-,	F	J				
• • •				 	 	

Thank you for your participation.

APPENDIX IV: Student questionnaire

Please respond to the items in this questionnaire honestly and accurately as much as possible. The information you give will be treated with confidentiality.

Please tick ($\sqrt{ }$) against the responses (5) most applicable to you or fill in the blank spaces.

	Adequate	Inadequate	None
provid	led.		
7.	Tick the adequacy of the follo	wing school resources	using the rank (s)
	Please indicated the marks y		_
Section	n B – Information about institut	tional factors.	
5.	What is the type of your school?	Day () Boa	arding ()
	Yes () No ()		
4.	Are there times you are sent hom	ne to collect school fees	?
	Yes () No ()		
3.	Are your parents/guardians able	to pay your school fees	on time?
	12-15 years () 16-20 year	rs () Abo	ove 20 years ()
2.	What is your age bracket?		
1.	What is your gender? Male ()	Female ()	
Section	n A – Background information.		

Textbooks

Desks

Classro	oms							
Laborat	ory							
Library								
Toilets								
8.	Does the sch	nool have	a playing g	round	?			
	Yes ()		No ()					
a)	If yes, does	the school	ol have enou	gh pla	aying equipm	ent.		
	Yes ()		No ()					
b)	If no, where	do you g	go for games	?				
9a)	If you are a	day sch	olar what c	hores	do you do v	when you	go home afte	r
school	?							
	Fetch firewo	ood ()		V	Vash utensils	and cooki	ing ()	
	Fetch cattle	from gra	zing ()	Γ	Oo my private	studies ()	
b)	If you are a	boarder a	at what time	do yo	our evening pr	reps		
	Start	· · · · · · · · · · · · · · · · · · ·	and Er	ıd				
10. Do	your school	type of	that is day o	r boa	rding influence	ce the resi	ults of student	S
in nati	onal examina	tions?	Yes []		No []]		
b) Exp	lain your ans	wer						

Thank you for your participation.

APPENDIX V: Questionnaire for the district education officer

INSTRUCTIONS

This is not a test, but an item to find out some information about transition of students from

Secondary school to university level in Kenya. You are kindly requested to answer questions which relate to you as honestly as possible. Your responses will be used for the purpose of this study only.

W	rite the ans	wers	in the sp	aces pro	vided.				
i.	Length	of	time	you	have	served	in	this	District
				y	ears/mont	hs/weeks.			
ii.	Have you	ever p	articipate	ed in this	District's	form selec	tion pro	ocess?	
	YES ()						
	NO ()						
	If yes	, wha	t are the i	major cha	allenges ei	ncountered	during	the proc	ess?
iii.	Generally	how	can you	rate seco	ondary to	university	school	transitio	n rates in
	this Distric	et sinc	e the yea	r 2009 - 1	2013.				
	Very lo	ow	()					
	Low		()					
	Averag	e e	()					

	High ()
	Very low ()
iv. V	That is your comment about the proportion of students selected to join
u	niversity from day and boarding school from Mutomo Sub County?
• •	
v. D	o you think that, there is equity in transition of students from day and
b	oarding secondary schools to university in Mutomo Sub County?
	YES ()
	NO ()
	Explain your response in v, above
vi.	Give your suggestions about the way form one selection should be done so
	as to enhance equity in transition of students from both day and boarding
	secondary schools to university from Mutomo Sub County Kenya?

Appendix V: Transition tables

 $KCSE\ \underline{grade\ achievements\ 2011-2013}$

		2011		2012		2013	
Schools	School type	Mean score	Grade	Mean score	Grade	Mean score	Grade
Mutomo girls	Boarding	6.61	C+	6.390	C+	7.129	B-
Voo Sec	Boarding	5.05	C-	5.487	С	5.444	С
Ikanga Boys	Boarding	4.981	C-	5.168	С	4.972	C-
Mutomo Mixed	Boarding	4.586	C-	5.539	С	4.768	C-
Kyatune Girls	Boarding	3.569	D+	3.931	D+	4.043	C-
Mathima Sec	Boarding	3.600		3.636	D+	3.938	D+
Ikanga Girls	Boarding	4.7147	C-	3.897	D+	3.884	D+
Kisayani sec	Boarding	3.0	D	3.455	D	2.604	D-
Kawelu Sec	Day	3.463	D+	3.608	D+	3.897	D+
Kitoo Sec	Day	2.677	D-	3.5	D	3.857	D+
Kyatune Boys	Day	5.265	С	4.595	C-	5.390	С
St.Partrick Mixed	Day	4.270	D+	4.295	D+	3.856	D+
Mutha Sec	Day	4.300	D+	3.300	D	3.818	D+
Enzou Sec	Day	4.147	D	3.897	D	3.706	D+
Kyaango sec	Day	-	-	-	-	3.385	D
St.Peter	Day	3.629	D+	3.68	D	3.680	D
Nduundune							

Appendix VI: Students' grade attainment from 2011 to 2013

		2011		2012		2013		
Schools	School type	C+ &	No of	C+ &	No of	C+ &	No of	
		above	candidates	above	candidates	above	candidates	
Mutomo girls	Boarding	17	72	38	87	38	54	
Voo Sec	Boarding	4	31	10	39	9	47	
Ikanga Boys	Boarding	20	106	4	47	10	74	
Mutomo Mixed	Boarding	10	70	29	63	13	71	
Kyatune Girls	Boarding	3	65	6	44	4	47	
Mathima Sec	Boarding	2	50	2	44	1	48	
Kisayani sec	Boarding	3	53	1	44	0	50	
Kawelu Sec	Day	0	14	0	23	2	31	
Ikanga Girls	Boarding	14	74	7	68	3	86	
Kitoo Sec	Day	0	31	0	26	2	28	
St. Partrick Mixed	Day	10	76	9	61	8	97	
Mutha Sec	Day	0	52	0	20	2	22	
Enzou Sec	Day	9	42	4	39	0	34	
Kyaango sec	Day	-	-	-	-	1	13	
St. Peter Nduundune	Day	3	36	0	25	2	28	
Kyatune Boys	Day	15	51	16	83	11	42	

Appendix VII: Authorization letter



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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

Ref: No.

Date:

13th November, 2014

NACOSTI/P/14/6463/4195

Angeline Kasuki Ngatu University of Nairobi P.O. Box 30197-00100 **NAIROBI.**

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Factors influencing transition of students from Boarding and Day Secondary Schools to Universities in Mutomo Sub-County, Kenya," I am pleased to inform you that you have been authorized to undertake research in Kitui County for a period ending 31st December, 2014.

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

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

DR. S. K. LANGAT, OGW FOR: SECRETARY/CEO

Copy to:

The County Commissioner Kitui County.

The County Director of Education Kitui County.



National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified

Appendix VIII: Research permit

Itional Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovation National Commission for Science, Iechnology and Innovation National Commission for Iechnology and Innovation National Commission for Iechnology and Iechnology and Iechnology Iechnology and Iechnology Iechnology and Iechnolog tional Commission for Science, Technology and Innovation National Commission for Science National Commission for THIS IS TO CERTIFY THAT atland Commission for Science, Permit No : NACOSTI/P/14/6463/4195 tional Commission of Certific India Commission for Science, Technology and India November, 2014 India Commission of Science, Date Of Issue: 13th November, 2014 ology and Innovat tional Commiss of UNIVERSITY OF NAIROBI 144-90209 Science, Feel Recieved: Ksh: 1,000 sion for Science, Technology and Innoval ion for Science, Technology and Innovat Kyeni, has been permitted to conduct Science or Science, Technology and Ir tional Commission for Science, Technology and Initional Commission for Science, Techno hnology and Innoval itional Commission for Science, Technology and Innovation National Commission for Science (Innovation National Commission National Commissi itional Commission for Science, Technology and Innovation National Commission for Science, Technolo hnology and Innovat or Science, Technology and Inn tional Commission the topic: FACTORS INFLUENCING or Science, Technology and Inr hnology and Innovat itional CommissiTRANSITION OF STUDENTS FROM ission for Science, Technology and Inn BOARDING AND DAY SECONDARY ssion for Science, Technology and Inr tional Commiss SCHOOLS TO UNIVERSITIES IN MUTOMO cience, Technology and Ini itional CommissiSUB-COUNTY, KENYA vation National Commission for Science, Technology and Inn for Science, Technology and Innoval itional Commis nnovation National Commission for Science, Technology and Innovation Natio on for Science, Technology and Innoval itional Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovation National ion for Science, Technology and Innovat tional Commission for Science, Technology and Innovation National Commission for Science (Innovation National Commission National Commission National Commission National Commission (Innovation National Commission National Commission National Commission National Commission (Innovation National Commission National Commission National Commission National Commission (Innovation National Commission National Commission National Commission National Commission (Innovation National Commission National Commission National Commission National Commission (Innovation National Commission National Commission National Commission National Commission (Innovation National Commission Nationa itional Commissifor the period ending: tion National Commission for Science, Technology and Innovation National Commission for Science (Innovation National Commission National Com sion for Science, Technology and Innoval tional Commission of Science, Technology and Innovation National Commission for Science (Innovation National Commission National Commis tional Commission for Science, Technology and Innovation National Commission for Science (Innovation National Commission National Commission National Commission National Commission National Commission (Innovation National Commission National Commission National Commission National Commission National Commission National Commission (Innovation National Commission National Commiss mmission for Science, Technology and Innovat tional Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovation National itional Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovation National mission for Science, Technology and Innovat tional Commission for Science, Technology and Innovation National Commission for Science (Innovation National Commission National Commission for Science (Innovation National Commission National Commission National Commission National Commission National Commission (Innovation National Commission Natio nission for Science, Technology and Innoval Technology and Innovation National Commission for Science, Technology and Innovation Nation Science, Technology and Innoval hard and Innovation National Commission for Science, Technology and Innovation National itional Commission for Science I appoint and Innovation National Commission for Science, Technology and Innovation National for Science, Technology and Innoval Contribsion for Science, Technology and Innoval Itional Commission of Science, Technology and Innovation National Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovation National Commission for Science Technology and Innovation National Commis nnology and Innovation National Commission for Science, Technology and itional CommissiSignature echnology and Innovation National Commission for Science, Technology and National Commission for Science, and Innovation National Commission for Science and Innovation National Commission N ttional Commission for Science, Technology and Innovation National Commission for Science (Technology & Innovation National Commission National Commission National Commission National Commission (Technology & Innovation National Commission ttional Commission for Science, Technology and Innovation National Commission for Science (National Commission National Commission National Commission National Commission National Commission National Commission (National Commission National C tional Commission for Science, Technology and Innovation National Commission for Science (Innovation National Commission Nation

itional Commission for Science, Technology and Innovation National Commission for Science (Innovation National Commission National Commission National Commission National Commission National Commission National Commis