FACTORS INFLUENCING INTERNAL EFFICIENCY OF PUBLIC PRIMARY SCHOOLS IN SUBA WEST DIVISION, MIGORI COUNTY, KENYA

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DECLARATION

The research project is my original work and has not been presented for a degree in any University.

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DEDICATION

This work is dedicated to my wife Everline Anyango for the moral support, my children Otieno Cedrick, Oduor Noel, Amondi Audrey and Omondi Clyde.

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LIST OF ABBREVIATIONS

AEO	:	Area Education Officer
CDF	:	Constituency Development Fund
DEO	:	District Education Officer
ECDE	:	Early Childhood Development Education
EDSE	:	Free Day Secondary Education
EFA	:	Education For All
EMIS	:	Education Management Information System
FPE	:	Free Primary Education
GER	:	Gross Enrolment Rate
GNP	:	Gross National Product
GoK	:	Government of Kenya
KCPE	:	Kenya Certificate of Primary Education
KESI	:	Kenya Education staff Institute
MDG	:	Millennium Development Goals
MoE	:	Ministry of Education
NER	:	Net Enrolment Rate
NGO	:	Non-Governmental Organization
PTA	:	Parents Teachers Association
PTR	:	Pupil Teacher Ratio
QASO	:	Quality assurance and Standards Officer
SACMEO	:	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SPSS	:	Statistical Package for Social Science

SSA	:	Sub- Sahara Africa
TSC	:	Teachers Service Commission
UPE	:	Universal Primary Education
USA	:	United States of America

ABSTRACT

The success of education programmes depends on how efficient and effective the inputs are managed to achieve the set objectives. The purpose of this study was to investigate the factors influencing the internal efficiency of public primary schools in Suba West Division where output of education was reported to be below expectation as shown in KCPE results and net enrolment rate. The objectives of the study were; to determine extent to which gender equality has been achieved in public primary school, to determine correlation between pupil- teacher ratio and pupils' achievement in examination, to investigate the relationship between school financing/costs and dropout rate and to assess the impact of learning materials and physical facilities on pupils' achievements in both academic and co-curricular activities in Suba West Division, Migori County. The findings of this research would be significant to Ministry of Education (MOE) in the formulate policies that result in efficient utilization of education resources. The Teachers Service Commission (TSC) would use the results of study to identify schools that require immediate action in terms of Teacher-staffing. The study would also help donor agencies to identify areas where they can commit funds. The study used descriptive survey design, which was appropriate because it facilitated data gathering by administering questionnaires. Purposive sampling was adopted since the head teachers and pupils were believed to be having reliable information relevant to this study. The questionnaires were used because respondents could be reached and were able to read and write. The researcher analyzed the data by use of the Statistical Package for Social Science (SPSS). Quantities data was analyzed using descriptive and inferential statistics; findings were presented in form of pie charts, bar graphs and frequency distribution. The research findings indicated that teachers staffing was one of the factors contributing to low achievement in KCPE results in the division. The high pupil teacher's ratio, low level of training affected quality of service delivery. Poor financial management due to lack of appropriate skills negatively affected acquisition of resources. As a result many pupils dropped out of school due to stress caused by sharing of scarce resources or they were withdrawn by parents who were discouraged by misappropriation and embezzlement of funds. The research found out that most of the schools had poor infrastructures: classes, latrines and inadequate desks. The few that were available were over stretched causing stress among pupils. The research revealed existence of serious gender disparity in the division. The research recommends that community financing be encouraged to provide resources, regular auditing of schools' accounts, training head teachers on financial management, employment of qualified teachers be priority of the parents and government to uplift education standards in the division. To improve gender equality in the division serious campaigns are recommended through organizations advocating for gender parity such as FIDA, FAWE. Provincial administrators and politicians should ensure that government policies are adhered to, especially on early marriages and child labour. The Teacher's Service Commission should post more female teachers to the division to act as role models to the girls.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is widely seen as one of the most promising paths for individual to realize better, more productive lives and as one of the primary drivers of national economic development. Education is perceived to be the most effective instrument for promoting sustainable social, political and economic development (Glennerster et al, 2011).

Education is more than reading, writing and arithmetic. It is one of the most important instruments a country can make in its people and its future, and is critical to reducing poverty and inequality. Global Partnership for Education (http://www.globalpartnership.org/who-we-are/the-valu-of-education). The impact of investment in education is profound; education result in rising income, improving health, promoting gender equality, mitigating climate change and reducing poverty.

The realization of the importance of education made public expenditure on education to rise, for instance, South Korean Government immediately after attaining her independence made education provision a priority by making it free to all citizens, while in China, the government increased its expenditure. In United States of America (USA), education sector consumes 17.1% of government expenditure, Philippines spends 17.8% while Kenya spends 22.1% of the total expenditure on education (http://www.nationmaster.com).

Individuals and society therefore view education as either consumer product or an investment. Whether education is an investment or consumption good, it entails costs aimed at achieving specific outcomes. These costs are borne by both the society (government) and the household as social and private costs respectively.

According to Birdsall (1980) and Cochrane (1979), the household faces tradeoff between present consumption and children's future income. The time children spend in school and money costs of school necessarily reduce total family work time and total consumption of goods in the present. When the direct costs of education are too high, the parents may be forced to keep children at home. Such ancillary costs exists even where school fees are not charged. In most cases parents incur some expenditure for school uniforms, textbooks, exercise books, transport, construction and maintenance of school buildings and many others. Poor households may judge such costs to be beyond their means (Mukudi; 2004: Coplcough, 2003).It has been noted that poorer households may depend more so as richer households, upon the labour of their children in order to supplement household income either directly on the farm or in the market place or indirectly by children undertaking household tasks which liberate adult labour force for other remunerated work (Chernichorisky, 1980; Tan, 1985)

According to Constitution of Kenya (2010), Chapter Four, every child has the right "to Free and Compulsory basic education". This shows the importance attached to education.

For the Kenyan government policy to achieve UPE and offer quality basic education it has to be seen within the wider international context. The universal declaration of human rights adopted in 1948 declared that everyone has a right to education. The World Conference of EFA held in Jomtein, Thailand in 1990 sparkled off a new impetus in basic education especially with its so called vision and renewed commitment. It was noted that to serve the basic needs for all requires more than a recommitment to basic education. These aspects were further endorsed by the millennium development goals which among other things targets to ensure that by 2015, children everywhere; boys and girls alike will be able to complete a full course of primary schooling (Republic of Kenya and UN, 2003), Millennium Development Goals (MDG) and Education For All (EFA).

In absolute terms, the education sector in Kenya has experienced massive expansion in enrolment and number of institutions over time. In Canada, the government attaches great value to education and provides it for every child free of charge. It is believed that a more educated population is likely to create greater economic success for a country than a less educated population.

In Japan, schooling is regarded to be a preparation for appropriate position in workforce and for adult society. Mostly, Japanese believe that schooling offers an opportunity for all children to move up the social ladder if they are working hard. Equal opportunity is thought to exist in Japan through its education

system. Schooling also plays the role of selecting young people based on their academic achievement, identifying some for leadership positions and other for subordinate positions. (Nemoto, 1996). In Africa, manifestation of realization by individual countries of the strategic role that education can play is portrayed by high public expenditure on education. The table below shows percentage of government expenditure spent on education for selected countries.

Table 1.1: Expenditure in education

Country	% Expenditure				
	2008	**2009**	**2010**	**2011**	**2012**
Armenia	13.6	12.7	11.5	11.7	
Brazil	17.4	16.8	18.1		
Burundi	22.3	23.4	25.1	24.1	
Ethiopia	22.8	23.6	25.4		
Ghana	22.5	24.2	24.4		
Netherlands	11.9	11.5	11.6		
Singapore	22.6	21.2	20.3	21.4	22.7
Thailand	20.5	20.3	22.3	29.5	
Hong Kong SAR, China	22.9	21.0	20.2	20.1	

Source: (UN, 2012)

It is evident that developing countries such as Singapore, Ethiopia, Ghana e.t.c. spend above 20% of government expenditure on education compared to developed countries. The argument behind this trend is that education is the key to economic development (UN, 2012).

The government of Kenya equally attaches great importance and spends averagely 22.1% of its government expenditure on education (MoE, 2011). In Nyanza Province, particularly Suba West Division, parents spend un-estimated portions of their incomes on top of free Primary Education fund to provide basic requirements for their children at primary school level.

The second goal in the United Nations Millennium Development Goal is to achieve universal Primary education, more specifically, to "ensure that by 2015, children everywhere, boys and girls alike will be able to complete a full course of primary schooling". Currently there are more than 75 million children around the world of primary school age who are not in school. The majority of these children are in regions of Sub-Sahara Africa and South Asia and within these countries, girls are at the greatest disadvantage in receiving access to education at the primary school age (UN, 2012).

There has been great progress achieved since 1999 in the achievement of Millennium Development Goal (MDG). The number of children enrolled in primary schools worldwide rose by more than 40 million between 1999 and 2007; net primary enrolment in Sub-Sahara Africa rose from 58% to 75% over

the same period and international aid commitments to basic education almost doubled from $2.1billion in 2002 to $4.1billion in 2007 (UNESCO, 2003).

According to UN (2012), the enrolment rose from 58% to 76% between 1999 and 2010. Apart from Sub-Sahara Africa, more than 90% of children of primary school age were enrolled either in primary or secondary schools in 2010.

According to the Ministry of Education's Management Information System (EMIS), the number of public and private primary schools increased from 6,058 in 1963 to 27,489 in 2010, while the number of secondary schools has increased from 151 to 7,308 over the same period.Enrolment in primary education has grown from 892,000 pupils in 1963 to about 9.4million pupils in 2010. The increase has been accelerated by the Free Primary Education (FPE) and Free Day Secondary Education (FDSE) programmes in 2003 and 2008 respectively (MOE, 2012).

The achievement of educational goals and targets in a country depends on how efficient the resources invested in education are managed. The term efficiency is used to described relationship between inputs and output. Investment in education needs to consider both external and internal efficiency, (Psachoropolous, 1985).

However, despite all these important achievements, the world is currently not on course to achieve its target of Universal Primary Education (UPE) by 2015. Currently, 120 million children could still be out of school in 2015 – and girls will still lag behind boys in school enrolment and attendance. Sub – Sahara Africa is particularly affected as over a quarter of its children of primary school age were out of school in 2007 (UNESCO, 2003).

The Millennium Development Goal number 3 is to promote gender equality and empower women. This is to be achieved through eliminating gender disparity in primary and secondary education, preferably by 2005, and in all levels of education not later than 2015. Achieving parity in education is an important step towards equal opportunity for men and women in the social, political and economic domains. The gender parity index grew from 91 in 1999 to 97 in 2010 for the developing countries as a whole – falling within the plus or minus 3 points margin of 100 percent that is the accepted measure for parity (UN, 2012).

The Millennium Development Goal (2) of Universal Primary Education and Education for All set targets for gross enrolment rate, completion rate and gender parity where set at 100%, 100% and 1:1 respectively. In United States the primary school completion rates were 101% (2008), 102% (2009) and 104%(2009). In Germany the completion rates were 100%, 100% and 101% for the same years. In Ethiopia, the rates were 52%, 54% and 62%. In Cameroon, 75%, 76% and 79%. The completion rate in Kenya in 2007 was

81% while in Nyanza Province recorded 80.95%, (MoE, 2011). Completion rate in Suba West Division in the year 2007 was 52% while in 2012 it was 61% (DEO's Office – Migori, 2012).

The recommendation of 2003 National Conference on education and training informed the development of Sessional Paper 1 of 2005. It outlined short, medium and long-term sector target, which include the attainment of Universal Primary Education (UPE) and Education For All (EFA) by 2015. The following specific targets were set; a primary school NER of 100% by 2015, completion rate of 100% by 2010, achievement of transition rate of 70% from primary to secondary school level from 47% paying special attention to girls education by 2008; a Net Enrolment Rate (NER) in Early Childhood Education (ECDE) by 2010 and gender parity at primary and secondary by 2014, achieving 50% improvement in levels of adult literacy by 2015. (MoE, 2012: A Policy Framework for Education).

However, in the year 2007, Kenya has achieved promotion rate of 59.6%, graduation rate of 81%, dropout rate of 3.5%, retention rate of 84.4% and gender parity of 0.94%, these rates were below set targets. In Nyanza province, the NER was 98.3%, gender parity was 1%, retention rate was 85.8% and completion rate 80.95% (MoE, 2012). In Migori District, particularly in Suba West Division the NER was 72.3%, completion rate was 76.4%, retention rate was 79.7% and gender parity was 0.66% (DEO's Office – Migori, 2012).

However, despite the quantitative expansion of education, the sector continues to face a number of challenges. Inequality in access of educational opportunities is an example. In 2010, 61million children of primary school age were out of school. More than half of them were in Sub-Sahara Africa and a further one fifth (13 million) in Southern Asia. In relative terms, 24% of children of primary school age in Sub-Sahara Africa and 7% in Southern Asia were not in School (UN, 2012).

Other challenges noted include high wastage rates in terms of dropouts and repetition of classes, problem of relevance and quality of education being offered, poor performance in national examinations, home related factors such as increasing level of poverty and lack of conducive reading environment after school, poor planning and political interference (Ngari, 2007).

Wastage in education system is a problem worldwide but more common in Third World as revealed by UNESCO, 2003. The problem and trends that have emerged throughout Africa, Asia and Latin America include the growing demand for school places which is accompanied by heavy dropout rates and sluggish flow caused by repetition (UNESCO, 1990).

In the year 2007, the wastage rates were; national dropout rate was 3.5%, while Nyanza province recoded dropout rate of 3.5%. Suba West Division had dropout rate of 4.35%. The dropout rate for girls was higher than the one for boys. Nationally, boys dropped out at the rate of 3.2% while girls recorded

3.7%. In Nyanza boys indicated 2.3% while girls indicated 4.4% (MoE, 2012). In Suba West Division, boys dropped out at 3.8% while girls recoded 4.9% (AO's Office – Suba West, 2012).

The Kenya Vision 2030 is looking upon the education sector to deliver the necessary skills and build adequate human capital to achieve and sustain the country as a idle-income country. Research from the Kenya Institute for Public Policy Research and Analysis (Kippra) show that the survival from class one to form four is below 20%, while those who survive from class one to University is 1.69%. (Daily Nation Newspaper, February 12, 2013).

These dropouts and repetitions are elements of wastage of the scarce resources allocated to the primary subsector. Kinywa (2007), quoted Blang (1970) that a lot of emphasis is placed on the efficient utilization of school inputs, the link between inputs and outputs of an education system makes the equation complete. Given the scarce resources allocated to the education institution to be both internally and externally efficient (Nafuko, 2000).

According to Migosi (2011) internal efficiency is concerned on how internal systems is best organized to minimize wastage in order to meet desired goals and objectives. This means that the dropout and repetition rates must be minimized at all times so that there is less wastage by students existing the education system without completing the relevant education levels, on the other hand the completion rates must be encouraged to take place. Internal

efficiency of a system is measured based on aims and objectives together with a range of measures of output that reflect these various objectives and success with which they are achieved. Some analysis have used such measures as examination scores; cognitive scores in a wide range of subjects, the length of time needed for pupils to reach required standards, scores on standardized sets of reaching ability and language, mathematics and science skills; and non cognitive tests designed to measure pupils attitudes motivation, (Psachoropolous, 1985).

The recommendations of 2003 national conference on education and training informed the development of the Sessional Paper number 1 of 2005. It outlined short, medium and long-term sector targets, which include the attainment of Universal Primary Education (UPE) and Education For All (EFA) by 2015. The following specific targets were set: A primary school NER of 100% by 2015, completion rate of 100% by 2010, achievement of transition rate of 70% from primary to secondary school level from 47%, paying special attention to girls' education by 2008, a Net Enrolment Rate (NER) in Early Childhood Education (ECDC) by 2010 and gender parity at primary and secondary by 2015, achieving 50% improvement in levels of adult literacy by 2015. (MOE, 2012: A Policy Framework for Education). However, in the year 2007, Kenya had achieved the following rates promotion rate 59.6%, graduation rate 81%, dropout rate 3.5%, retention rate 84.4% and gender parity 0.94.This rate was still below the recommendations.

1.2 Statement of the Problem

The 22.1% of total expenditure committed by the government in education witnessed a net enrolment of 92.5% (UNESCO, 2010), justifying the value attached to education by the government of Kenya. With this kind of expenditure, it is expected that the goals of Free Primary Education (FPE) would be achieved. This would be realized in low dropout rate, high completion rate and improved graduation rate. However, these have not been witnessed as the contrary continued to be realized in Suba West Division indicating dropout rate of 4.35% above national and provincial rates in 2007. Completion rate was 76.4%, retention rate 79.7% and gender parity index of 0.66%. The achievement of candidates in KCPE has been consistently below 250 marks. These rates were below provincial and national standards. This shows that there was serious inefficiency in the division, which needed to be investigated. There was need to identify causes of the inefficiency.

1.3 Purpose of the study

The purpose was to investigate the factors influencing internal efficiency of public primary schools in Suba West Division of Migori County.

1.4 Objectives of the study

The objectives of this study were:-

(i) To determine extent to which gender equity has been achieved in public primary school in Suba West Division, Migori County.

(ii) To determine correlation between pupil- teacher ratio and pupils' achievement in examination (KCPE) in Suba West Division, Migori County.

(iii) To investigate the relationship between schooling costs and dropout rate in Suba West Division.

(iv) To assess the impact of learning facilities on pupils' achievement in both academic and co-curricular activities in Suba West Division, Migori County.

1.5 Research Questions

(i) To what extent has gender equality been achieved in public primary school in Suba West Division, Migori County.

(ii) How does pupil- teacher ratio relate to pupils' achievement in examination (KCPE) in Suba West Division, Migori County?

(iii) What is the relationship between schooling costs and dropout rate in Suba West Division, Migori County?

(iv) How do learning facilities impact on pupils' achievements in both academic and co-curricular activities in Suba West Division, Migori County?

1.6 Significance of the Study

The findings of this study may guide the Quality Assurance and Standards Officers (QASOs) in assessing learning in schools in the division. The reports of study concerning learning facilities may help them in identifying schools

which require immediate attention in terms of provision of infrastructure funds. The report may also help education planners to identify areas in the primary sub-sector, especially in Suba West Division which require funding. The Ministry officials may take action against schools which overcharge pupils and parents. The report of the study on pupil- teacher ratio would help the Teachers Service Commission (TSC) in identifying schools, which need to be considered for staffing in terms of number of teachers and qualifications.

This study would give pupils, teachers, headteachers of the primary schools in Suba West Division of Migori District and opportunity to express their views in terms of needs. They may not have direct link with the Ministry of Education, especially pupils; this would act as a good opportunity for them to communicate.

The report of the study would be a good document justification for soliciting funds from well wishers, donors and sponsors. The Non - Governmental Organizations (NGOs) and donor agencies may be able to identify particular aspects of the institutions to support (finance); for example, classrooms, latrines or provision of sanitary towels for girls.

1.7 Limitations of the Study

Some of the challenges in this study included; lack of co-operation from some respondents, some gave inaccurate data and the low return rate which was 93.6% below the anticipated 95%, Logistic problems which were created by

difficulty in transportation since most of the semi-permanent roads had been damaged by heavy rains in the month of April and in availability of documentary data from education offices (out of four zones only two had the data readily available at the offices).

1.8 Delimitations of the study

Onen and Osoo (2005), refers to delimitation as the boundary within which research is confined. They mention four dimensional delimitations or scope which include: time scope, content, sample and geographical. Geographical may have been covered under area of study. This study was therefore delimited to the factors influencing internal efficiency in public primary school in Suba West Division of Migori County where a sample of 375 respondents were interviewed for circumstances in school settings of the schools for a period of four years (2008 – 2011).

1.9 Basic Assumptions of the Study

(i) All documentary data required were expected to be available however only two zonal educational offices had such records

(ii) There would be maximum co-operation from respondents

1.10 Definition of significant terms

Completion rate- refers to the proportion of pupils who successfully complete the final grade of the cycle expressed as percentage of the total enrolled in the final grade of the cycle in a given school year.

Dropout – refers to the proportion of pupils who leave the system without completing a given grade in a given school year. (Wako, T.N. 200). In context of this study, it is the proportion of pupils who leave the education system without completing class eight

Efficiency - Is a term used to describe optimal relationship between inputs and outputs (Psacharopoulos G. and Woodhall M. 1985). In this study efficiency means relationship between school factors (learning facilities, pupil teacher ratio, schooling costs, gender equity e.t.c) and output (quality of grades in KCPE, number of pupils completing primary course, e.t.c.)

Factors- refers to circumstances that helps to produce a result. In the context of this study, I have used factors to mean internal and external environments that influence production of graduates of primary school levels.

Internal efficiency- refers to the relationship between inputs and outputs within the education system or within individual institutions (Psacharopoulos G. 1985). In the context of this study it refers to relationship between inputs and outputs within the individual public primary schools under study in Suba West division.

Internal- refers to schools' internal environments on which school has control over and affects the process of pupil completion rate.

Net enrolment rate- refers to percentage of pupils of school age who are actually enrolled in school.

1.11 Organization of the Study

The study is organized into five chapters; Chapter one, two, three, four and five. Chapter one presents the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitations of the study, basic assumptions of the study, definition of significant terms and organization of the study.

Chapter two contains review of related literature arranged into sub – themes: gender equality, pupil-teacher ratio, school financing/costs and physical facilities and learning materials, summary, theoretical framework and conceptual framework.

Chapter three is about the research methodology to be used. It contains the research design, target population, sampling techniques and sample size, research instruments, data collection procedure and data analysis techniques. Chapter four contains of data analysis, presentation discussions and interpretations. Chapter five contains summary of the research, conclusion recommendation and area for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review will explore various aspects of efficiency such as inputs and outputs, financial resources, staffing, physical infrastructure and other factors influencing internal efficiency of public primary schools.

Efficiency

The concept of efficiency refers to relationship between the inputs into a system and the outputs from that system (Gravenir, 2003). The most efficient system is one that achieves a given output at the lowest cost or gets the greatest output from given inputs (Lowe, Grant and Williams, 1971).

UNESCO (2002), defined education efficiency as the ability to perform well or achieve a result without wasted resources, efforts, time or money, that is using the smallest quantity of resources as possible, it can be measured in physical terms (technical efficiency) or in terms of cost (economic efficiency). Gender educational efficiency is achieved when the same amount / quantity and standard of educational services are produced at a lower cost, if a more useful educational activity is substituted for a less useful one at the same cost or if unnecessary educational activities are eliminated.An educational system is said to be efficient if maximum output is obtained from a given input; or if a given output is obtained with minimum possible input. Inputs and outputs have somehow to be valued so that they may be aggregated and usually prices are used to perform this valuation function. In addition, the most common

indicator used to assess the educational efficiency is the coefficient of efficiency (or its reciprocal referred to as the input – output ratio) (Gravenir, 2003).

Internal efficiency

Internal efficiency refers to the ability of educational institution to educate the pupils and turn out its graduates (Psacharopoulos, 1980). Ayodo (1999), argues that internal efficiency in an educational institution is linked to industries which receive inputs at one end and transform them into outputs on the other. For many reasons, measuring output by the number of students or pupils who complete a course gives an approximation and by comparing this with inputs measured by the number of students' years may be sufficient to show that high rates of wastage cause poor or low efficiency of the education system.

2.2. Gender equality in education and internal efficiency

The World Bank Report on "Achieving Universal Primary Education by 2015: A chance for every Child" in 2003 indicated that most of developed nations had gender parity above 1% while developing countries, more so in Sub-Sahara Africa had gender parities below 1%, for instance, in terms of pupil enrolment at primary school level in the years 2008 and 2009, Canada recorded 100% in both years, China recorded 103% and 103 respectively, while Ethiopia recorded 89% and 91%. Kenya recorded the parities of 98% in both years, which was an improvement over 2007 record of 94%. World Bank,

2003, MoE, 2012).A child's gender continues to contribute to access and attendance today. The importance of gender equality in education within the process of international goal- setting as emphasized in the Education for All (EFA). Goals (UNESCO, 2000) and the Millennium Development Goals (MDG) (United Nations, 2006).

The gender equality issue in education has been a major concern in many countries, because of its link with health and nutrition, economic development, and civic responsibilities. For the purposes of this policy brief the concept of gender equality in education follows the UNESCO (2003) interpretation, which refers to the notion of boys and girls experiencing the same advantages or disadvantages in attending school, receiving teaching methods, curricula, and academic orientation and producing equal learning achievements and subsequent life opportunities.

The Government of Kenya considers gender balance and equality in education and training as a key contributor to the economic growth and sustainable development of Kenya. However, even after the introduction and implementation of the Free Primary Education (FPE) initiative in 2003, there were gender gaps in education. Gender disparities were evident in access completion, transition, retention and performance rates both nationally and provincially. To address these challenges these challenges, the Ministry of Education came up with a policy that sought to establish mechanisms to eliminate all gender disparities in education (Republic of Kenya, 2007a). The

policy, which pays special attention to girls and women, emphasizes inclusiveness, affirmative action, mainstreaming and partnership to achieve gender balance and equality in education in Kenya. Increasing the female staff has been seen as a strategy for girls' success, since female teachers and school heads are considered to be good role models as leaders. Among the SACMEO countries, some had 'general' teachers who taught all subjects, while others had specialized subject teachers. In Kenya, pupils are assigned to teachers who specialize in particular subjects (SACMEO, 2011).

By drawing attention to the 2011 EFA Global Monitoring Report, Ms Bokova pointed a picture of widening disparities and challenges to equality. Girls are getting lost along the way, falling out of education. She called on the forum to examine their strategies and practices and to respond to these challenges in a clear and constructive manner, as these disparities start early and run deep. The need for education of quality and equality has made it necessary to examine both the academic and institutional levels, in terms of, respectively, the achievement of students and the planning and conception of programmes. The United Nations Economic and Social Council has already taken an important first step in affirming the key role of education as a fundamental right for the realization of the Millennium Goals of Development (UNESCO, 2011).

This sentiment was reiterated by Cheryl Faye, the Executive Director of the UN Girl's Education initiative (UNGEI) who emphasized that even though great strides had taken place, only one in three countries around the world had achieved parity in both primary and secondary education. Ms Faye argued that food practice and an informed evidence base is necessary to ensure that gender sensitive interventions and clear policy strategies are developed and implemented (UNESCO, 2011).

In Viet Nam 'the government recognizes the role of women in the home through awards and certificates, but does not recognize or encourage men's contributions (Kelly, 2011:4) with parental leave associated with the care of a new-born baby or sick child only available to mothers. Interventions have not targeted the constraints placed on mothers by traditional norms, and understandably there has been little progress in the share of household work since 2004 (Kelly, 2011).

In Kenya a new constitution has been established where no more than two-thirds of any leadership/management positions can be of one gender, and presently '42 per cent of the senior officers in the Ministry of Education are women; and 22 per cent in the Ministry of Higher Education.' (Obura, 2011). Despite high levels of female teachers there are very low levels of female head teachers, in the ministries 'women comprise 27 percent of those reportedly involved in the totality of the policy decision-making, shaping and originating process' with the highest concentrations occurring at the middle

rather than lowest levels (Obura, 2011). 'Increased female visibility in senior positions reportedly raises the morale of female staff in the Ministry but, so far, has not led to strategic action by women or anyone else to maintain positive change. Women say that currently there is no gender affirmation' (Obura, 2011). Significant structural challenges within the Ministry remain with male domination of officer positions and the public service commission, which controls recruitment and promotions. Additional support strategies are required including those which empower women in overcome the effects of societal and structural barriers and assist them in being more pro-active in their own career progression (Obura, 2011).

The national gender parity index in the year 2007 was 0.94 while in Nyanza 1. The study therefore was aim at investigating whether gender parity in terms of school access, participation and achievements in academic and co-curricular activities meet national and international standards.

The gender parity index recorded by Nyanza province of 1 in 2007 was quite impressive, but could be misguiding if taken to be representative f or all regions in the province. The study was to determine the extent to which gender parity has been achieved in the division in comparison to the findings of Ministry of Education in 2012 and the international gender parity indices recorded by United Nations findings in 2012.

2.3. Correlation between pupil-teacher ratio and pupils' achievements in examination

These include administrators of schools who are concerned with maintenance and improvement of education standards, particularly trained teachers who impart knowledge to the pupils (Open University Press, 1977). Teachers' quality is another important aspect that determines performance trends. The characteristics that shape the teacher's quality include the formal educational attainments, the teacher training attainments, the experience gathered by the teacher, the subject mastery and the availability of the teachers (MOEST, 2003).

According to Ndala (2006), teachers are a key enabling factor in improving the quality of primary (or indeed any) education. In low income countries like those in Sub-Sahara Africa (SSA), teachers become a critical and sometimes the only resource for the teaching and learning process. This task is made more difficult by the almost complete absence of data relating to the quality of teachers in SSA making objectives generalization therefore highly problematic.

Ndala (2006), further says that the scarce data suggests that only slightly more than 50% of primary school teachers in SSA have the proper qualifications, which is insufficient for the achievement of quality education (UNESCO, 2005). Malawi was at the bottom of the list in 2000: only 27% of its teachers in primary education had the necessary qualifications. These figures were

interpreted by some reports (AW & Muliro, 2001; Bregman & Bryner, 2003) as an indicator that the SSA countries are faced with serious teacher shortages in primary education. This is true if one accepts a PTR of 20:1 as the standard. However, if one considers that PTR of 40:1 may be more appropriate for these low income countries, teachers' shortages appear as less of a pressing problem in SSA. What is worrying however is the lack of data on teachers' qualifications, which makes it very difficult to gain an accurate picture of the situation on the ground. A World Bank Report (1987), noted that the number of years of schooling of a teacher was most consistently and significant contributor to pupils achievement.

Dahar (2012), found that misallocation of student teacher ratio, class size and per student, expenditure leads to the wastage of resources and lower level of academic achievement. Reduction in student teacher ratio and class size, and addition in per student expenditure are very expensive; therefore, policy can be decided considering the funds constraints. However, allocation of student teacher ratio, class size and per student expenditure can be equalized within the scarce funds. This equal allocation of these resource inputs may lead to the effective use of school resource inputs and produce higher level of academic achievement.

Baguada Seminar Reports on Quantities and Qualities in Nigerian Education (NERC, 1980) as cited by ESA, (2005) also shared the consensus that teachers are the main determinants of quality in education: "If they are apathetic,

uncommitted, uninspired, lazy, unmotivated, immoral, and anti social, the whole nation is doomed. If they are ignorant in their disciplines and thus impart wrung information, they are not only useless but dangerous. Therefore, the kind of teachers trained and posted to schools may well determine what the next generation will be like" (Akinsolu, 2010).

According to Mugo (2013), less than half of Class Three children in Western, Nyanza and Eastern regions can read a Class Two level paragraph, with a Class Three child in Nairobi having twice as much chances of reading a Class Two level paragraph than a child in the same class in Western region. But the report suggests that teacher absenteeism is still very high and could be a reason why learning levels in numeracy, literacy and general knowledge is worsening. On average 10 per cent of teachers are not in school on any given day, with teacher absenteeism highest in Narok at 21 per cent followed closely by Nairobi at 17 per cent. In all classes, more boys than girls are absent, but children in lower primary are two times more likely to be absent from school than those in the upper primary school.

Student achievement, however, is not the only factor in play. The possible benefits of smaller classes must be weighed against the costs (Hoxby, 2002). To reduce class size in a meaningful way, school districts might need to hire more teachers, add more classes, purchase more supplies -or all of the above.

As reported by Abagi & Odipo (1997), there exists an important relationship between teacher – pupil ration and pupil's achievement. Fewer pupils per teacher give more opportunity for interaction and effective learning. Pupils therefore learn better in small classes. This situation enhances academic performance of both teachers and learners since there is increased teacher-pupil contact. This increased teacher- pupil contact increases the level of attention and participation per pupil. In situations where pupils' number per teacher is large teachers become overburdened in their efforts to have contract with each of the learners in a class. In such a lesson and where most of the learners have not acquired the concept of the lesson topic and therefore 'insufficient' learning takes place. Such scenarios more often than not end up in situations where a number of pupils in a class do not qualify for the promotion to the next class. In the year 2007 the Kenya national pupil-teacher ratio was 42.9 while in Nyanza province it was 44.7 (MoE, 2011). The study therefore, aimed at determining whether pupil- teacher ratio in Suba West Division meet the national and international standards.

2.4. Influence of schooling costs on pupil dropout

Money is needed for constructing school buildings, buying teaching and learning materials and paying salaries. A lot of money is spent on training teachers in teacher training colleges and even at the University. Their task on completing their training is to come out and promote education with the expertise they have gained from those institutions (Open University Press, 1977). Financing education is the primary responsibility of the central, local

and NGOs', private sector and community. According to economic Survey (2004), education is a major consumer of government budget. The recent statistics in education indicate an increased expenditure from 35 of public expenditure budget in 2000 to 39% in 2004 with 79% going towards administration, planning and staff salaries. The government finances education at primary school level to improve access and achieve Universal Primary Education goal.

Head teachers play a major role in the management of all school financial activities, which involve the disbursement of money. The money is obtained through various sources such as fees. According to Orlosky (1984), financial management determines the way the school is managed and whether or not the school will meet its objectives. The head teacher is responsible for budgeting, accounting and auditing functions of financial management. With the introduction of free primary education, schools get some funding from the government while parents are required to meet various other costs such as school development projects and boarding fees (Republic of Kenya, 2005).

Drawing up institutional budgets is not an optional activity. It is a legal requirement as stipulated in the educations Act Cap 211. The cash receipts must be from sources approved by the ministry. The estimated expenditures must be approved by the school management committee, KESI (2011).

Efficiency of schools in relation to financial management faces a lot of challenges. The schools mainly depend on the government to finance their activities, but in a situation where the government delays to release funds to the schools the head teachers find themselves in a hard situation in running the school. This forces them to sending students at home to bring funds. The delay in disbursement of Free Secondary Education funds was a challenge in school management as most transactions settlement time would not be met. In a study of Challenges faced by newly appointed principals in the management of public secondary schools during an interview with the principals all of them said that "Delay of Free Secondary Education funds hinders effective running of schools and it puts us in a very awkward position as managers" They all suggested that "Clear policies for disbursement be put in place and delay of disbursement be avoided at all cost". Infact the District Quality Assurance and Standards Officer said that "the delay of Free Secondary Education funds has been so frequent that it is unpredictable when funds are to be expected when in schools a situation that messes up the newly appointed principals and all principals and it is high time the government stopped delay of funds".

Delay of government subsidy implies delay in acquisition of learning facilities. The teachers would be forced to postpone or reschedule lessons thus slows down coverage of syllabus. The delay of funds delays payment of salaries, which demotivates the staff. The schools may not be able to participate in co-curricular activities because of inability to sponsor such activities.

Fee defaulting happens as a result of the high poverty index in a region, an issue experienced by all the third world countries, Kenya included. Bush and Oduro (2006), found out that new principals face serious problems created by non-payment of school fees. Leu and Byren (2005), who did a study in six sub-Saharan countries namely, Ghana, Guinea, Ethiopia, Tanzania, Uganda and Madagascar and found out that parents are reluctant to pay fees and again it is the heads who must ensure that the fees is paid. During interviews schedule with the principals and the District Quality Assurance and Standards Officer they all complained of huge fee arrears caused by poor fee payment and that was a great challenge to the newly appointed principals. Six of the principals said this was as a result of the poor economic backgrounds of the students and the high number of orphans in schools who lacked proper sources of finances. Default in paying fees reduces schools ability to acquire resources. The headteachers send pupils home to collect the unpaid fees. Such students take long before they return to school. They lose what is taught while they are away. This affects their performance in academics as individuals and school at large.

According to the Ministry of Education (1999), Head teachers must understand the importance of managing and maintaining school resources. Head teacher are charged with the responsibility of managing resource, whether tangible or intangible which include financial, physical, time, school projects and programmes and people. A budget is a carefully outlined plan for financing the desired activities of a school. The head teacher as the lead person

in planning and directing school activities must be active in determining, mobilizing and acquiring financial resources. This will help to effectively implement the school development plan.

It is a regulation from the ministry of education that schools prepare the following budgets. With this rate of expenditure, the government regards the output of education system as very important and undertakes each time to evaluate the output at all levels. In 2009, the national budget allocation to education was 216m (Daily Nation 15th, June 2008).

The increasingly prohibitive cost of schooling is the major reason parents offer for not educating or for removing children, particularly girls, from school. Almost all the students interviewed specify this as a constraint to female education. This is not surprising, given the prevailing economic crisis in the region. Poverty is widespread and affects schools and families alike. The literature indicates the extent to which parents have to cover the shortfalls due to the fiscal crisis, which has had a devastating impact on household incomes and educational systems (Asomaning and others 1994, Graham-Browne 1991, Njeuma 1993, Palme1993).

The trend to shift educational costs to parents in the name of cost sharing is especially likely to work against girls' education (Kinyanjui 1993, Namuddu, 1994). When fees were introduced in Nigeria between 1982 and 1986, primary enrollments declined from 92 percent to 75 percent (Obadina, 1993). In Ethiopia, the construction of SIDA-assisted Primary Village Schools

dependent on community contributions has been delayed or foiled because of the severe economic problems affecting local communities (TGE/UNICEF 1993). Schooling costs are considerable in Mozambique and are beyond the means of many rural and peri-urban families. A recent Study reports that most of the rural families interviewed could not imagine sending their children to schools in town to complete primary school or attend secondary schools.

Even where primary education is free, household educational expenditures can be heavy. Apart from tuition, other cost items identified in the literature include fees for registration and admission, examinations, boarding, school building fund, parent and teacher association (PTA) fees, the cost of uniforms, the provision of furniture, extra tutorials, and transportation. These costs can add up to two or three times the cost of tuition.

It is often assumed that poverty pulls down the academic performance of children in rural areas and urban slums. But the real problem is that public primary schools have become factories of mediocrity no matter who is schooling in there. The emerging evidence is that poor academic performance in public schools is not necessarily a result of poverty but largely an outcome of the absence of teachers, most of whom may be in school or even in class but are not teaching. According to a World Bank Report, Education and Health Services in Kenya: Data for Results and Accountability only 55 out of 100 teachers are in class teaching, (Uwezo Kenya, 2013).

In public schools, higher teacher absence and higher student-teacher ratio were found to determine pupil test scores. “But more time spent teaching and increased teacher test scores were found to improve pupil test scores,” said Martin. Such indicators are significant for Kenya that has invested more money on education than its neighbours. According to the World Bank, Kenya's public expenditure on education; amounts to 20 per cent of the total government expenditure, which translates to 7.2 per cent of the Gross Domestic Product. The largest share of this expenditure goes to public primary school teachers as their vote accounts to 57 per cent of total government budget on education. However, the World Bank’s Social Delivery Indicators on y Kenya show a massive disconnect between the country’s expenditure on education and learning outcomes. Gaps in teacher knowledge, little time; spent teaching and absence from classroom has experts worried (World bank Report, 2013).

Costs contribute to a child’s lack of access and attendance to primary education opportunity costs are often influential in the decision to attend school. For example; an estimated 121 million children of primary-school age arc being kept out of school to work in the fields or at home (UNICEF). For many families in developing countries the economic benefits of no primary schooling are enough to offset the opportunity cost of attending.

Besides the opportunity costs associated with education, school fees can be very expensive, especially for poor households. In rural China, families dedicate as much as a third of their income to school fees. Sometimes, the cost gets too expensive and families cannot support their children's education anymore, although the statistics disagree. “China has 108.6 million primary school students, with a 1 percent dropout rate, but experts doubt these figures because the dropout rates in rural areas appear much higher.” Although the relationship between school fees and attendance still is not perfectly clear, there is evidence to prove that cost is a factor that contributes to a child's access and attendance to primary education. The study is intended to find out the impact of school levies on school dropout in Suba West Division, Migori County and suggest possible solution to this problem. The study would investigate how schooling costs / levies influence efficiency of primary schools in Suba West Division in relations to absenteeism, low academic achievements, acquisition of facilities and dropout rates.

2.5. Impact of learning facilities on pupil academic achievement

Physical facilities are the plant facilities provided in the school in order to facilitate teaching learning process. It include school building, availability of enough rooms, proper lighting and ventilation, seating and furniture, provision of pure and safe drinking water, availability of play grounds, laboratories, writing boards, enough washrooms. In order to improve teaching learning process general cleaning and particularly the cleanliness of classrooms are necessary.

Excellent school facilities are basic ingredients for good education programmes and are very important for achieving the targets and improving the literacy rate of a country. The phenomena that some schools have surplus facilities and others lack them are an indicator of poor educational planning in schools (Khan, 2012).

Lyons (2012) documented that learning is a complex activity that supremely tests students' motivation, physical condition, teaching resources, their skills of tea clung and curriculum. All these play a vital role in a child's development. He further concluded that there was an explicit relationship between the physical characteristics of school buildings and educational outcomes. While good maintenance, modem systems, and flexible designs are clearly required. Linkages between different subject areas were growing and teachers were enhancing their multi-disciplinary capabilities. All these changes in teaching methods required changes in school facilities. The old saying “the building fits the curriculum” developed because the physical structure limited the learning experience. School facilities can be flexible enough to accommodate changing learning patterns and methods.

In Latin America, a study was conducted by Willms (2000) and he found that children whose schools lacked classroom materials and had an inadequate library were significantly more likely to show lower test scores and higher grade repetition than those whose schools were well equipped.

Fuller (1999), revealed that physical learning environments or the places in which formal learning occurs, range from relatively modem and well-equipped buildings to open-air gathering places. The quality of school facilities seems to have an indirect effect on learning, an effect that is hard to measure. Some author argued that "extant empirical evidence is inconclusive as to whether the condition of school buildings is related to higher students' achievement after taking into account student's background."Decaying environmental conditions such as peeling paint, crumbling plaster, nonfunctioning toilets, poor lighting, inadequate ventilation, and inoperative heating and cooling systems can affect the learning as well as the health and the morale of staff and students.

Cash (1993) examined the relationship between building condition and student achievement in small, rural Virginia high schools. Student scores on achievement tests, adjusted for socioeconomic status, was found to be up to 5 percent points lower in buildings with lower quality ratings. Achievement also appeared to be more directly related to cosmetic factors than to structural ones. Poorer achievement was associated with specific building condition factors such as substandard science facilities, air conditioning, locker conditions, classroom furniture, more graffiti, and noisy external environments.

Similarly, Mines' (1996) study of large, urban high schools in Virginia also found a relationship between building condition and student achievement. Indeed, Mines found that student achievement was as much as 11 percentile points lower in substandard buildings as compared to above-standard

buildings. A study of North Dakota high schools, a state selected in part because of its relatively homogeneous, rural population, also found a positive relationship between school condition (as measured by principals' survey responses) and both student achievement and student behavior (Earthman, 1995).

In order to have school programmes operating towards the achievements of desired goals, adequate physical facilities should be made available in schools. Physical facilities in primary school include; buildings such as classrooms; pit latrines; furniture, especially desks for learners to sit on; land on which other facilities create conducive learning environment within which the school community can work comfortably and effectively to achieve institutional goals and objectives. Furnishing classrooms with the appropriate furniture for example, is key to ensuring that learners are seated comfortably and are able to learn well. Children who are seated well on suitable chairs and desks or benches, will be able to acquire good skills, have good eye- contact with the chalkboard and concentrate better (MoE, 2011).

Adequate buildings such as classrooms are also essential in children learning. The availability and safety of the buildings contribute towards the creation of conducive learning environment. Physical facilities, therefore contribute to effective learning since their adequacy will lead to improved teaching and learning; increased retention of learners; improved development of a sense of

belonging among learners; and development of ownership in the parents and the school community in general (MOEST, 2004).

Research carried by California CSR programme in 1988 suggested pupil class ration 13:1 to be the lowest and 20:1 to be maximum (centre for public education). In Kenya in the year 2011, pupil class ratio was recommended to be 40:1. In 2007, the pupil textbook ratio was average with 1:3. These ratios were above international standards. Based on the government of Kenya's recommendation of pupil class ration of 40:1 and of textbook pupil ration of 1:1, this study was intended to assess the quantity and quality of physical facilities and learning materials in public primary school in Suba West Division in relation to national and international set ratios. The research would further investigate if correlation exist between physical facilities and pupils achievements in both academic and co-curricular activities.

Despite the continued investment in free primary education, the textbook ratio seems to be worsening. With Kiswahili for instance, the learner textbook ratio shifted from two children sharing a book in 2009, to three children per book last year. On class size and attendance, the report shows that the average number of pupils in classes One to Eight is 64, which is higher than the 40 recommended by the Ministry of Education. The report also paints a grim picture of infrastructure available to learners. It established that nearly all children in Nairobi and Central Province have desks whereas half of their peers in North-Eastern sit on the floor, as do those in parts of Kitui, West

Pokot and parts of Coast, Nyanza, Eastern and Western provinces. Children in public schools also continue to lack basic facilities, including toilets, clean drinking water and sanitary towels, with only four out of 10 schools providing sanitary towels to the young ladies. The study was intended to investigate the situation of learning facilities in Suba West Division in relation to set standards and situations in other areas of the republic of Kenya.

2.6 Summary of the literature review

The literature review point has shown that internal efficiency is a relationship between input (pupil) and output (graduate). Education wastage (repeaters and dropouts) is a sign of internal inefficiency and it is an apparent issue in primary education. Factors attributed to educational wastage, which originate from high pupil-teacher ratio, gender inequality, high school levies/ charges and inadequate physical facilities have also been explored. The literature review has also showed that measurement of educational output is not an easy one mainly due to the fact that they are not easily quantifiable and are not sold at market prices. The literature review has shown that efficiency of education system is influenced by many factors such as pupil-teacher ratio, gender equality, school levies/ charges, physical facilities and learning materials. These factors motivate learning hence reinforcing retention and progression variables, which culminate to passing of pupils in examination. Therefore, efforts to increase internal efficiency by reducing wastages will ensure retention and completion rates within an education cycle culminating to more

and better educated graduates reflected by good performance in national examination.

The following are gaps that have been cited in the view of literature: Educational wastage (repetition and dropout) at secondary level and not at primary sub-sector. Many studies have also concentrated on performance of schools in examinations at Secondary sub-sector and not at primary sub-sector. Little attention has been focused on the influence of internal efficiency on the performance in examinations more so in Suba West Division. Majority of the studies have focused on the general flow of pupils without many studies have concentrated on internal efficiency indicators such as considering the cohorts of these students. The present study attempted to fill the gaps by use of measurement of internal efficiency framework. It will explore the trends of internal efficiency and completion rates.

2.7. Theoretical framework

The study was guided by education production theory based on findings of Coleman Report in 1966. The report showed that socio-economic factors are more important than school variables in explaining regional and racial differences in pupil achievement. This model was criticized by other economists who developed the production model.

$$A = f(T, B, E, ...)$$

Where

A = Achievement

T = Teacher – pupil ratio

B = Book and other materials

E = Equipment

The model was further advanced by Mace John in 1979. The theory states that the output of education system in terms of graduation and completion rate depends on various factor inputs closely related to the quality and quantity of inputs especially in public primary schools and their performance there.

The education production model can be illustrated as below:

$Ts = f(S, F, C.....)$ where

Ts - is academic performance number of graduates

f – function of

S = schooling factors

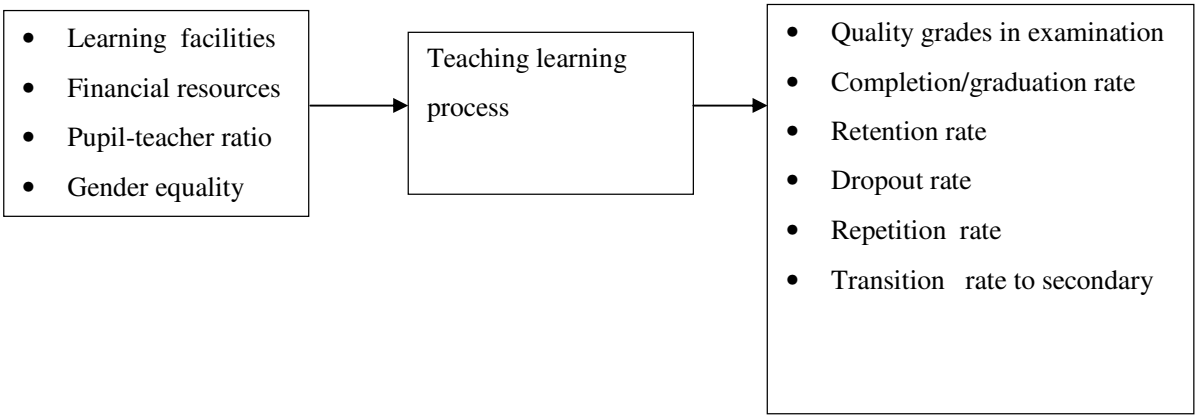
F = family background

C = students characteristics

The theory was relevant to the study because it addressed the inputs under study; pupil-teacher ratio, learning facilities (books), and expected outputs – academic achievements.

2.8. Conceptual framework

Factors which influence internal efficiency in public primary school



The independent variables are the inputs in the education system such as learning facilities, pupil-teacher ratio, gender equality and financial resources. Through education processes (teaching and learning) the inputs are used to realize the set targets which include quality grades in examinations, high completion/graduation rate, high retention rate, low dropout rates, low repetition rates and high transition rates to secondary.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter includes research design, target population, sampling techniques and sample size, research instruments, validity of the instruments, reliability of the instruments, data collection procedures and concludes by representing data analysis techniques.

3.2 Research Design

The study adopted descriptive survey design. This design entails describing, recording, analyzing and reporting conditions that exist or existed, Kothari (1985). The design provides numeric descriptions of some part of the population, explains events as they are, as they were or as they will be (Onen and Oso, 2009). Onen and Oso further states that the design is suitable for extensive research since it is economical, rapid in data collection and gives researcher ability to understand a population from part of it. The researcher considered the vast Suba West Division in terms of geographical region, large population; cost involved and time required and found the design appropriate.

3.3 Target Population and Sample Size

The target population included all the members of a real hypothetical set of people, events, or objects to which researchers wish to generalize the results of their research (Borg & Gall, 1996). The target population in this study consisted of forty five (45) public primary schools in Suba West division of

Migori district with a population of 16,058, which included teachers, pupils and Head teachers. (AEO's Office-Migori Suba West Division, 2011)

According to Krejcie and Morgan (1970) this study used a sample of 475 out of the total population of 16,058 people. This gave 95 percent confidence level with 5.0 margin of error. Accordingly, this sample was appropriate because it was above 30 percent criteria as recommended by Mulusa (1988).

3.4 Sample size and sampling technique

According to Borg and Gall (1996), sampling refers to selecting a section from a defined population with the intent that the selected group accurately represents that population. The study adopted purposive sampling technique since the head teachers, class teachers and zonal Pupils were believed to be having reliable information relevant for this study (Kombo 2009).

The researcher employed stratified sampling technique to group population into headteachers, class teachers and pupils. The schools were also stratified into two groups; the ones headed by female and ones headed by male headteachers. This would ensure equitable representation of population in the sample (Oso and Onen, 2009). There were 40 schools headed by male headteachers and 5 by female headteachers. Class teachers were 2360 while pupils were 16,058.

Further, class teachers and male headteachers were randomly selected to give each one of them an opportunity of being selected. The female headteachers

were purposively selected because the researcher believed that they had focused information about girls' education.

Omburi (2007) quotes Gay (1992) who observed that for survey research, a sample of at least 20% is good representation.

Number of schools = $5 + {}^{25}\!/_{100} \times 40 = 15$

Note that 25% was used as a balance between 20% proposed by Gay (1992) and 30% proposed by Mulusa (1988).

Number of pupils - Five classes were sampled in each school, classes four to eight pupils were grouped based on gender, then two girls and three boys selected randomly because girls were less than boys in number in all classes. In total ($15 \times 5 \times 5$) = 365 pupils: 150 girls and 225 boys. Class teachers – All class teachers of selected classes were interviewed

(15×5) = 75.

3.5 Research Instruments

The study used two instruments namely Questionnaires and observation schedule. Questionnaires were used because respondents could reach and able to read and write independently (Orodho, 2008). The questionnaires were both structured and closed to guide responses and also gave room for more information. Observation schedule was used in collecting information by way of own investigation, observation without interviewing respondents. (Orodho,

2008). In this study, observation schedule was used to collect information about physical infrastructure.

3.5.1 Validity of the Instruments

Validity is the degree to which empirical measure or several measures of the concept, accurately measure the concept, (Orodho, 2008; Wikipedia, 2008). For this study, the researcher tested content validity of the questionnaires and observations schedule by systematically examining the content to determine whether it covered a representative sample of the behavior domain to be measured. The examination of the document was based on the objectives of the study.

Wikipedia (2008), quotes Anastasi and Urbina, (1977) "that a test has content validity built into it by careful selection of which items to include". Wikipedia further quotes Foxcroft, Paterson, le Roux and Herbst (2004) who noted that by using a panel of experts to review the test specifications and the selection of items the content validity of a test can be improved. The researcher presented questionnaires and observation schedule to research supervisors for examination and approval. Their recommendations were incorporated in the final instruments.

3.5.2 Reliability of the Instruments

Reliability has been defined as the degree of consistency that the instrument or procedure demonstrates (Best and Kahn, 1993). Kerlinger (1986), sees

reliability as the absence of errors of measurement or the accuracy or precision of a measuring instrument. It is also seen as the consistency of a research instrument in producing the expected results. The researcher employed test – retest technique to determine reliability of the questionnaires. The developed instruments (questionnaires) were given to tow headteachers, eight class teachers and twenty pupils (not the ones who were included in the main study). The answered questionnaires were administered to the same group after a period of two weeks.

The questionnaire responses were once more scored manually. A comparison of responses obtained in the two tests was made using Pearson's Product Moment formula;

$$\text{Rho} = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{\{N\sum x^2 - (\sum x)^2\}\{N(\sum y^2) - (\sum y)^2\}}}$$

Where

N is number of respondents

X is test 1

Y is test 2

$\sum$ is sum of

For the test-retest computed correlation co-efficient of 0.82 was established, confirming that the contents of the questionnaire were consistent in eliciting the same responses every time the instrument was administered.

3.6 Data Collection Procedures

The researcher sought a research permit from The National Council of Science and Technology. The researcher also sought clearance from Migori District Education Office. The ethical standards were adhered to, the purpose of the study was explained to respondents and the respondents consent sought. The research instruments were administered in person.

3.7 Data analysis techniques

The gathered instruments will be validated, edited and the coded (Mugenda and Mugenda, 1999). Data from questionnaires and observation schedule constituting the qualitative data in the form of opinions were transcribed. The qualitative data were quantified where possible. Finally, data coding was done whereby categories of responses were identified, classified and recorded on prepared analysis was then performed using both qualitative and quantitative techniques.

Quantitative data was analyzed using percentages, frequency distribution tables, pie-charts, bar graphs, mean and correlation coefficients (Spearman's Rank Order Correlation). Quantitative data (which would not be quantified such as personal opinions) were analyzed as guided by objectives of the study; they were arranged in themes while establishing patterns of relationships among the responses. The researcher analyzed the data by use of the Statistical Package for Social Science (SPSS).

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

The researcher used two types documents to collect data, questionnaires and observation schedule. The questionnaires were of two categories, one for head teachers and the other for pupils. The observation schedule was used to gather information about the physical facilities in the schools. The questionnaires were administered by the researcher in person, they were issued to 15 head teachers of the primary schools that were randomly selected. They filled and returned the questionnaire immediately. The pupils were also issued with the questionnaires, five pupils per class from class four to eight, a total of 375 pupils. The observation schedule was filled by the researcher based on the observations made.

4.2. Questionnaire return rate

The questionnaires were administered to 15 headteachers, five female headteachers and ten male headteachers. All female headteachers filled and returned questionnaires. Out of ten male headteachers, 9 returned questionnaires while one did not because he had to attend to an official duty at the District Education Officer's office.

Out of 375 pupils interviewed 364 filled questionnaires and returned, recording 97.07%. Among the pupil respondents 124 (34%) were girls while 240 (66%) were boys.

Among the 75 class teachers interviewed 13 were female while 62 were male. Of the 75 questionnaires administered, 72 (96%) were returned.

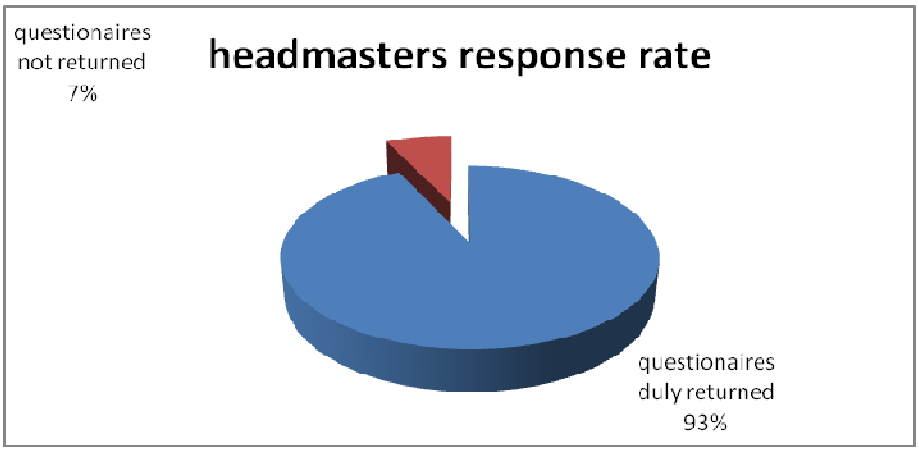
The average questionnaire return rate was

$$\frac{93.33 + 97.67 + 96}{3}$$

$$= 95.67\%.$$

This return rate was considered by researcher to be high enough to conclude that the respondents were ready to co-operate in giving information for success of the research.

Figure 4.1: Response rate (Headteachers)



The return rate was below anticipated 100%. However, this rate shows that the headteachers in these schools were co-operative in this research giving researcher confidence of attaining the research goal. A total of 375 pupils were interviewed/provided with questionnaires. Out of this number, 364 returned

the questionnaires, which were filled correctly (97.07%) below100% anticipated.

4.2.1 Demographic Information

The composition of respondents was analyzed interns of gender and age. Five headteachers were females; representing 36.04% while 9 (64.29%) were males as shown in the figure below.

4.2.2. Respondent's age

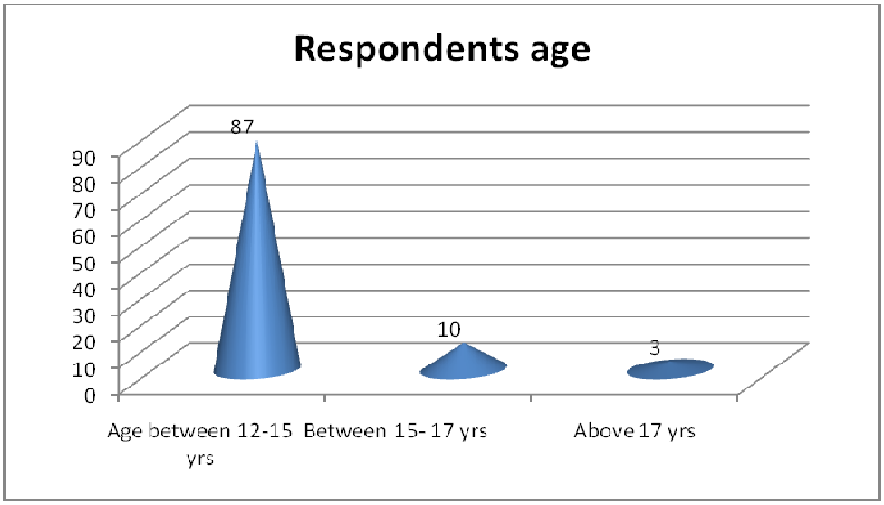
Productivity of human capital is believed to increase with level of experience, which is based on age and varied working environments. The table below shows ages of the headteachers who were interviewed.

Table 4.1: Respondent age (Head teachers)

Respondents Age	**Frequency**	**Percentage (%)**
31 – 35 Years	0	0
36-40 Years	2	14
41-45 Years	4	29
46 – 50 Years	6	43
Above 50 Years	2	14
Total	**14**	**100**

The table shows that none of the head teachers age fell between 31-35 years, 14% were in age bracket 36-40 years, 29% were in age bracket 41-45, 43% in bracket 46-50 years while 14% were above 50 years of age. This shows that most headteachers were in active productive age and were experienced. At the age of 31-35years some teachers were still serving on probation or had not matured to hold positions of responsibility, a head teacher reported. A class teacher who was interviewed observed that majority of the headteachers who were advanced in age were busy preparing for retirement. They were involved in businesses than in handling school matters.

Figure 4.2 Respondent age (pupils)



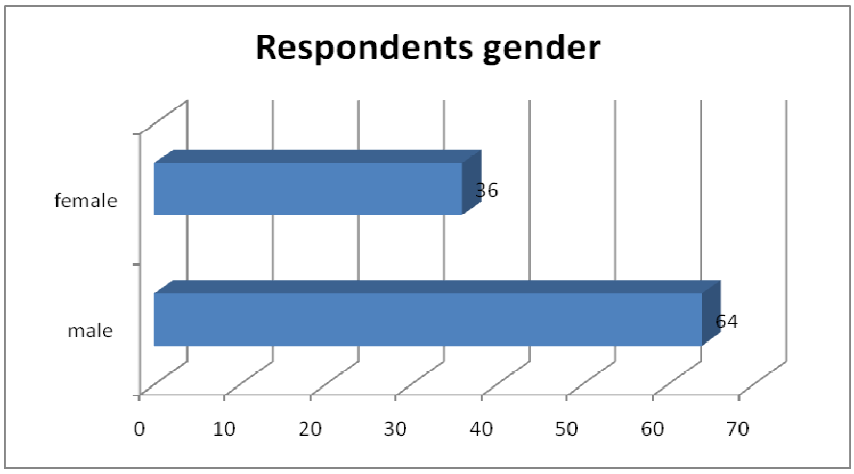
The figure above shows distribution ages of pupil respondents. Among 364 respondents, 87% had ages between 12years and 15 years. However, 13% of the respondents were too old to be in primary schools. Their presence was reported by headteachers to be as a result of FPE while three among the pupils in this category reported that they had been made to repeat classes severally.

Two girls reported that they had been out of schools because of pregnancy and marriage but came back when they realized marriage life was not easy without good level of education and income. The finding of this research agree with world bank report on 23rd July 2013 that many children are older than expected for their class level, including 40 percent of children in class 2, and 60 per cent of children in class 7.

The extent to which gender equality has been achieved in Suba West Division

The findings of the research based on gender parity were as shown in the figures below.

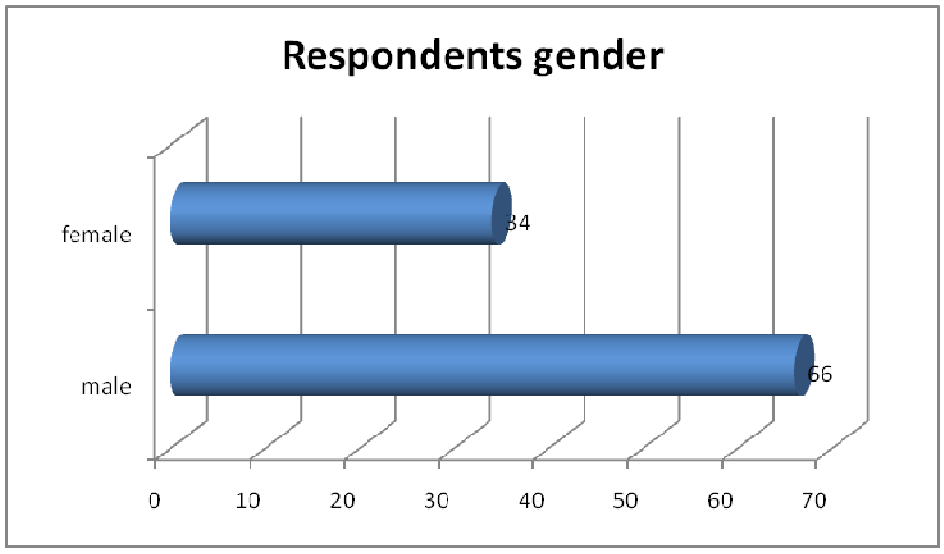
Figure 4.3: Respondent's Gender (Headteachers)



The figure shows that there are more male headteachers than female teachers. This trend contradicts the policy of gender party, which is one of the pillars of Millennium Development Goals.

Two female headteachers interviewed attributed the imbalance to remoteness of the division female teachers were seeking transfers to work in Migori town and would decline to take positions of responsibility. The other three female head teachers reported that literacy level in the region was low, especially among girls. There were few female teachers either originating from the region or married. The area education officer (AEO) reported that it was not easy to get a female teacher to be deployed as deputy head teacher or head teacher. Among the pupils respondents 124 (34%) were girls whereas 240 (66%) were boys.

Figure 4.4 Respondent Gender (pupils)



Eight (57.14%) headteachers reported that girl –child enrolment was low, especially in the upper classes because of early marriage, particularly in the neighboring country, Tanzania. Five male headteachers indicated that lack of role models and exposure affected girl child education negatively. The report

given by one female teacher was as follows; “the girls in these schools are crude, uninformed and immoral. They do not spare any boy or man including their teachers.”Averagely eight girl’s dropout of school because of pregnancy.

The developed nations such as Canada and some Sub-Sahara African Countries like Senegal, Uganda and Rwanda have met MDG (3) by recording above 100% gender parity indices (World Bank, 2003). Kenya recorded 94% in the year 2007 while Nyanza Province recorded 100% in the same year (MoE, 2011). The research findings show lower gender parity in Suba West Division, 56% for headteachers, 60% for teachers and 51% for pupils. Average GPI was 55.7%. High level of gender disparity noted in pupil enrolment, posting of teachers, leadership positions (headteachers) and pupil achievements. The quality grades in KCPE results (2012) were dominated by male pupils (73.7%). This indicated high level of inefficiency.

The gender parity indices were as follows;

Headteachers = 0.56

Teachers = 0.6

Pupils = 0.51

Average = 0.557

This index is below the index of Suba East, neighboring division within urban area, which recorded 0.84. Compared to the year 2007-gender parity indices Suba West Division ranks even below North Eastern Province, which recorded an index of 0.63. This trend goes against recommendation of SACMEQ in Policy Brief Number 6 (2011). There is need for campaign to promote gender

equality. The study revealed that four schools in Suba west Division do not have female teachers at all. Two female pupils reported that they were discouraged since they did not have role models.

4.3. Correlation between Pupil -teacher ratio and pupils' academic achievement

The pupil – teacher ratio refers to number of pupils handled by a teacher in school at a time. It is obtained by dividing the total pupil enrolment by number of teachers. According to Policy Brief Number 2 (2011) the national benchmark for pupil teacher ratio was 40:1. This was set to ensure quality education. The pupil – teacher ratio was also looked at in terms of professional qualifications, experience and the number per subject. In Suba West Division the pupil – teacher ratios were as shown in the table below;

4.3.1. Headteachers professional qualification

According to Kenya's constitutions (2010), in chapter 4, every child has a right to education and to be taught by qualified teachers. The human capital development improves productivity (Psacharopoulos, 1985).

Table 4.2: Highest Professional Qualification

Professional Qualifications	Frequency	Percentage (%)
M.Ed.	1	7
B.Ed.	5	36
Diploma	2	14
P1	6	43
Total	**14**	**100**

The study revealed that majority of the respondents had attained P1 level of education as their highest level of education, from the table above 43 percent of the respondents indicated that they had attained P1 level as their highest level of education, 36 percent of the respondent indicated that they had attained a degree in education, 14 percent indicated that they had attained diploma level of education, whereas 7 percent indicated that they had attained a master's in education, this is an indication that most of the head teachers had attained P1 as their highest level of education and were qualified enough to enhance internal efficiency in the schools in terms of financial management, physical infrastructures and effective teachers staffing. However, the qualification of head teacher in the division do not match their output in terms of KCPE results, retention of pupils in schools, public relations and general administration. A class teacher indicated that most of the headteachers were unprofessional in handling pupils, parents and teachers. Their approaches to issues were poor and discouraged the stakeholders.

4.4. Experience of Headteacher

Table 4.3: Experience of Head teacher

Years of Experience	Frequency	Percentage (%)
1 – 5 Years	2	14
6-10 Years	4	29
11-15 Years	5	36
16 – 20 Years	3	21
Over 20 Years	0	0
Total	**14**	**100**

It was revealed that majority of the respondent had served for between 11 to 15 years as head teachers as shown by 36%, 29% indicated to have served as head teachers for a duration of 6 to 10 years, 21% also indicated to have been head teachers for a duration between 16 to 20 years. Those who indicated to be head teachers for duration of 1 to 5 years were 14% and none indicated to have worked as a head teacher for more than 20 years. This clearly shows that majority of the respondents had a vast experience as head teachers and in their respective schools and had gained more knowledge in regard to internal efficiencies in their school running. The headteachers in the division had profession qualifications and experience in line with the requirements of the Ministry of Education (2003) hence should provide quality services.

Table 4.4 Pupil teacher ratio

Teacher Pupil Ratio	Frequency	Percentage (%)
Below 20: 1	0	0
20: 1 – 29:1	0	0
30: 1- 39:1	2	14.28
40:1 – 49:1	9	64.29
Above 50:1	3	21.43
Total	**14**	**100**

From the table above, the study established that majority of the respondents indicated that their schools had a teacher pupil ratio of above 50:1 as shown by 21.43%, 64.29% indicated that their schools had a ratio between 40:1 and 49:1 while 14.28 percent indicated that the schools had between 30:1 and 39:1 as pupils- teacher ratios. This shows that most of the schools had huge classes and for the teachers to effectively deliver had to move an extra time either by creating more time to fully interact with the pupils who needed special attention.

The ratio in the table was above national benchmark 40:1. The large number of pupils per teacher reduced the attention a teacher would be given each pupil. The headteachers reported that teachers were overworked and could not effectively mark pupils work. They were taking averagely two days to mark and return the books. This reduces quality of service provided by teachers.

The study went further in determining the categories of trained teachers in the sampled schools, the findings were presented as follows;

Table 4.5: Adequacy of trained teachers

Adequacy of Trained Teachers	Frequency	Percentage(%)
Are Inadequate	12	86
Are Adequate	2	14
Are More Than Adequate	0	0
Total	**14**	**100**

It was established that majority of the respondents indicated that the number of trained teachers was inadequate as shown by 86%,14% of the respondents indicated that their schools had adequate trained teachers while as none indicated that they had more than adequate trained teachers. This shows that these schools had few trained teachers and the government needs to do something in regard to this problem. The inadequacy of trained teachers forced school management committee to hire untrained teachers who had difficulties in interpreting the syllabus and preparation of professional records. The incompetency of such untrained teachers lowered morale of learners hence, poor results in internal exams and KCPE.

Table 4.6: Number of Teachers

Number of Teachers	Frequency	Percentage (%)
Less Than 7	3	21
Less Than 8	7	50
8	3	21
More Than 8	1	7
Total	**14**	**100**

Majority of the respondents indicated that their schools had less than 8 teachers as shown by 50%,21% of the respondents indicated that their schools had exactly 8 teachers and less than 7 teachers respectively while only 7% indicated that their schools had more than 8 teachers in total. This is a clear indication that majority of these public schools had less than 8 teachers. Teacher's play a significant role in influencing the overall school performance and with these schools having less than eight teachers is a big challenge to the management of these public schools. Poor performance can also be related to this since these teachers have to carry a huge work load of a very huge class therefore being put in a situation whereby effective delivery is a challenge in these schools.

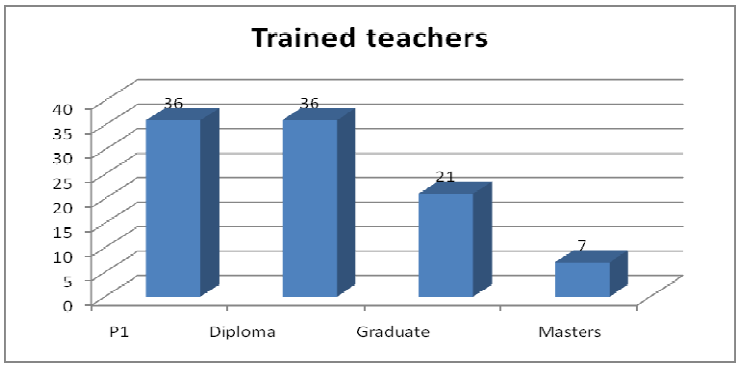
Table 4.7: Adequacy of teachers in every subject

Teachers' In Every Subject	Frequency	Percentage (%)
Adequate	93	26
Inadequate	263	72
More than adequate	8	2
Total	**364**	**100**

It was revealed that majority of the respondents indicated that teachers in every subject were inadequate as shown by 72%,26% indicated that they were adequate while as only 2% who indicated that they were more than adequate. This shows that teachers were not adequate in the schools and the Teacher's Service Commission should take this issue with great magnitude to enhance effective and efficient knowledge delivery to the pupils.

Poor performance in KCPE was blamed on understaffing. The level of training of the few teacher available was investigated and reported as in the figure below;

Figure 4.5: Categories of Trained Teachers



Inadequate training was reported as one of the major reasons behind schools inefficiencies and poor performance in KCPE. The schools have failed to solve the problem of understaffing by sourcing for funds to employ other teachers. The table below shows the sources of funds used to employ such teachers.

Table 4.8: Sources of funds to bridge teacher staffing gap

Source of funds	Frequency	Percentage (%)
No Action	0	0
PTA Teachers	11	79
Sponsors	3	21
Volunteers	0	0
Total	**14**	**100**

It was established that majority of the respondents indicated that their schools employed teachers through their Parents Teachers Association as shown by 79%,21% indicated that they look for sponsors who help them in paying salaries for the extra teachers employed and neither of the respondents indicated that they took no action nor looked for volunteers. This shows that teachers and parents have the schools interest at heart and that's the reason why they contribute some amount from their pockets to hire extra teachers for the benefits of their children performance. On the school performance in KCPE in relation to the teachers staffing, the research established that those

schools with inadequate staffing recorded a mean score of less than 250 in the KCPE but those schools which were adequately staffed reported a mean scores of between 259.4 and 267.3. This shows that adequate staffing and a lower pupil-teachers ratio will lead to improved performance in KCPE. The research revealed that among the teachers employed by School Management Committees (SMC), 42.7% were untrained. Such teachers are not qualified to handle pupils therefore, their outputs are low. The resources used to hire them do not generate desired returns, hence wastage is realized. This misuse of resources leads to inefficiency in school.

Another form of inefficiency reported by pupils was lack of commitment among teachers. They reported that a good number of teachers were irregular in class attendance. They either fail to report to school or they just sit in the staffroom. The table below shows teachers attendance as reported by pupils.

Table 4.9: Teacher's attendance

Other Sources	**Frequency**	**Percentage(%)**
All their lessons every day	46	13
Some lessons every day	181	50
Almost all lessons every day	137	38
Total	**364**	**100**

It was established that majority of the respondents were of the opinion that teachers attended some lessons every day as shown by 50%,38% indicated that some teachers attended almost all lessons every day and finally 13 percent indicated that teachers attended all lessons every day. This is an indication that teachers in some cases skipped some lessons and this could be attributed to the poor performance in these schools. Teacher's attendance is very vital in schools especially primary schools whereby the pupils need a trained teacher to sharpen their skills.

Table 4.10: Schools mean score in 2012 KCPE

Mean score	Below 250 marks	251-300 marks	301-400 marks	Above 400 marks
Number of schools	26	19	Nil	Nil
Percentage	57.78	42.22	0	0

Source: AEO's office, SubaWest Division

Table 4.11: Pupil Teacher ratio

Ratio	20:1	30:1	40:1	50:1	Above 50:1
Number of schools	Nil	Nil	4	13	28
Percentage	0	0	8.89	28.89	62.22

Source: AEO's office, SubaWest Division

The table below shows schools' means score in the year 2012 KCPE results and the pupil teachers' ratio in Suba west division. The researcher used information in the two tables to investigate whether there was correlation between pupil- teacher ratio and performance in KCPE. The correlation coefficient was calculated using Spearman's rank order correlation formula.

Table 4.12: Spearman's rank correlation coefficients

School	Mean score	Pupil teacher ratio	Rank 1	Rank 2	Deviation (D)	D^2
A	261.3	33:1	2	2	0	0
B	240.6	40:1	8	4	4	
C	252.8	42:1	5	6	1	1
D	231.9	51:1	13	12	1	1
E	228.1	49:1	14	11	3	9
F	273.4	41:1	1	5	4	16
G	239.4	47:1	9	9	0	0
H	244.4	56:1	7	14	7	49
I	254.7	32:1	4	1	3	9
J	233.6	43:1	12	7	5	25
K	248.2	52:1	6	13	7	49
L	237.3	47:1	10	10	0	0
M	255.4	39:1	3	3	0	0
N	236.2	46:1	11	8	3	9
Total						184

$$e = 1 - \frac{6\sum D^2}{N(N^2-1)}$$

$$= 1 - \frac{6 \text{ x } 184}{14(14^2-1)} = 0.5956$$

The correlation coefficient of 0.5956 shows significant relationship between mean score in KCPE and pupil teacher ratio. The lower the pupil teacher ratio the higher the mean score in KCPE in Suba west division.

The head teacher (56.3%) attributed poor performance in KCPE to serious understaffing and lack of proper training. This agrees with findings of Wamai (1991) which established that Harambee schools which relied mainly on untrained teachers had a failure rate of 37.7% in the national examinations as compared to 20% for the government schools which were manned by trained teachers.

In this research only 33.33% of the schools had mean scores above pass mark (250marks) while 66.67% failed to hit pass mark. This failure rate is almost double the 1991 finding. The greater the number of untrained teachers, the poorer is the performance and subsequent order of merit ranking.

Table 4.13: Mean Score per subject in KCPE

Mean Score Per Subject	Frequency	Percentage(%)
Is the same	13	4
Improves	197	54
Declining	154	42
Total	**364**	**100**

From the research it was established that majority of the respondents indicated that the mean score was more than it used to be earlier as shown by 50%, 42% indicated the mean was declining while as 4% indicated that the mean had not changed at all. This shows that there was some improvement recorded but more needs to be done to enhance higher performances in these public schools in Suba Division. The research established that the respondents indicated that the reasons behind their schools poor performances were inadequate staffing, some teachers were not trained hence not competent to handle some subjects. Absenteeism among teachers and inadequate learning materials such as text books were also other problem noted in the research. Finally, parents were not committed and forced pupils to work on farms and herd animals. There was also lack of exposure to learning environment through educational tours.

4.5. Relationship between schooling costs and dropout rate

The schools mainly depend on the government to finance its activities, but in a situation where the government delays to release funds to the schools the headteachers find themselves in a hard situation in running the school. This forces them to sending pupils/students at home to bring funds (Chrisantous, 2013).The findings of this research agree with the findings of Chrisantous (2013). To find how often pupils are sent home to bring money the pupils responded as per the table below:

Table 4.14: Frequency of sending pupil for money

No. of times sent home	Frequency	Percentage(%)
Always	52	60.6
Rarely	226	29.8
Not at all	86	9.6
Total	**364**	**100**

It was established that the respondents were rarely sent home to home to bring money for financing school programmes as shown by 61%, 30% indicated that they had never been sent home to bring money to finance school programmes while as only 9% who indicated that they were always sent home to bring money to finance school programmes. From the table there is evidence that pupils are sent home for money to run school programme.

The researcher further investigated how long the pupils take at home when sent for money. Their responses rate in table 4.15

Table 4.15 Duration stayed out of school

Duration stayed home	Frequency	Percentage(%)
Less than one week	183	50
One week	90	25
More than one week	29	8
Total	**302**	**83**

Majority of the respondents indicated to have stayed at home for less than a week as shown by 50%, 25% indicated one week while only 8% who indicated to have stayed for more than a week. This shows that such people who stays at home for longer periods are likely to drop out. Even those who stay at home for a week lose a lot in terms of syllabus coverage and may not perform well in exams. This may result to high dropout rate.

According to the Ministry of Education (1999) head teacher must understand the importance of managing and maintaining school resources. Drawing up of budgets is a legal requirement as stipulated in Education Act Cap 211. This requires head teachers to be knowledgeable in budgeting and book-keeping. In Suba West Division, the level of training of head teachers in financial management is below expectations of the Ministry of Education Table 4.16 shows the responses from the 14 head teachers.

Table 4.16: The head teachers' training and financial management

Head Teacher Training	**Frequency**	**Percentage(%)**
Inadequate	11	79
Adequate	3	21
More than adequate	0	0
Total	**14**	**100**

From the research 79% of the respondents indicated that they were not adequately trained by the ministry while only 21% indicated to be adequately trained on the various methodologies of handling finances in their schools. Misappropriation and embezzlement reported was attributed to poor training of the headmasters. Due to poor management of the funds, employees were not paid on time and the required materials were not also purchased to aid learning. Financial reports are never presented to parents, which has made the headteachers either to be transferred to other schools or relived of their responsibilities. The discontented parents withdraw children from the schools if the head teachers are not transferred.

Table 4.17: Adequacy of Free Primary Education Fund

Funds Received	**Frequency**	**Percentage(%)**
Insufficient	12	86
Sufficient	2	14
More Than Sufficient	0	0
Total	**14**	**100**

From the findings 86 % of the respondents indicated that fund received were in sufficient and only 14% indicated that the funds were sufficient. This is an indication that inadequate funds was one of the major reasons behind poor results. This has forced the head teachers to levy extra charges on pupils. Pupils waste a lot of time at home waiting for parents to raise the money or

they end up dropping out of school completely. The government sends the funds with specific purposes aimed at improving quality of service. The research revealed that 78.57% of the head teachers occasionally divert some funds to other areas of concern. This hampers the achievement of objectives of FPE, hence inefficiency.

This study sought to know ways in which primary schools in Suba West Division source for funds to subsidize FPE. The head teachers gave responses as follows:

Table 4.18: Sources of funds to subsidize FPE

Other sources	**Frequency**	**Percentage(%)**
Parents/community	11	79
NGOs'/ agencies	1	7
Churches	2	14
Total	**14**	**100**

From the research majority of the respondents indicated that parents and the community took the largest share in supplementing the FPE funds as shown by 79%,churches also played a significant role as they contributed also a portion and this was represented by 14% and finally the NGOs as shown by 7%. The funds from PTA and sponsor churches are not enough to hire qualified (trained) teachers and hence the schools would go for form four school leavers who are yet to join training institutions forming the bulk of teaching staff. This

justifies the high levels of indiscipline among the pupils and poor performance in KCPE.

The study further established that poor financial management is a strong cause of pupil's dropouts. This is because majority of the pupils dropping out of the school are unable to afford the basic requirements in the schools such as the school uniform, geometrical sets, sanitary towels among others. In adequacy of finances leads to sharing of learning resources which discourage pupils. Embezzlement of funds, misappropriation and failure of the head teacher to give financial reports regularly discourage some parents who end up transferring their children to other schools. The findings of this research concur with the findings of Chisantous (2013) that in addition to funding to meet the statutory requirements placed upon schools and to take account of their individual needs, schools need extra funding to enable effective teaching and learning. As a result of poor financial management, schools were unable to provide pupils with basic materials such as sanitary towels. The table below shows responses of pupils the issue of sanitary towels.

The objective of Universal Primary Education is 100% enrolment and 100% completion of primary school course. The government commits a lot of money f or success of the programme and achievement of the goal MoE (2003). The research revealed that completion rate in the division was 73.8% below the Nyanza rate of 80.95% and national rate of 81% in the year 2007. Responses from pupils indicated that 4.15% of pupils dropped out of school based on last

year's enrolment, with girls recoding 4.36%. Survival rate was 79.2% while transition to secondary school rate, based on 2012 candidates was 46.4%.

The teachers and pupils indicated that dropout rate was high because of high poverty levels. Where pupils were sent home for examination fees and other charges, a good number were not returning to school immediately, about 5% would disappear. This trend affected syllabus coverage and pupils performance, resulting in high repetition and dropout rates, indicating high level of inefficiency in the division. The finding of this research agree with findings of Obadina, (1993) in Nigeria and Kinyanjui, (1993) that increasing cost of schooling leads to decline in pupil's access to school.

4.6. Impact of learning facilities on pupils achievements

The research sought to investigate the impact of learning materials and physical facilities on pupil's achievements in academic and co-curricular activities. According to Ndala (2006), the quality and availability of learning and teaching materials in Sub-Sahara Africa is evidently a problem. The finding of this research agrees with Ndala's findings.

The head teachers gave responses as follows;

Table 4.19: The Pupils Latrine Ratio (boys)

Pupils Latrine Ratio	Frequency	Percentage(%)
Boys: Less Than 30:1	0	0
30: 1	3	21
More Than 30:1	11	79
Total	**14**	**100**

Table 4.20: The Pupils Latrine Ratio (girls)

Pupils Latrine Ratio	Frequency	Percentage(%)
Less than 30:1	4	28.5
30: 1	7	50.0
More Than 30:1	3	21.43
Total	**14**	**100**

From the study it was established that majority of the respondents indicated that the pupils latrine ratio was more than 30:1 as shown by 79% while as only 21% indicated that the pupils latrine ratio was exactly in the ratio of 30:1.

Table 4.21: Access to the latrines

Latrines waiting	Frequency	Percentage(%)
Always	276	76
Rarely	72	20
Not at all	16	4
Total	**364**	**100**

From the study it was established that majority of the respondents indicated that they always wait for other pupils in order to access the latrines as shown by 76%,20% indicated that they rarely wait for other pupils and only 4% indicated not at all. Pupils waste a lot of time as they wait for each other and at times punished for being late for classes. Majority of the schools in this region fail to reach the ministry of education threshold of 30:1 for boys and 25:1 for girls

In general, the schools in Suba division did not have adequate latrines. Pupils waste a lot of time as they wait for each other and at times punished for being late for classes. Majority of the schools in this region fails to reach the Ministry Of Education threshold of 30:1 for boys and 25:1 for girls.The national benchmark for boys- latrine ration is 30:1 while girls' latrine ration is 25:1 (Policy Brief 2012). The findings of this research show that schools in Suba West Division have shortage in terms of latrines.A good school environment should provide enough latrines to reduce stress pupils go through as they wait for one another.

Table 4.22: Pupil- desk ratio

Desk ratio	**Frequency**	**Percentage(%)**
2:1	26	7
3:1	117	32
More than 3:1	221	61
Total	**364**	**100**

From the research it was established that majority of the respondents indicated that the ratio was more 3:1 as shown by 61%,32% indicated that the ratio was 3:1 and finally 7% indicated that the ratio is 2:1.This shows that the classes are overcrowded and hence not favourable environment for pupils learning. The school management should come up with strategies of getting more funds from CDF and other nongovernmental organizations. This would also include looking for donors who may chip in and may provide adequate infrastructures to enhance smooth running of schools and creating a conducive environment for the young pupils in these schools. If 76% of pupils always wait to access latrine then a lot of time is wasted, assign of inefficiency.

The set national benchmark for class size is 45 (Policy Brief, 2011). The researcher sought to know whether class sizes of schools in Suba West Division comply with this benchmark. The responses of head teachers were as follows;

Table 4.23: The Pupils classroom Ratio

Pupils Classroom Ratio	**Frequency**	**Percentage(%)**
Less Than 40:1	2	14
40: 1	3	21
More Than 40:1	9	64
Total	**14**	**100**

From the research majority of the respondents indicated that the ratio was more than 40:1 as shown by 64%,21% indicated that the ratio was exactly 40:1 while only14% indicated that their schools ratio was less than 4:1. Majority of these classes were fairly done, some did not have windows, others were neither plastered nor painted. This shows that the learning environment was not conducive and this large ratio lead to congestion in classes. To explain the reason behind large class sizes 8 head teachers (57.14%) attributed it to free primary education funds, 4 head teachers (28.57%) attributed it to repetition of classes while 2(14.29%) attributed it to awareness about importance of education.

The distances between desks were also given as below;

Table 4.24: The distance between our desks in class is

Distance between lockers	**Frequency**	**Percentage(%)**
1ft	159	44
2ft	103	28
3 feet	84	23
More than 3 ft	18	5
Total	**364**	**100**

From the study it was established that majority of the respondents indicated that distance between lockers were one foot as shown by 43%, 28% indicated a distance of two feet, 23% indicated a distance of 3 feet while 5% indicated a

distance more than 3 feet. This shows that the classes are overcrowded and pupils may not have enough space to do their personal studies.

The researcher sought to know the number of pupils repeating each class visited. The pupils responded as per the table below;

Table 4.25: Number of pupils repeating class in class

Students repeating	Frequency	Percentage(%)
Between 5-10	58	16
between 10- 15	127	35
above 15	179	49
Total	**364**	**100**

On the number of pupils repeating in each class the study established that majority of the respondents indicated that those repeating were above 15 as shown by a 49%, 35% indicated between 10-15 while as 16% indicated between 5-10.This shows that there is high repetition rate on level in these schools meaning that majority of the pupils did not achieve the pass mark to move to the next class. These large numbers of pupils also cause their respective classes to be overcrowded.

On the respondents opinions on the size and quantity of infrastructures in their school in relation to pupil's repetition the study found out that majority of the classes were overcrowded and the space between their desks was barely one feet. This is an indication that the schools have inadequate facilities and the high repetition rate worsens the situation. The stress caused by repetition may

force some pupils to drop out of school or they perform poorly in exams due to stress.

Frequency of assessment of physical facilities by quality assurance and standard officials.

Table 4.27: Physical facilities assessment

Physical Facilities Assessment	Frequency	Percentage(%)
Always	6	43
Rarely	8	57
Not At All	0	0
Total	**14**	**100**

From the research majority of the respondents indicated that the physical facility assessment was rarely done as shown by 57% and only 43% who indicated that it was always done. This shows that Health Officers and Quality Assurance and Standards officers from (MOE) have been sleeping in their jobs and these are the reports that they could be presenting to the ministry to facilitate increase in these schools funding.

The objective of Free Primary Education (FPE) was to reduce pupil text book ratio to 1:1 which concurs with national benchmark in Policy Brief KE. 09/2012E.The researcher sought to know whether this target has been achieved in Suba West division. The records obtained from head teachers were tabulated as sown below;

Table 4.28 Pupil text book ratio

Text book ratio	Frequency	Percentage(%)
1: 1	47	13
2: 1	78	21
3:1	143	39
More than 3:1	96	26
Total	**364**	**100**

Majority of the respondents indicated that the text book ratio is 3:1 as shown by 39%,26% indicated that the ratio was more than 3:1,21% indicated that the ratio was 2:1 while 13% indicated that the ratio was 1:1.This shows that the ratio is not favourable for effective pupils' learning. The school needs to invest on books since it's the only way out of conveying knowledge to young ones when the teachers are not in the vicinity.

The researcher used observation schedule to record aspects of the facilities that were used to judge their qualities.

The researcher visited 75 classrooms, five per school.

Conditions of physical facilities

Aspect	Condition	No. of classes	Percentage (%)
Floor	Plastered (cemented)	30	40
	Loose	45	60
Walls	Mud	Nil	0
	Bricks but not plastered	54	72
	Plastered	21	28
	Painted	13	17.33
Roof	Grass thatched	Nil	0
	Iron sheets	75	100
	Asbestos	Nil	0
Windows	Wooden	23	30.67
	Window panes	10	13.33
	open	42	56

Latrines

All schools had pit-latrines for both pupils and teachers

Play grounds

All schools had enough land to accommodate basic pitches, football, volleyball and netball.

Sources of water

All schools had one water tank each. However, the tanks were not sufficient to serve all pupils and teachers. Thirteen schools out of fifteen 86.67% were fetching water from the rivers while 2 were fetching from boreholes. The water from the river was meant to prepare teachers meals but pupils were carrying water for drinking from home when the tanks were dry.

Source of power

Out of 15 schools visited only 4 (26.67%) had electricity.

The objective of study was to investigate the impact of physical infrastructure and learning materials on pupils' achievements. The research revealed that the average grade repetition rate was 33.33%, implying that in average class of 45. Pupils, 15 are repeating the grade. This contradicts the government policy and target of 100% completion rate by 2010.The research also revealed that classrooms were overcrowded; a room meant for 45 pupils was containing averagely 54 pupils, desk meant for two pupils was being used by 3 or 4 pupils. When facilities are overstretched the rate at which pupils learn decreases, for example, a pupil possess textbook for a shorter time when they share than when using it alone. This reduces output of education system, hence high levels of inefficiency in the division in terms of educational service provision. These findings agree with findings of Munguyu (2008) in Embakasi division, Maengwe (1985).

The findings of the research revealed that the conditions of learning facilities in the division are below international standards (World Bank, 2003) and national standards (MoE, 2011). These conditions demoralize both pupils and teachers, leading to poor achievements in academics and co-curricular activities.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations for the research. The prime objective of the research was to investigate the factors influencing internal efficiency of public primary schools in Suba West Division of Migori County. The specific objectives of the study were to determine extent to which gender equality has been achieved in public primary school, to determine correlation between pupil- teacher ratio and pupils' achievement in examination, to investigate the relationship between school financing/costs and dropout rate and to assess the impact of learning materials and physical facilities on pupils' achievements in both academic and co-curricular activities in Suba West Division, Migori County.

5.2 Summary of the study

The purpose of this study was to investigate the factors influencing internal efficiency of public primary schools in Suba West Division of Migori County. The objectives of the study were to determine extent to which gender equality has been achieved in public primary school, to determine correlation between pupil- teacher ratio and pupils' achievement in examination, to investigate the relationship between school financing/costs and dropout rate and to assess the impact of learning materials and physical facilities on pupils' achievements in both academic and co-curricular activities in Suba West Division, Migori County. Descriptive research design was adopted in the study. The target

population of this study consisted of all the public primary schools in Suba West Division of Migori District. Random sampling was used to select a sample of 15 schools head teachers, and 364 pupils, Primary data was used in the study. Data collection instrument was by administering a semi-structured questionnaire that had both closed and open-ended questions. The quantitative data obtained was presented using descriptive statistics such as percentages, frequency distribution tables, and using inferential statistics. Content analysis was used to present the qualitative data, which was later presented in prose form. The research revealed that there is gender disparity in the division in terms of access and achievements. Pupil- teacher ratio is below the national and international set target. Many pupils dropout of school because of the extra charges especially for examinations and basic equipment required in school. The conditions of physical facilities are not conducive for effective learning. The classrooms and toilets are overstretched.

5.3 Conclusions

The study therefore concludes that most of the schools had too large classes and for the teachers to effectively deliver. Poor performance in these schools could be attributed to majority of teachers only having the basic teaching prerequisite qualifications. Inadequate training could be one of the major reasons behind the schools inefficiencies and poor performances KCPE. The researcher concludes that these schools had few trained teachers and the government needs to do something in regard to this problem. Schools also

employed teachers through their Parent's Teachers Association but could only afford to employ untrained ones.

The research also concludes that those schools with inadequate staffing records low mean score but those schools which were adequately staffed reports higher mean scores. The study further concludes that teachers in some cases skipped some lessons and this could be attributed to the poor performance in these schools. Teacher's attendance is very vital in schools especially primary schools whereby the pupil needs a trained teacher to sharpen their skills. Parents in these areas were not committed and forced pupils to work on farms and herd animals.

The study also concludes that the misappropriation and embezzlement reported was attributed to poor training of the headmasters. Due to poor management of the funds, employees were not paid on time and the required materials were not also purchased to aid learning. This has forced the head teachers to levy extra charges on pupils who are not able to pay. Pupils waste a lot of time at home waiting for parents to raise the money or they end up dropping out of school completely. From the research it was concluded that that parents and the community took the largest share in supplementing the FPE funds.

The study further concludes that schools in Suba West Division did not have adequate latrines. Pupils waste a lot of time as they wait for each other and at times punished for being late for classes. Classrooms were overcrowded, dusty

and very cold during the cold weathers since there were no window panes. The desks were barely one foot, which is an indication of inadequate facilities.

5.4 Recommendation

This research makes the following recommendations in view of the responses from the research respondents.

(i) The school management should come up with strategies of lobbying more funds from CDF and other nongovernmental organizations. This would also include looking for donors who may chip in and may provide adequate infrastructures to enhance smooth running of schools and creating a conducive environment for the young pupils in these schools.

(ii) The Teacher's Service Commission should employ the large number of trained teachers who are jobless to improve these schools performance. Absenteeism among teachers should be an issue to be addressed by the Teachers Service Commission.

(iii) Disciplinary actions should be taken on the teachers who seem to go contrary to the Teachers Core of Regulations.

(iv) Parents should also play the fundamental role of giving their children adequate time to go school. The government should come up with policies, which will make the primary education affordable and compulsory.

(v) Affirmative action to benefit public school pupils in the selection to national schools and county schools.

(vi) There is need to enforce accountability on the part of teachers and more so head teachers in public primary schools to ensure that pupils are taught properly.

(vii) The focus on learning improvement in public primary schools must come from many partners, including officials of the Ministry of Education, the Teachers Service Commission, Teacher Trade Unions, county government education officials and above all, parents of all shades of education and economic backgrounds. What is clear is that teachers have severely been cutting class as education officials sleep on the job.

5.5 Areas for Further Research

The study recommends the following areas for further research;

(i) There is need to conduct a study to determine the extent to which each of the factors influence internal efficiency in public primary schools in Suba West Division, Migori County Kenya.

(ii) The study recommends that an in-depth to be carried out on factors influencing internal efficiency of public primary schools in Kenya, covering wide geographical region like a district or county.

(iii) The study also recommends that the same study should be replicated to private primary school in Suba West Division, Migori County, Kenya.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

University of Nairobi

Department of Educational

Administration and Planning

P.O. Box 30197-00100

Dear Respondent,

REF: RESEARCH PROPOSAL

I am a postgraduate student at the University of Nairobi, undertaking a master of Educational Administration and Planning. I am carrying out a research on **Factors influencing internal efficiency of public primary schools in Suba West Division of Migori County.**

The research is purely academic and the results provided in this research will be used in this work only. Identity will be treated confidentially. I therefore, request you to assist me achieve this goal by allowing me to choose your school as study sample. Thank you in advance.

Yours Faithfully,

Owaga D. Okech

University of Nairobi

APPENDIX II: HEADTEACHERS/TEACHERS' QUESTIONNAIRE

Dear respondent,

This questionnaire is designed to investigate factors including internal efficiency of public primary schools in Suba West Division of Migori County. The information you give will be used for purposes of the study only and identity kept confidential. Do not write your name or the name of your school. Please kindly respond to all items in the questionnaire as honestly and correctly as possible.

Use a tick (√) to indicate the choice you have made in the structured questions and space provided for open-ended questions.

SECTION A: **BACKGROUND INFORMATION**

1. What is your gender?

   Female [ ] Male [ ]

2. Indicate your age

   31 – 35 years [ ] 36-40 years [ ]

   41 -45 years [ ] 46 – 50 years [ ]

   Above 50 years [ ]

3. Your highest professional qualification

   M.Ed. [ ] B.Ed. [ ] Diploma [ ] P1 [ ]

4. Indicate your experience as a headteachers in the teaching career

   1 – 5 years [ ] 6-10 years [ ] 11-15 years [ ]

   16 – 20 years [ ] Over 20 years [ ]

OBJECTIVE I: EXTENT TO WHICH GENDER PARITY HAS BEEN ACHIEVED

1. The composition to teaching staff by gender

   Male [ ] Female [ ] Total [ ]

2. Pupil enrolment by gender

   Male [ ] Female [ ] Total [ ]

3. Composition of school prefects by gender

   Male [ ] Female [ ] Total [ ]

4. What was the composition of year 2012 candidates by gender?

   Male [ ] Female [ ] Total [ ]

5. Comment on achievement in KCPE in the year 2012 based on gender

   ……

6. Comment on gender parity level on the school

   ……

OBJECTIVE II: CORRELATION BETWEEN PUPIL TEACHER RATIO AND PUPILS' ACADEMIC ACHIEVEMENTS

1. Our school has the pupil teacher ratio of:-

   20:1 [ ] 40:1 [ ] 50:1 [ ] above 50:1 [ ]

2. The school has the following categories of trained teachers:-

   P1 [ ] Diploma [ ]

   Graduate [ ] Masters [ ]

3. The school has the number of teachers as follows:-

   Less than 7 [ ] less than 8 [ ]

   8 [ ] more than 8 [ ]

4. The number of trained teachers in the school:-

   Are inadequate [ ] are adequate [ ]

   Are more than adequate [ ]

5. If the number of teachers are inadequate, how does the school bridge the gap?

   ……

   ……

6. Comment on the school performance in KCPE in relation to teacher-staffing.

   ……

   ……

OBJECTIVE III: THE RELATIONSHIP BETWEEN SCHOOLING COSTS AND DROPOUT RATE

1. The head teachers' training by the ministry of education in financial administration was:-

   Adequate [ ] inadequate [ ]

   More than adequate [ ]

2. The Free Primary Education fund received by the school is

   Sufficient to acquire scholastic materials for all pupils [ ]

   Insufficient to acquire scholars to materials for all pupils [ ]

More than sufficient to acquire scholastics materials for all the pupils [ ]

3. The FPE is subsidized by other sources as:-

   Parents/community [ ] NGOs'/ agencies [ ]

   Churches [ ]

4. a) How many pupils were in your class last year? [ ]

   b) Indicate the number that were promoted to next class, repeated class, dropped out.

   Promoted and are in school [ ]

   Repeated previous grade and in school [ ]

   Dropped out of school [ ]

5. Comment on pupils dropout rate in relation to financial management

   ……

   ……

OBJECTIVE IV: ASSESSMENT OF IMPACT OF LEARNING FACILITIES ON PUPILS' ACHIEVEMENTS

1. The Pupils Latrine Ratio

   Boys: Less than 30:1 [ ] 30:1 [ ] More than 30:1 [ ]

2. The Pupils classroom Ratio is

   Less than 40:1 [ ] 40 :1 [ ] More than 40:1 [ ]

3. How often in a year are the schools physical facilities assessed by the public Health Officers and Quality Assurance and Standards officers (MOE)

   Always [ ] Rarely [ ] Not at all [ ]

4. The schools' physical resources are financed by:-

   Parents/ Community [ ] Ministry of Education [ ]

   Donor agencies & churches [ ]

5. Comment on the schools' physical infrastructure in relation to pupils repetition rate

   ……

   ……

   ……

Thank you for your cooperation

APPENDIX III: PUPILS' QUESTIONNAIRE

Dear respondent,

This questionnaire is designed to investigate factors including internal efficiency of public primary schools in Suba West Division of Migori County. The information you give will be used for purposes of the study only and identity kept confidential. Do not write your name nor the name of your school. Please kindly respond to all items in the questionnaire as honestly and correctly as possible.

Use a tick (√) to indicate the choice you have made in the structured questions and space provided for open ended questions.

SECTION A: BACKGROUND INFORMATION

1. What is your gender?

   Female [ ] Male [ ]

2. Age

   Between 12-15 years [ ] Between 15- 17 years [ ]

   Above 17 years [ ]

OBJECTIVE I: EXTENT TO WHICH GENDER PARITY HAS BEEN ACHIEVED

3. a) In our school there are [ ] boys and [ ] girls.

   b) Indicate the number of all school prefects by gender

   Girls [ ] boys [ ]

4. In our school there are [ ] female teachers and [ ] male teachers

5. Comment on pupil academic achievements by gender

……

6. Comment on gender parity level

……

OBJECTIVE II: CORRELATION BETWEEN PUPIL TEACHER RATIO AND PUPILS' ACADEMIC ACHIEVEMENTS

7. In our school teachers' attend:

   All their lessons every day [ ] Some lessons every day [ ]

   almost all lessons every day[ ]

8. The number of teachers' in every subject is

   Adequate [ ] Inadequate [ ] More than adequate [ ]

9. The mean Score per subject in KCPE in our school

   is the same [ ] is different [ ]

10. Give reasons for good/ poor performance of your school in KCPE

……

……

OBJECTIVE III: THE RELATIONSHIP BETWEEN SCHOOLING COSTS AND DROPOUT RATE

1. How often have you been sent to bring money from parents to finance school programmes?

   Always [ ] Rarely [ ] Not at all [ ]

2. How long do you stay out of school while looking for money required in school?

   Less than one week [ ] One week [ ]

   More than one week [ ]

3. Does the school provide sanitary towels to girls in your school?

   Yes [ ] No [ ]

4. In our school we have pupil Text book ratio of:

   1:1 [ ] 2:2 [ ]

   3:1 [ ] More than 3:1 [ ]

5. How many pupils were in your class last year? [ ]

   (b) Indicate the number that were promoted to the next class, repeated class or dropped out

   Promoted and are in school [ ]

   Repeated previous grade and are in school [ ]

   Dropped out in school [ ]

6. Comment on the school levies? Charges in relation to pupils drop out (pupils leaving school):

.....

.....

OBJECTIVE IV: ASSESSMENT OF IMPACT OF LEARNING MATERIALS AND PHYSICAL FACILITIES ON PUPILS' ACHIEVEMENTS

7. Have often have you been made to wait for other pupils in order to access the latrines?

   Always [ ] Rarely [ ] Not at all [ ]

8. We share a desk in the ratio of

   2:1 [ ] 3:1 [ ] More than 3:1 [ ]

9. The distance between our lockers in class is

   1ft [ ] 2ft [ ] 3ft [ ] more than 3 ft[ ]

10. What is the number of pupils repeating class in your class?

    Between 5-10 [ ] between 10- 15 [ ] above 15 [ ]

11. Make a brief comment on the size and quantity of infrastructures in your school in relation to pupils repetition

    ……

    ….....……

    ……

    ……

Thank you for your cooperation

APPENDIX IV: OBSERVATION SCHEDULE

This observation schedule is designed to collect information about physical facilities in the primary schools in Suba West Division to help in investigating factors influencing internal efficiency of public primary schools in the division.

Part A: pupil enrolment

Part B: classrooms

1. How many classrooms are in the school?
2. What is the pupil enrolment?
3. Assess classroom conditions (material used)

Floor – mud [ ] cemented [ ] tiled [ ]

Walls – mud [ ] plastered [ ] iron sheets [ ]

Windows – wooden [ ] glasses [ ] open [ ]

Roof – grass thatched [ ] iron sheets [ ] asbestos [ ]

Part C: Latrines

(i) Teachers latrine [ ]

(ii) Latrines pupils

Boys [ ] girls [ ]

(iii) Types of latrines flash toilet [ ] pit- latrines [ ]

Part D: Play – ground

Indicate the number of pitches

Football [ ] volleyball [ ] netball [ ]

Part E: source of water

The school draws water from (indicate using tick (√)

River [ ] spring [ ] borehole [ ] roof catchment [ ]

Part F: source of power/light

Electricity [ ] generator [ ] solar [ ]

Thank you for your cooperation

APPENDIX V: LETTER OF AUTHORIZATION

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550
Mobile: 0713 788 787 , 0735 404 245
Fax: 254-020-2213215
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/013/945**

Date: **7th June 2013**

Damiano Okech Owaga
University of Nairobi
P.O Box 92-0902
Kikuyu.

RE: RESEARCH AUTHORIZATION

Following your application dated **30th May, 2013** for authority to carry out research on "***Factors influencing internal efficiency of public primary schools in Suba West Division, Migori County, Kenya.***" I am pleased to inform you that you have been authorized to undertake research in **Migori District** for a period ending **31st July, 2013.**

You are advised to report to **the District Commissioner and District Education Officer, Migori District** before embarking on the research project.

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

DR. M. K. RUGUTT, PhD, HSC.
DEPUTY COUNCIL SECRETARY

Copy to:
The District Commissioner
The District Education Officer
Migori District.

APPENDIX VI: RESEARCH PERMIT

PAGE 2

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss/Institution
Damiano okech Owaga
of (Address) University of Nairobi
P.O Box 92-0902, Kikuyu.
has been permitted to conduct research in

Migori — Location
Nyanza — District
Province

on the topic: Factors influencing internal efficiency of public primary schools in Suba West Division, Migori County, Kenya.

for a period ending: 31st July, 2013.

PAGE 3

Research Permit No. *NCST/RCD/14/013/94*
Date of issue *7th June, 2013*
Fee received *KSH. 1000*

Applicant's Signature

For Secretary
National Council fo
Science &Technolog

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

HARAMBEE

REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT