

**FACTORS INFLUENCING ACADEMIC PERFORMANCE IN KENYA CERTIFICATE
OF SECONDARY EDUCATION EXAMINATIONS IN PRIVATE SCHOOLS IN
WESTLANDS DIVISION IN NAIROBI, KENYA**

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DECLARATION

This Research Project report is my original work and has not been presented in any other university for academic award.

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DEDICATION

This work is dedicated to my husband, Mr. Patrice M. Odude and my children Calvin Ober, Jerry Wamulla and Joseph Hawi whose support, patience, love and encouragement has been a source of inspiration.

For the many sacrifices you made when I totally focused my energies to my academic pursuit, kindly accept my appreciation for your endless love for me.

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LIST OF ABBREVIATIONS AND ACRONYMS

| | | |
|-------|---|---|
| BOG | - | Board of Governors |
| ELS | - | Educational Longitudinal Study |
| KCPE | - | Kenya Certificate of Primary Education |
| KCSE | - | Kenya Certificate of Secondary Education |
| KNEC | - | Kenya National Examination Council |
| MDG | - | Millennium Development Goals |
| MOE | - | Ministry of Education |
| SES | - | Socio Economic Status |
| SRP | - | Student Role Performance |
| TSC | - | Teachers Service Commission |
| n.e.s | - | not elsewhere specified ('Data' for which no classification was made) |

ABSTRACT

The study set out to establish the factors which influence academic performance in K.C.S.E in Private Schools in Westlands Division, Nairobi County. There are (13) thirteen private schools in Westlands Division which were categorized into three subgroups selected using the stratified sampling technique. The study covered the period 2007 – 2011. The sample consisted of head teachers, teachers and students. Three sets of instruments were used to collect data. These were the Student Questionnaire (SQ); the Teachers Questionnaire (TQ) and the Head Teachers (HTQ). The research instrument was tested for validity and reliability. The data obtained was analysed and interpreted using descriptive statistics. The study concluded that the availability of physical and teaching facilities have a positive influence on performance. The condition of the physical facilities in terms of cleanliness and in good state of repair, have also been confirmed to bear positive impact on performance in K.C.S.E. The study shows that most teachers engaged in the sample schools had professional qualifications and were also trained as teachers except in one of the schools where although the teachers were graduates in other disciplines, not all of them were teachers by profession. The teachers' experience had a positive impact on performance in K.C.S.E. However, the family size did not seem to have any impact on performance. The Socio Economic Status (SES) and good K.C.P.E grades influenced K.C.S.E performance. The researcher recommends that schools should strive to have good physical facilities with particular attention to maintenance. There is need to retain the experienced teachers and to set minimum K.C.P.E grades to be admitted as the study has established that they positively influenced K.C.S.E performance.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The education sector in Kenya represents the single largest and fast growing sector accounting for 15.97% of the National Budget. Therefore education officials in Kenya are concerned with the efficient allocation of education resources. The efficiency of an educational system can be defined partly by the net benefits in life term earnings, labour productivity and personal satisfaction – accrued to individuals with more education than those accrued to individuals with less. Educational Institutions aim at providing their graduates with these advantages by instilling in them attributes considered necessary to obtain such advantages. These attributes are both cognitive academic achievement and manual skills such as effective self-esteem, dependability, creativity and motivation. This study was concerned with identifying the factors which influence a student's cognitive achievement as measured in school / national examinations. A person's education is closely linked to their life chances, income and well-being (Battle and Lewis, 2002). Therefore, it is important to have a clear understanding of what benefits or hinders one's educational attainment. By gaining a better understanding of factors that influence students' test scores, it is possible to determine whether or not the prevailing circumstances are benefiting students or if perhaps other policies would be more beneficial.

Economists and international development agencies claim that an educated population is essential for economic growth and more generally for a higher quality of life (Lucas, 1998 and UNDP, 2003; World Bank, 2000). Universal primary Education is one of the Millennium Development Goals (MDG) for children in developing countries by 2015. Although it is

desirable to provide education to all, it has been established that students who finish primary schooling in many developing country often perform poorly in academic tests (Glewwe & Kremer, 2005). Therefore, while the MDG goal focuses on attendance, the value of “low quality” education may be low.

Aturupane (2006) investigated the determinants of learning among fourth grade students in Sri Lanka. Whereas Sri Lanka has already attained universal primary completion, many Sri Lanka students display weak academic performance, as it is unclear what education policies would improve their performance. The data used included data on schools, child characteristics (including health and nutrition status), and parental support for education. The researcher used the data to study the impact of school quality, child health and other factors on students learning in Sri Lanka.

School environment factors such as: School size, neighbourhood, and relationship between teacher and student also influence test score (Crosnoe, Johnson and Elder, 2004). One’s family background has also been found to have an influence on students’ academic performance. Research has found that socioeconomic status, parental involvement and family size are particularly important family factors (Major banks, 1996).

Peer influences can also affect students’ performance. Peer pressure and peer conformity can lead to an individual participating in risk taking behaviours which have been found to have negative, indirect effect on the test scores (Santor, Messervey and Kusumaker 2000). The Educational Longitudinal Study (ELS: 2002), a national probability database with over 15,000 tenth grade in the United States which was used to ascertain the above issue.

Since 1985 the education system in Kenya has been 8-4-4 system. Students undergo 8 years of primary school education, 4 years of secondary education and 4 years of minimum basic university education. At the end of form four students take Kenya Certificate of Secondary Education (K.C.S.E). This examination is administered by the Kenya National Examinations Council (K.N.E.C). Good performance at this level is necessary for selection of higher learning and in jobs. The demand for quality education in Kenya is therefore crucial and has led to stiff competition among secondary schools both public and private. There is a general belief among the Kenyan population that success comes when one is able to competitively pass well in the national examinations. Most courses at the university level require more than a C+ grade for admission besides a good combination in the course cluster. Poor performance in the K.C.S.E examinations therefore undermines students' chances of joining institutions of higher learning and minimizing opportunities for job placements, consequently limiting their participation in national development.

This paper investigates factors which influence the performance in private schools in Westlands Division in Nairobi.

1.2 Statement of the Research Problem

Considering the importance of educational attainment to society, researchers have conducted many studies focusing on academic achievement. This study tries to establish what is influencing the academic performance in private schools in Westlands. The problem merited investigation mainly because of the fact that performance in KCSE Examinations has been quite poor in some schools while in a few others it has been excelling. The problem merited investigation mainly because of the fact that performance in K.C.S.E examinations over the 5

year period 2007 to 2011 has been below the average of 5 in four schools (category 3) and above 8 in four other schools (category 1) in the same division (refer to appendix iv).

The factors responsible for differences in academic standards are not well understood. This prompted the researcher to carry out the study. The lack of knowledge of the factors that influence the performance within these schools made it difficult to design strategies and policies that could help improve the performance of poorly performing schools. This would help to bridge the growing performance gap in the schools in Westlands Division. It was therefore important to carry out the study in order to establish the causes of the varying performance standards and therefore form a basis for remedial / corrective actions that would help salvage schools with poor and declining academic standards. The researcher choose private schools because of the interest private investors in this sector have in academic performance so as to survive in the competitive world.

1.3 Purpose of the Study

The purpose of this study was to investigate the factors influencing the performance of Private schools in Westlands Division, Nairobi in KSCE.

1.4 Research Objectives

The study sought to fulfil the following objectives:

1. To establish extent to which the physical facilities influence the students' achievements levels in KCSE.

2. Assess the relationship between school leadership and students' academic performance in KCSE examinations.
3. To determine the relationship between professional qualification of teachers and the students performance in KCSE.
4. To analyse the effects of the students background on KCSE performance.

1.5 Research Questions

This study examines four research questions;

1. To what extent does the availability of physical facilities influence students' performance in KCSE?
2. Does the leadership style of head teachers' have influence students' KCSE performance?
3. To what extent does the professional qualification of teachers influence on the performance of the students?
4. Does the learner's home background influence the student's in KCSE?

1.6 Significance of the Study

The study is considered as significant and timely because the Government, parents and other stakeholders in education spend large portions of their respective resources in education. Low levels of performance leads to undesirable wastage and denies students entry in to their preferred course when trying to further their courses / profession (usually very competitive courses). The effect spills over to the labour market, where the students fail to get employed in lucrative jobs.

The outcome of the study will be important to all stake holders in education. The findings of the study can be used as a framework for improving academic performance. Principals may utilize the results of the study to establish ways and means of improving performance in their respective schools, including those that have been enjoying good performance standards. The factors that are responsible for differing performance levels will be documented and can be used to carry out further research. Students can use the results at the personal level to avoid negative traits so as to enhance their personal academic performance.

1.7 Scope of the Study

The researcher recognised the fact that there are many other variables that influence the performance of the students that have not been addressed in this study.

This is because the whole range of factors that may influence academic performance cannot be effectively investigated due to time constraint.

The work focused on KCSE performance in private schools in Westlands Division between 2007 and 2011. It assessed the extent to which the availability of physical facilities; the leadership style of head teachers; the professional qualification of teachers and the learners' background influenced the students' performance in KCSE.

The study targeted thirteen (13) schools in Westlands Division. The researcher obtained the primary data from the head teachers, teachers and students. To back up the primary data, secondary data from Kenya National Examination Council (KNEC) was used to give credibility of the study. The study settled on a sample of 507 students; 96 teachers and 5 head teachers. Since the study was restricted to this sample, the findings cannot be construed to be directly applicable to schools in other regions of the country.

1.8 Limitations of the study

The study was limited by some factors beyond the control of the researcher such as the unreliability of the ranking of schools.

The study concentrated on head teachers, teachers and students. The researcher did not engage other stake holders like officials of the Teachers Service Commission (TSC); Teacher Training Institutions; Ministry of Education (MOE) staff and the school Board of Governors (BOG) whose interaction with the head teachers, teachers and students could also impact on the students' KCSE performance. Further, the students who responded to the questionnaires (form three and form four students) had not participated in KCSE examinations that were being analysed in the study.

1.9 Organization of the Study

The study is divided into five chapters. Chapter one forms the introduction of the study. It describes the background to the problem; it states the problem, purpose and objectives of the study. Chapter two deals with literature review. It contains previous research and opinions by other researchers and summarizes the key findings of the literature reviewed by the researcher.

Chapter three set out the design and the methodology of the study. It describes the design of the study, the population of the study; sample and sampling procedure; research instruments; data collection, reliability and validity; and analysis procedures.

Chapter four describe how the data was analysed and the procedures and techniques employed in the analysis of the data.

Chapter Five summarize the findings, conclusions and recommendations. It describes the main findings, conclusions and recommendations for further research

1.10 Definition of Significant Terms

| | |
|---|---|
| Academic Performance: | Academic performance is the ability to study and remember facts and being able to communicate the knowledge verbally or in writing |
| Kenya Certificate of Primary Examination (KCPE): | KCPE refers to the national Examination that is undertaken by students during the eighth year of Primary Schooling in the 8-4-4 curriculum education system. The outcome determines the students' admission into secondary school. |
| Private Schools: | Private schools, also referred to as independent schools are schools not sponsored by the State. The sponsors / administrators reserve the right of admitting students. Private schools are not administered by local, state or national Governments. |
| Kenya Certificate of Secondary Examination (KCSE): | KCSE refers to the national Examination that is given at the end of four years of Secondary Schooling in the 8-4-4 curriculum education system. |
| Teacher Professional Qualification: | A form of training that a teacher has undergone in relation to their profession and meant to improve their teaching skills |
| Physical Facilities / Teaching Resources: | Physical facilities refer to classrooms, washrooms, laboratories and sports fields. Teaching resources refer to equipment used by teachers when delivering a lesson such |

as text books, and desks.

School Administration:

Educational administration involves leading and managing an institution of learning together with the teachers and learners.

Head Teacher / Principal:

This refers to a person appointed to administer a learning institution.

Economies of Scale:

This is the phenomenon used to describe the reduction of per unit cost of production of an item as more of the product is produced.

Kenya National Examination Council (KNEC):

The KNEC refers to the body that sets, moderates, administers and marks Kenyan National examinations and evaluates the secondary school curriculum

8-4-4 System of Education:

This is the current framework upon which the education system operates. A student is expected to complete eight years of learning at the primary school level before graduating to a four year stint at the secondary school level. If the student meets the minimum university entrance requirements, but subject to competition, they are admitted to the university for a minimum period of four years in order to earn a degree certificate.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on factors which influence performance in KCSE in private schools located in Westlands Division, Nairobi. The highlight of the reviews focused on the relationship between KCSE performance and factors such as the availability of physical resources, that is; classrooms, washrooms, libraries and co-curricular activities – which would indicate the availability of facilities like sports field(s) and qualified staff to train the students. In addition research work that investigated the relationship of the school leadership and administration; which includes the professional qualification and leadership style. Teacher availability and quality, experience and workload was also reviewed. Literature relating the learners' background, including their Socio Economics Status (SES); family size and KCPE performance was addressed.

2.2 Performance Measure Concepts

Using terms like school failure or academic performance continues to be problematic since both concepts are considered controversial. Different approaches have been adopted to address the issue, as an assessment of school failure – even its very name – has strong negative connotations and there are broad based problems in trying to draw a line between success and failure.

There are a many factors that can influence the performance of a student, including sickness or trauma just before or during the examination. However the discussions below are restricted to investigating how Physical Facilities provided by the school; School leadership and

administration; teacher characteristics, that is availability and quality; and Learners Background can influence students' KCSE performance.

There are different circumstances that are most commonly linked to academic performance of high schools. In the United States of America (U.S.A), the factors that have been reviewed include: Students Role Performance (S.R.P). This is how well an individual fulfils the role of a student in an educational setting. Sex, race, school effort, extra-curricular activities, deviance and disabilities are all important influences on SRP and have been shown to have an effect on test scores.

Bakare (1994) describes poor performance as any performance that falls below a desired standard. Crosnoe, Johnson and Elder (2004 b) suggest that private schools tend to have both better funding and smaller class sizes than public school. These smaller class sizes in private schools create more intimate settings and therefore can increase student – teacher bonding which has also been shown to have a positive effect on student success. This paper investigates factors which influence the academic performance in private schools in Westlands Division, Nairobi.

2.3 Availability and Condition of Physical Facilities and students academic performance

The importance of school factors such as location and physical buildings to a successful academic achievement cannot be overemphasized. Where a school is located determines, to a very large extent the patronage such a school will enjoy. Conversely, the unattractive physical structures of the school could demotivate learners academically. This is what Isangedighi (1998)

refers to as learner's environment mismatch. According to him, this promotes poor academic performance. Smaller class sizes leads to better academic performance and more access to resources such as computers which have been shown to enhance academic achievement (Crosnoe et al; Eamon 2005). A good school facility supports educational enterprise. Research has shown that clean air, good light, small, quiet, comfortable and safe learning environment are important for academic achievement (Cash 1993; Earthman and Lemasters 1996; Lemasters 1997, Lackney 1999; Cotton 2001; Schneider 2002).

The availability of teaching and learning resources makes a difference in the achievement of students. Court and Ghai (1986) found that the distribution of resources such as books and equipment accounted for scholastic differences among schools. Eshiwani (1988) indicates that most schools which perform poorly spend less money on the purchase of teaching resources. Availability of adequate relevant text books makes the teaching task easy. Physical facilities like classrooms laboratories, Libraries contribute to performance. A World Bank Report (1987) on school and classroom effects on student learning in Thailand reported that students in larger schools learn more than students in smaller schools. However students in schools with higher student / teacher ratio learn less than students in schools with lower student / teacher ratio. It concludes that larger schools may be more effective due to economies of scale – lower student / teacher ratio, less crowding and conversely a greater teacher / student contact.

Heynemann and Lopxlely (1983) in their study saw that presence of school library related significantly to achievement in Brazil, China, Botswana and Uganda. This was consistent with Coleman's study (1966) as cited by Ndiritu (1999) where findings were that the numbers of text

books on loan from the library were significantly related to learning achievement in the USA. According to Southworth and Lefthouse (1990) sound physical environment reflected in the schools amenities, decorative order and immediate surrounding has a positive advantage to pupils' progress and achievement.

2.4 School Leadership and Administration and students academic performance

Almost every single study of school effectiveness has shown that both Primary and Secondary Leadership are key factors. Gray (1990) has argued that "the importance of the head teacher's leadership is one of the clearest of the messages from school effectiveness research". He draws attention to the fact that there is no evidence of effective schools with weak leadership that has emerged in review of effectiveness research. Leadership is not simply about the quality of individual leaders, although this is of course important, it is also about the role leaders play, their style of management, their relationship to the vision, values and goals of the school and their approach to change. Leadership at work in educational institutions is thus a dynamic process where an individual is not only responsible for the groups' tasks, but also actively seeks the collaboration and commitment of all the group members in achieving group goals in a particular context (Cole, 2002). Leadership in this context pursues effective performance in schools because it does not only examine tasks to be accomplished and who executes them, but also seeks to include greater reinforcement characteristics like recognition, conditions of service and building of morale, coercion and remuneration (Balunywa, 2000).

Maicibi (2003) contends that, without a proper leadership style, effective performance cannot be realised in schools. Even if the school has all the required instructional materials and financial resources, it will not be able to use them effectively if the students are not directed in their use of the materials or if the teachers who guide in the usage are not properly trained to implement them effectively.

Looking at the research literature as a whole, it would appear that different styles of leadership can be associated with effective schools, and a very wide range of aspects of the role of leaders in schools have been highlighted. As Bossert et al, 1982 concluded "... no simple style of management seems appropriate for all schools ... principals must find the style and structures most suited to their own local situation". However, a study of the literature reveals that three characteristics have frequently been found to be associated with successful leadership; these are: Strength of purpose; involving other staff in decision making and Professional Authority in the process of teaching and learning.

Effective leadership is usually firm and purposeful. Most case studies have shown the head teacher to be the key agent bringing about change in many of the factors affecting school effectiveness (Gray, 1990; United States Department of Education, 1987). The Research literature shows that outstanding leaders tend to be proactive. For example, effectiveness is enhanced by "Vigorous Selection and Replacement of Teachers" (Levine & Lezotle, 1990). Another feature of effective head teachers is the sharing of leadership responsibilities with other members of Senior Management team and the involvement – more generally – of teachers in decision making. Mortimore et al (1988a), in their study of primary schools mentioned, in

particular, the involvement of the deputy head in policy decisions and the involvement of teachers in management and curriculum planning and consulting teachers about spending and other policy decisions.

An effective head teacher is, in most cases, not simply the most senior administrator or manager, but is in some sense a leading professional. This implies involvement in and knowledge about what goes on in the classroom, including the curriculum, teaching strategies and monitoring of pupil progress (Rutter et al 1978; Mortimore et al 1985). In practice, this requires the provision of a variety of forms of support to teachers, including encouragement and practical assistance (Levine & Stark, 1981; Murphy, 1989). It also involves the head projecting a 'high' profile through actions such as frequent movement through the school, visits to the classroom and informal conversation with staff (Sizemore et al, 1983; Mortimore et al, 1988; Pollack et al, 1978; Teddlie et al, 1989). It also requires assessing the ways teachers function, described by Scheerens (1992) as "one of the pillars of educational leadership". The impact head teachers have on student achievement levels and progress is likely to operate indirectly rather than directly by changing school and staff culture, attitudes and behaviour which, in-turn affect classroom practices and the quality of teaching and learning.

2.5 Availability and Quality of Teachers and students academic performance

The quality of the learning environment at the school depends to a large extent on the quality of the human resources capacity available. Teachers are the most important human resource and remain the backbone of any educational system (UNESCO 2000). The quality of teachers in any educational system determines, to a great extent, the quality of the system itself (Okoye 2002).

One key factor in determining examination results is the availability and quality of teachers. Trained teachers represent a significant social investment and their levels of motivation and career commitment is of concern to policy makers (UNESCO 2000). Adeyemo (2005) remarks that; no profession in Nigeria has suffered reversal of fortune than teaching. This they submit has affected the commitment expected of teachers. This then implies that the quality of service rendered by an unmotivated teacher could affect academic achievement of learners. Or how does one explain a situation whereby primary school pupils or secondary school students receive an average of 125 and 150 hours of teaching against the recommended 250 and 300 hours respectively.

According to Abaji and Odipo (1997) teacher quality depends on their qualification, experience and level of discipline which in-turn determines the level of commitment. Kerlinger (1995) asserts that the quality of the teacher is very crucial to determining examination outcomes in a school. Kerlinger argues that school principal is the most important influential individual in a learning institution and his / her managerial skills set the benchmark, direction, tone, tempo and the school learning climate.

Creamer (1994) notes that; the roles of a teacher includes; organizing the instructional environment, setting time framework and carrying out the instructional process. Lack of teachers results in some classes being left unattended and sometimes the teachers who are present take up extra loads to make up for absentee teachers. This leads to inconsistency and ineffective teaching and sometimes loss of valuable time. Thus students may not adequately cover the syllabus to effectively prepare for national examinations.

One of the leading problems in education in Africa as cited by UNESCO (1991) is the persistent shortage of both qualified and properly trained teachers. This has a negative impact on the academic achievement of students. Osman (1989) in his study on poor performance in KCPE in North Eastern Province, Kenya noted that poor performance was mainly a result of unequal distribution of teachers. There was understaffing in most schools and teachers rarely attended in-service refresher courses.

Kathuri (1984) quoted by Nyaga (1997) concurs with Osman regarding the effect the teacher quality has on the educational achievement of children. In a study on factors that influence performance in KCPE Kathuri established that the quality of teachers contributed to the nurturing of pupils' performance. He also cites efficient use of teaching methods and good administrative set up as a reflection of teacher quality and as important factors in examination performance of pupils.

Simiyu (2002) established that teachers who were involved in marking CRE at KCSE level produce better results in the subject than those who were not. Marking KCSE examinations is a form of training that helps teachers improve their understanding of the subject as well as learning to interpret examination questions. Such teachers are able to model their teaching along the examination lines and their students stand a better chance of performing well in the national examinations. On the quality of teachers Eshiwani (1983) established that 40 percent of the teachers in primary schools in Western Province, Kenya were untrained and this had a negative effect on the performance in the final examination. Eshiwani further established that 60 percent of the teachers in the schools he visited were not serious with homework / assignments. Some

students were not given homework / assignment and for those who were, there was no serious follow up. These schools had poor results in public / national examinations.

Pearson (1988) noted that in-service training is an important aspect of alleviating teachers' effectiveness. The courses should be geared towards the improvement of teaching skills and making teachers aware of changes in curriculum. Pearson further pointed out that in-service training also helped teachers to use the available teaching resources more effectively and efficiently. Ndiritu (1999) concurs with Pearson that it is important to train teachers whether through formal training or through in-service courses. Ndiritu's study in Nairobi established that teachers' attendance of in-service training and their desire to stay in the same work station influences performance in examinations.

According to the Republic of Kenya Economic Survey (1998, 1999 and 2000) there were large numbers of untrained teachers in the country although the numbers have been gradually but slowly declining. Table 2.1 show the situation between 1995 and 2003.

Table: 2.1: Number of Trained & Untrained Teachers in Secondary Schools in Kenya (1995 – 2003)

| Year | Number of trained teachers (T) | (T) as a percentage of total number of teachers | Number of un-trained teachers (UT) | (UT) as a percentage of total number of teachers | Total number of teachers |
|------|--------------------------------------|--|---|---|--------------------------------|
| 1995 | 33,443 | 81 | 8,041 | 19 | 41,484 |
| 1996 | 34,923 | 85 | 6,357 | 15 | 41,280 |
| 1997 | 38,427 | 87 | 5,951 | 13 | 44,378 |
| 1998 | 40,438 | 92 | 3,257 | 8 | 43,694 |
| 1999 | 39,423 | 97 | 1,359 | 4 | 40,782 |
| 2000 | 38,997 | 97 | 1,093 | 3 | 40,090 |
| 2001 | 43,096 | 96 | 1,853 | 4 | 44,943 |
| 2002 | 44,094 | 96 | 1,897 | 4 | 45,991 |
| 2003 | 44,792 | 96 | 1,653 | 4 | 46,445 |

Source: Economic Survey 2004

The table shows that the number of untrained teachers was slowly declining and was at 1,359 as at the end of 1999. This improvement may be attributed to the Governments' policy change that discontinued the recruitment of un-trained teachers. However due to the acute shortage of Science, Mathematics and Economics teachers the Teachers Service Commission (TSC) authorized head teachers to recruit graduates (BSc and BA) as untrained teachers to bridge the shortfall. As a result the declining trend of untrained teachers in schools increased in 2002.

On teacher commitment, Wamai (1991) argues that the low salaries paid to teachers in Kenya compelled them to engage in other income generating activities. He asserts that these allegiances of teachers were more on their personal businesses rather than teaching and that the teachers were often absent or ill prepared for teaching. The teachers were therefore not able to prepare students adequately for examinations because they were not able to utilize their learning time properly. He further argues that many trained teachers in Kenya opted for teaching profession after failing to secure other courses and were therefore always on the look out for opportunities elsewhere. These teachers were therefore ill motivated and were not committed. In most cases their students performed poorly in national examinations.

2.6 Learners Background and academic performance

The home environment has an exceedingly great role to play on the academic performance of every child. Smith et al (1989) reveals that home environment may enhance positive self-esteem which may improve academic performance. This home environment must be encouraging and supportive towards academics. Mworira (1993) comments that for a child to make the most of his educational needs - at home - the child should have easy access to instruments like books, newspapers, space. Light and silence that is convenient for studying.

Social class is common to all societies ancient or modern .Socio-economic status is usually determined by wealth, power and prestige. Generally, when comparing and evaluating people we rank those who are wealthy in terms of possession, type and size of house, area of residence and number of cars and quality of clothes. Wealth is strongly correlated with education and

occupation. When SES is measured other factors are usually included. Morakinyo (2003) indicate the existence of relationship between SES and academic achievement.

Muola (1990) studying Harambee schools in Nyandarua District asserted that there is positive relationship between student performance and home environment. According to Waweru (1982) there are environmental factors that have been seen as handicaps to good school progress. Poverty due to low wages; unemployment; large families and loss of family bread winner. Kinyanjui (1980) in his study saw that limited income among low class families has been found to restrict provision for school books and other necessary materials necessary for attendance and good performance in school.

Avalos (1986) in his study on teaching children of the poor explained that incomes among lower class families restricted provision of tuition fees, school books and other resources necessary to ensure good performance or continued education. Ndiritu (1999) found no correlation between socio-economic background and academic performance but found that poor children are regularly sent home from school because of inability to pay school levies.

According to Eshiwani (1993) good socio economic conditions facilitates studies while poor ones hinder them. A big number of children fail because of poor financial state of the parents. The atmosphere at home negatively affects students in school. Socio cultural customs and beliefs influence decisions to withdraw students from school; impacting negatively on their academic performance.

Family size could lower the SES. Family size refers to the number of children in the reference family. It is argued that; the larger the family, the less the attention and devotion of each child by the parents and the more the austerity difficulties encountered by the parents. In meeting the needs of the children both physically and emotionally particularly in this austerity period when the price of food and commodities are sky rocketing.

The students KCPE performance and therefore KCSE could be attributed to the SES or may be related to their innate ability. While several comprehensive reviews of the relationship between SES and educational outcomes exist (Mukherjee, 1995; Ainley et al; 1995) make it clear that children from low SES families are more likely to exhibit the following patterns in terms of educational outcomes compared to children of high SES families; have lower levels of literacy , numeracy and comprehension; have lower retention rates; have lower higher education participation rates, the degree of individual variance in academic performance accounted for by variation in genetic factors, however is the subject of intense debate (Sparkes, 1999).

Finally, the socio economic disadvantage has been found to be strongly associated with factors such as the home literacy environment, parents' teaching styles and investment in resources that promote learning such as quality child care, educational materials and visit to museums (Shonkoff and Phillips, 2000). Families with low income face greater hurdles in achieving effective parenting which in turn often harms their children's development and educational achievement (Berk, 1997:549)

2.7 Conceptual Framework

The conceptual Framework of Factors Influencing KCSE Performance in Private Schools in Westlands Division, Nairobi.

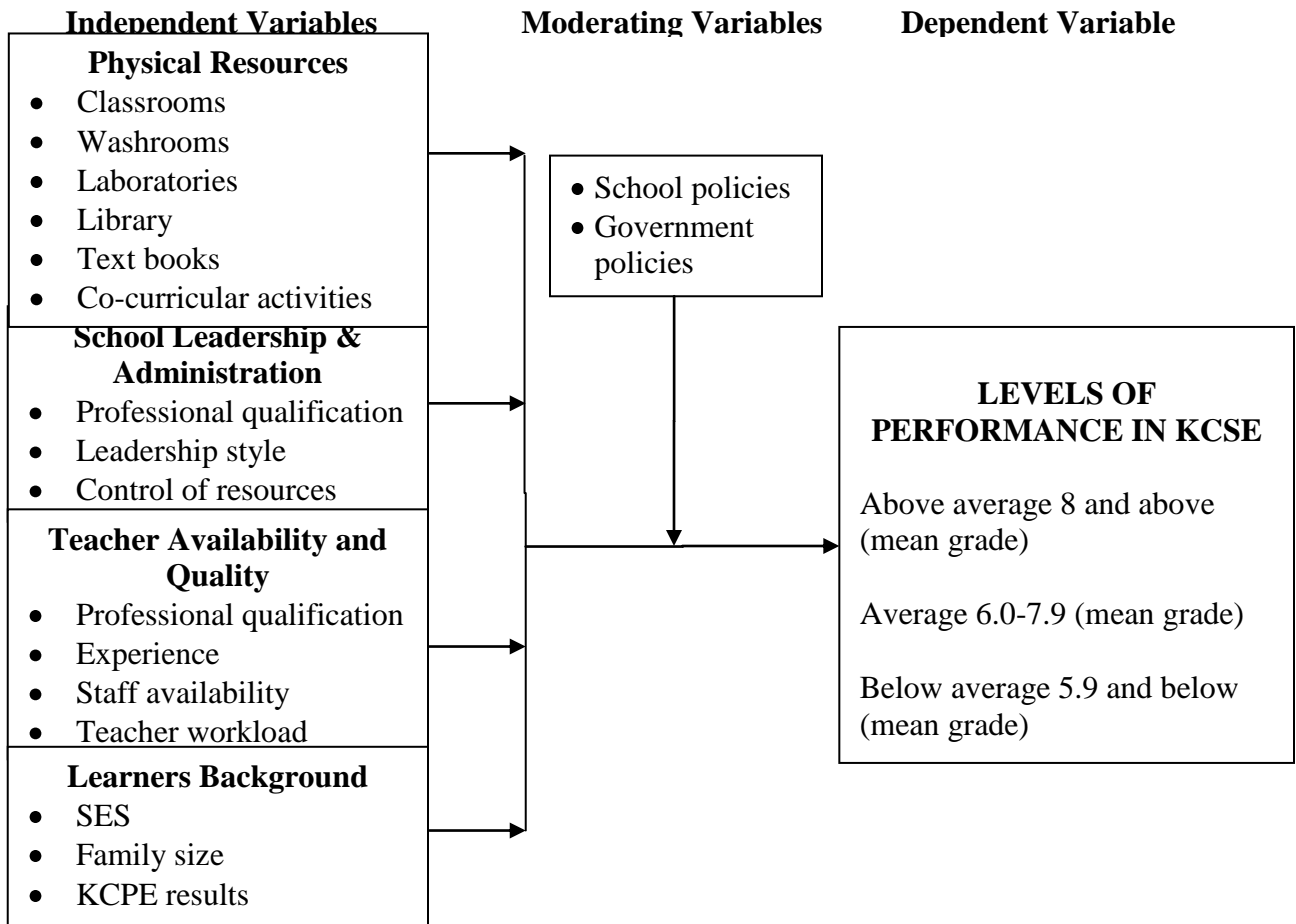


Figure: 2.1: Conceptual Framework

It is generally accepted that there are many factors which influence the students' level of performance in KCSE. This research has focused on four groups of factors; the physical and teaching resources, School leadership and Administration, Teacher Quality and availability and Learners' background.

The section on Physical and Teaching Resources described the resources available in the school, including the availability and state of the classrooms, laboratories, library, text books and exercise books. School leadership and Administration will seek to determine the extent to which the school leadership can influence the school performance. It will consider the qualifications of the principal (head teacher) and their control of resources, including the human resources (teaching and non-teaching staff).

Study on the impact of availability of teachers and their qualification will look into the professional qualification and experience of teachers and teacher workload. Frequent transfers and / or exit of staff are considered destructive; it tends to deny students' confidence since they every change requires them to acclimatize with the new teacher and teaching methods thus disrupting focus on learners.

The section on learners' background will describe the Socio Economic Status of the family, family size and how they can influence students' performance in KCSE. The students' KCPE performance will also be considered as a factor that can influence the learner's performance in national examination.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes procedures and strategies used in the implementation of the study. It describes the research design; study population, sample selection criteria, research instruments, pre-testing of the instruments and an outline of the methods used to collect and analyse the data.

3.2 Design of Study

This is a descriptive survey design. A descriptive survey involves asking questions often in the form of questionnaire to a Large group of individuals either by mail, by telephone or in person.

The design was recommended for this research because it involved a large group of students, teachers and head teachers and had the advantage of providing a lot of information from a large sample of individuals.

3.3 Target Population

The target population incorporated all the students, teachers and principals of private schools offering the 8-4-4 system of education in Westlands division. This consisted of 2,471 students, 240 teachers and 13 principals.

3.4 Sample Size and Sampling Procedure

A sample is defined as a smaller group obtained from the accessible population (Mugenda, 1999). Each member or cases in the sample are referred to as a subject or a respondent. The sample schools were selected through a stratified random sampling technique. The schools were

first ranked on the basis of their KCSE performance during the period the study covered. The schools were then categorized on the basis of average score for the period as ‘top performers’; ‘average performers’ and ‘below average performers’. (refer to appendix iv).

Top performers are the schools with a mean grade of 8.0 and above. Average performers are schools with a mean grade below 7.99 and above 6.0 while the below average performers registered average scores below 6.0. On the basis of the performance, the numbers of schools placed in category 1 were four (4) while the schools in category 2 they were five (5) and in finally, the schools in category 3 they were four (4). Stratified sampling is generally used where there are subgroups in the population. In this sampling technique, the subjects are selected in such a way that the existing subgroups in the population are selected on a pro-rata basis; that is in proportion to the subgroups size relative to the target population. From these categories or subgroups stratified sampling was used to choose the schools to be issued with the questionnaires. The sample size usually depends on the number of variables in the study; the type of research design; the method of data analysis and the size of accessible population (Mugenda and Mugenda, 1999).

Multi stage sampling techniques was then employed to select a sample within each of the three categories, where the form 3 and 4 students were chosen because the research felt that having been in the schools longer, they are likely to give more accurate answers as compared to forms I and 2. The total number of students in forms 3 and 4 was 1, 268; the teachers were 240 and there were 13 principals.

A sample size of 20 percent and above of the population can be considered as a representative sample for the descriptive research (Gay, 1992). For this study, a sample size of 40% of the target population for students and teachers, and 45% for head teachers drawn from the accessible population of private schools offering the 8-4-4 curriculum in Westlands division was employed. From the Thirteen private schools, the estimated population for students was 1268 and teachers 240. For students, the sample size was arrived at as follows:

$$\frac{40}{100} \times 1268 = 507$$

Moreover, since the study required the sample to be broken down in to subgroups, proportion of each sub-group calculated from the sample size of 507 for students was arrived at as shown;

Top performers: $\frac{4}{13} \times 100 = 30.7$ rounded to 31%

$$\frac{31}{100} \times 507 = 157$$

Average Performers: $\frac{5}{13} \times 100 = 38.4$ rounded to 38%

$$\frac{38}{100} \times 507 = 193$$

Below Average Performers: $\frac{4}{13} \times 100 = 30.7$ rounded to 31%

$$\frac{31}{100} \times 507 = 157$$

For teachers, the total number was estimated at 240. Therefore the sample size was worked out as follows: $40\% \text{ of } 240 = 96$.

To meet the requirement of sample size per sub-group, the sample size of 96 was apportioned to the subgroups as follows:

Top performers: $\frac{31}{100} \times 96 = 30$

$$\text{Average performer: } \frac{38}{100} \times 96 = 36$$

$$\text{Below Average: } \frac{31}{100} \times 96 = 30$$

The total number of head teachers (principals) was 13. The researcher administered 6 questionnaires, equivalent to 45 percent of the target population. This proportion of sample size was taken to mitigate sampling errors since the population size was very small.

3.5 Research Instruments

The research instruments were designed based on the objectives and research questions of the study. The following are the three types of instruments adopted for use in this study:

- 1) Students' questionnaire
- 2) Teachers' questionnaire
- 3) Principals' questionnaire

The questionnaire is important for collection of data when respondents remain anonymous. This encourages honesty and gives room for free expression of feelings.

3.5.1 Student Questionnaire

The Students' questionnaire was administered to form three and form four students in the sample. The questionnaire has two main sections.

Section I: This section was designed by the researcher to elicit responses on students' demographic data. This section has items relating to personal information. The data was analysed to show KCPE performance, gender, background of the student.

Section II: This section of the questionnaire reviewed information relating to the school environment, physical facilities like laboratories and teaching resources like books and the state of the classrooms and washrooms.

All the questions in these two sections are ‘close ended’. The questions in these sections are designed to have a high degree of objectivity and are easy to administer.

3.5.2 Teachers’ Questionnaire

The questionnaire for teachers was in two sections.

Section I: This section consists of demographic related questions. These questions are designed to give personal information; teaching experience and teachers’ qualifications. The information obtained from these questionnaires was analysed to review existence or non-existence of any relationships between teachers teaching experience; progress of qualifications and achievements in KCSE among secondary students. This questions in this section are ‘closed ended’, objective and easy to administer.

Section II: This Section of the questionnaire is a Likert type five point scale highlighting the leadership of the school, and appropriateness and availability of resources.

3.5.3 Principals’ Questionnaire

Section I: This test was designed by the researcher and focused on professional training and experience.

Section II: This section the questionnaire is a Likert type five point scale highlighting the effective / pro-active role of the principal in the running of the school. It sought to establish the principal’s influence on the budget; recruitment of teachers; review of teachers’ performance.

3.6 Pretesting of the Instrument

In order to gauge the effectiveness of the instrument, the researcher pre-tested the questionnaire in 3 schools. The pre-test schools were selected, one each, from the three categories of schools in the population of the study. The selection process for the schools was based on the findings of Mulusa (1990) who noted that, for effective pretesting of instruments, the items should be selected from all categories under the study. Appropriate adjustments are bound to be made in the instrument after the pre-test results have been compiled. According to Mulusa (1990) the purpose of pretesting / piloting the instrument is to assess their clarity, validity and reliability of each of the items in the instrument and the suitability of the language used. The pilot process helps the researcher to modify and redesign items in the instrument. This helps to weed out challenges of ambiguity and irrelevance thereby improving the quality of responses. Presence of blank spaces in the questionnaire, inaccurate responses, inconsistencies and other weaknesses strongly suggest the need to review / revise the instrument (s). Any questions that required information that respondents could not provide was eliminated or replaced.

3.7 Data Collection Procedure

The researcher obtained authority to collect data from the Ministry of Education before embarking on the data collection exercise. The researcher, after being authorised to collect the data, visited the sampled schools and introduced themselves to the school management and also obtained their consent to administer the instrument.

On finalizing the administrative arrangements, the researcher proceeded to administer the instrument and guide the respondents appropriately.

3.8 Instrument Validity

The data was subjected to content validity as the researcher has selected a representative sample of indicators from the domain of indicators of the concepts. This is known as sampling validity. Mugenda and Mugenda (1999) defined validity as the accuracy and meaningfulness of inferences which are based on the research results. Validity is the degree to which results obtained from analysis of data actually represents the phenomenon under the study. The Validity of the instruments was reflected on the items structured in the questionnaires by the ease with which the respondents understand and internalize the content. The researcher pre-tested the instrument validity with nine (9) students, three (3) teachers and three (3) head teachers with representation from all the subgroups.

3.9 Instrument Reliability

The split half technique was used to assess the reliability. The items in the questionnaires were divided into two groups, alternating the odd and even numbers. Sample questionnaire were distributed to three schools and in each school three students were given the questionnaire to answer making a total number of nine (9) students. Three (3) head teachers and three (3) teachers from three schools gave their responses to their respective questionnaires. The fifteen (15) constituted the pilot population study. The pilot schools were not part of the sample schools but they were schools from the same division.

The main purpose of the pilot testing involved cross checking the suitability of each of the questionnaires. The specific areas that were scrutinized were the suitability of the language; the clarity of the questions and the alternative choices in the response; the time taken by the

respondents in completing the questionnaire and the adequacy of the space provided for written responses. The pre-test questionnaires were collected for examination. The questions were discussed with the respondents to establish their content, validity and reliability. This exercise provided the researcher with useful information that was used to revise calculated a correlation coefficient for the two sets to obtain an estimated coefficient of reliability. The coefficient was computed using the Spearman-Brown prophecy formula (r) as shown:

$$ReliabilityCoefficient = \frac{2 \times reliabilityfor1/2test}{1.00 + reliabilityfor1/2test}$$

The reliability coefficient of 0.83 was obtained after an average of all possible split-half reliabilities. According to McMillan (2001), reliability coefficient of the research instrument above 0.80, is considered reliable enough. Therefore, the research instrument in this study was reliable.

3.10 Data Analysis

Data analysis refers to the search for patterns in data and for ideas that help explain the experience of those patterns (Benard 1994). Quantitative data was obtained through the questionnaire. The data was coded before being analysed. According to Gay (1981) descriptive statistics is best analysed using frequency distribution and percentages. The outcome of the analysis and computations were presented in tabular form.

CHAPTER FOUR

RESEARCH ANALYSIS PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter analyses the data collected and draws interpretations based on the analysis. The data analysis is aimed at addressing the purpose of the study that was to identify the factors that influence performance in KCSE examinations in private schools in Westlands Division. The main issues discussed in this chapter include questionnaire return rate, demographic and background information of the respondents and responses to the research questions.

The researcher has used descriptive statistics to draw conclusions on the factors reviewed in this study as having the potential to influence performance of KCSE in private schools in Westlands County.

4.2 Questionnaire Return Rate

Six questionnaires were administered to the head teachers and 5 were returned. The questionnaire return rate was therefore 83 percent. A total of 96 teachers questionnaires were administered and 72 were returned, this was a return rate of 75 % A total of 507 questionnaires were administered to the students and 446 were returned making the questionnaire return rate 88 percent.

4.3 Demographic Data of the Respondents and Schools

The information obtained was derived from the completed questionnaires for head teachers, teachers and students. Frequencies and percentages were used to describe the demographic data of the respondents.

4.3.1 Gender of Head Teachers

The analysis of the gender characteristic of the head teachers was presented in table 4.1, based on respondent category.

Table: 4.1 Analysis of Responses by Head Teachers

| | Male | Female | Total |
|--------------|----------|----------|----------|
| Category 1 | 2 | 0 | 2 |
| Category 2 | 0 | 2 | 2 |
| Category 3 | 1 | 0 | 1 |
| TOTAL | 3 | 2 | 5 |

The head teachers who responded to the questionnaire were composed of 60 percent (3) male and 40 percent (2) female. This shows that the majority of the responding head teachers were male.

4.3.2 Students' Gender

Students' gender representation based on their categories was analysed and presented in table 4.2.

Table: 4.2: Analysis of Student Responses by Gender

| | Male | Female | Total |
|--------------|---|---|---|
| Category 1 | 82 | 75 | 157 |
| Category 2 | 54 | 110 | 164 |
| Category 3 | 40 | 85 | 125 |
| TOTAL | !Invalid Character Setting | !Invalid Character Setting | !Invalid Character Setting |

There were more female student respondents (61%) in comparison with the male student respondent (39%). Out of the 446 questionnaires, 176 boys responded compared to 270 girls. Out of the 13 schools, 4 are girls only, 7 are mixed and 2 are boys' schools only.

4.3.3 Students' Class

Student respondents were selected from form 3 and form 4 in the sample schools. The selection criteria was left to the discretion of the teachers. This analysis has been presented in table 4.3.

Table: 4.3: Analysis of Student Responses by Class

| | Form 3 | Form 4 | Total |
|------------|--------|--------|-------|
| Category 1 | 48 | 109 | 157 |
| Category 2 | 67 | 97 | 164 |
| Category 3 | 43 | 82 | 125 |
| TOTAL | 158 | 288 | 446 |

The analysis indicates that, 446 students responded to the research instrument. Out of these, 156 students equivalent to 35 percent were form three students while 65 percent (288) were form four students. On further enquiry on the larger response from form four students, it became apparent that the teachers were biased in favour of form four students because they felt that they were in a better position to understand the questions and give accurate responses.

4.3.4 Age of Head Teachers and Teachers

Respondents' age was determined by asking the Head teachers and teachers to indicate their age category. The findings were indicated in table 4.4.

Table: 4.4: Age Category of Head teachers and teachers

| HEAD TEACHERS | | | TEACHERS | | |
|---------------|-----------|---------------------------------|-----------|-----------|---------------------------------|
| Age Group | Frequency | As % of Issued Questionnaire | Age Group | Frequency | As % of issued Questionnaire |
| <25 | | | <25 | 8 | 8.3 |
| 26 – 34 | | | 26 - 34 | 26 | 27 |
| 35 – 44 | 2 | 33.3 | 35 - 44 | 26 | 27 |
| 45 – 54 | 3 | 50.0 | 45 - 54 | 9 | 9.3 |
| >55 | | | > 55 | 3 | 3.1 |
| TOTAL | 5 | 83.3 | TOTAL | 72 | 74.7 |

From the table it can be deduced that 54 percent of the teachers who responded to the questionnaire were in the age bracket of 26– 44 years. There were fewer youthful teachers and older teachers who are at the age bracket of less than 25 and above 45 years respectively. Most significantly in category 3, there were more teachers with less than 25 years of age. Most of the younger teachers were fresh graduates who have a tendency of changing employment in search of better terms of service.

4.4 Physical And Co-Curricular Facilities

Physical and co-curricular facilities analysis reviewed students’ response on availability and condition of physical facilities in their schools as well as the students’ involvement in sports and clubs.

4.4.1 Physical Facilities and performance of the schools

Analysis of availability of physical facilities that include; textbooks, laboratory equipment's, classroom cleanliness, adequacy of ventilation and washroom cleanliness was determined from the sampled schools. Students were asked to express yes or no opinion with regard to available facilities. The responses in school categories were presented in table 4.5

Table: 4.5: Analysis of Student Responses on Physical Facilities

| | No. of Students | Text Book , Laboratory Equipment Availability | | Classroom cleanliness and adequacy of ventilation | | Washroom Cleanliness and Freshness | |
|------------|-----------------|---|------|---|------|------------------------------------|------|
| | | Yes % | No % | Yes % | No % | Yes % | No % |
| Category 1 | 157 | 83 | 17 | 93 | 7 | 85 | 15 |
| Category 2 | 164 | 64 | 36 | 72 | 28 | 53 | 47 |
| Category 3 | 125 | 48 | 52 | 59 | 41 | 39 | 61 |
| TOTAL | 446 | | | | | | |

The physical facilities were examined and the results of the analysis suggests that clean air, good lighting, comfortable, safe and quiet learning environment influences education performance. Observations revealed that physical facilities in category 1 and 2 had better facilities as compared to those of schools in category 3; with the exception of one school in category 3 where the students reported enjoying excellent facilities.

Classroom, laboratories and libraries are key components of a school. 446 students were asked about the adequacy of equipments and materials in their respective schools. 83 percent in Category 1 reported a positive response while 17 percent indicated that the equipment and learning materials were not adequate. 48 percent in Category 3 gave positive response while 52 percent gave negative feedback. More than half the student who had negative responses in category 3 was from schools located in the slums.

Classroom ventilation and cleanliness enhances learning environment. 93 percent of the respondents in category 1 noted that the classrooms were well ventilated and clean. However, 7 percent of the respondents felt that the classrooms were not well ventilated and clean. In category 3 59 percent of the respondents registered a positive response while 41 percent registered negative response. On cleanliness and freshness of washrooms 85 percent of respondents in category 1 registered a positive response while 15 percent registered negative response. The respondents from the top 2 schools had the highest level of satisfaction with respect to washroom cleanliness and freshness. Interestingly, respondents in 3 schools in category 2 which from observation appear to have adequate facilities registered a high level of dissatisfaction with the state of washroom cleanliness and freshness.

4.4.2 Involvement in Sports

Availability of sporting facilities was considered part of the physical facilities in the schools. The students were asked if they participated in sports activities in school. The findings were as shown in table 4.6.

Table: 4.6: Analysis of Engagement in School Sporting activities

| Involvement in School Sporting Activities | | | | | |
|---|-----|----|----|----|-------|
| | Yes | % | No | % | TOTAL |
| Category 1 | 130 | 83 | 27 | 17 | 157 |
| Category 2 | 153 | 93 | 11 | 8 | 164 |
| Category 3 | 109 | 87 | 16 | 13 | 125 |
| TOTAL | 392 | 88 | 54 | 12 | 446 |

88 percent (392) of the respondents were participating in sporting activities. The sport in the six schools included football, netball, volleyball, hockey, tennis, swimming, badminton, rugby, tug of war, skating, cricket and handball. Of the sports mentioned by the respondents; football, netball, basketball and swimming were the preferred sports. However 12 percent (54) of the respondents did not participate in any sporting activity.

The Strathmore School had the highest number of students participating in sporting activities. This could be attributed to the fact that the school has adequate sporting facilities and staff who oversee sporting activities. It is worth noting that students in the top performing schools were involved in sporting activities. However sports like cricket and tennis were not part of the sporting activities in top performing schools. This would suggest that the sports gave the students a good break from the academic environment thereby removing ‘academic’ pressure.

4.4.3 Clubs

71 percent (316) of the students interviewed were engaged in a club. 21 percent (94) of the respondents were however not participating in any club and the remaining 8 percent (37)

indicated that they were partially engaged in clubs. It is important to note that half of the respondents who do not participate in clubs were from one of the top schools. Clubs in which the students were involved in included Model United Nations (MUN) club; Science Club; Mathematics Club; Wildlife Club; Environment Club; Presidential Award; Scouting Movement; Rangers Club; Girl Guides and Girl Scouts; St. Johns Club; Art, Peace and Justice; Journalism; Kiswahili Club; French Club; debating Club and Karate club.

4.5 School Leadership and Administration and performance of schools

The quality of school administration plays a vital role in the institution as it is concerned with the students; teachers; policies; rules and Regulations that govern the school system. The study looked at the following aspects of school leadership and administration: Professional qualification of the heads; leadership style which includes the frequency of staff meetings, review of teachers' scheme of work, lesson plans and teachers' control of resources.

4.5.1 Professional Qualification

In this study all the respondents 100 per cent (5) were university graduates. AS evidenced by the wide disparity in KCSE performance in the sample schools, it can be concluded that there is no strong relationship between the professional qualification of the head teacher and KCSE performance.

4.5.2 Leadership Style

The findings show that head teachers differ considerably in the degree of leadership they provided in different aspects. The data obtained shows that 60 percent (3) hold staff meetings

each term while 40 percent (2) indicated that they did not hold staff meeting every term. Category 3 schools indicated that they had an average of two staff meetings per term. All the head teachers 100 percent (5) who responded confirmed that they reviewed the work undertaken by the teachers by checking the relevant documents including the scheme of work and lesson plans. This exercise was occasionally delegated to the Deputy Head teachers or Senior Teachers. All the head teachers 100 percent (5) affirmed strongly the fact that they evaluated the performance of teachers. This may be partly attributed to the fact that the private schools are particular about the performance of their schools.

4.5.3 Control of Resources

Control of resources was looked at in terms of the capacity of the head teachers' to assign resources to vote heads and in particular in deciding the remuneration and terms of service of teachers. All the (5) head teachers disagreed that they reviewed the remuneration and terms of service of teachers, technical staff and support staff. On further enquiry, 40 percent (2) stated that the terms of service for all employees were established at a different forum and the decisions made did not depend on them. The researcher did not get an opportunity to discuss with the other 60 percent (3) head teachers.

With respect to procurement and maintaining teaching materials, 80 percent (4) indicated that they were in charge while 20 percent (1) agreed to be moderately in charge. The 80 percent of the head teachers who confirmed being in charge of procurement and maintenance of teaching materials, were from schools in category 1 and category 2. On further enquiry 40% (2) stated that this was done at a different forum and decisions made did not entirely depend on them. The

researcher did not get an opportunity to discuss with the other 60% (3) head teachers. All the respondent head teachers agreed that they decided on the students to be admitted to the school by setting the cut-off point

Through observation of the schools, the researcher established that professional qualifications of principals had no significant impact on the KCSE performance. Theoretically the leadership style may be a strong factor in KCSE performance. However, this impact could be offset by the negative influence of limited financial resources, absence of good physical and teaching facilities and the background of students (KCPE grades admitted).

4.6 Availability and Quality of Teachers and performance of schools

4.6.1 Academic Qualification of teachers

During the study, the researcher sought to investigate the academic qualifications of the teachers and head teachers as a factor affecting KCSE performance in private schools in Westlands Division and the results are presented in the table 4.7.

Table: 4.7: Academic Qualifications of the Teachers and Head Teachers

| Academic Qualification | TEACHERS | | HEAD TEACHERS | |
|------------------------|-----------|---------------|---------------|---------------|
| | Frequency | As % of Total | Frequency | As % of Total |
| SI | 0 | 0 | | |
| Diploma in Education | 2 | 3 | | |
| Bachelor's Degree | 56 | 78 | 4 | 80 |
| Master's Degree | 14 | 19 | 1 | 20 |
| Doctorate Degree | 0 | 0 | | |
| Any Other n.e.s | 0 | 0 | | |

Research findings reveal that 72 teachers have attained recommended educational levels. Only 2 teachers had a diploma level of education. This may be attributed to school based programmes offered by universities' that enables teachers holding Diploma in Education to obtain university degrees. Majority of the teachers had bachelors' degree while 14 teachers had trained to masters' level. However there were no teachers with training level of S1, PHD or other levels of education.

4.6.2 Professional Qualification of Teachers

The study sought to investigate the professional qualifications of teachers and head teachers as a factor influencing performance of KCSE in private schools in Westlands Division. Further, the research study sought to understand how many teachers were trained as teachers. These results were presented in table 4.8

Table: 4.8: Professional Qualifications of Teachers and Head teachers

| | Teachers | | Head teachers | |
|-----------------------------------|-----------|---------------|---------------|---------------|
| | Frequency | As % of Total | Frequency | As % of Total |
| Secondary Trained (S1) | 0 | 0 | | |
| Untrained Graduate Teacher | 10 | 14 | | |
| Diploma in Education (Dip.Ed.) | 2 | 3 | | |
| Bachelor of Education (B.Ed.) | 56 | 78 | 4 | 80 |
| Master's in Education (M.Ed.) | 2 | 3 | 1 | 20 |
| TOTAL | 72 | | 5 | |

It was established that 86 percent of the teachers had trained teachers while 14 percent of the total number of teachers had not trained as teachers. Although the 14 percent were not trained as teachers, they all had university education in other fields such as Science, Philosophy and French, Engineering, Civil Engineering and fine arts. Most of the 14 percent non trained teachers were in a school in category 1 and the school in which all the respondent teachers had trained professionally as teachers with a minimum of Bachelors in Education (B.Ed.) was in category 2. Teachers were asked if they had participated in seminars in their first two years, between third and fourth year and above fifth year of teaching. 38 teachers admitted to have participated in seminars in their first two years of teaching while 21 teachers had participated in workshop between third and fifth year of their teaching. Only nine teachers had participated in professional workshops after five years and above of teaching practice. The finding revealed that there was a

trend of declining participation of teachers in professional seminars at workshop as year's advances in the six schools in Westland Division (Four teachers did not respond to the question).

4.6.3 Teaching Experience

Teaching experience is significant in educational performance. The longer a teacher teaches they gain knowledge as well as skills that allow them to perform better. The teachers were asked to state the number of years they had been involved in teaching as a high school teacher.

The study investigated teachers teaching experience as a factor affecting performance in KCSE in private schools in Westlands division and the findings were as shown in table 4.9.

Table: 4.9 Analysis of Teachers' Work Experience

| | Number of Teaching Years | | | | | TOTAL |
|------------|--------------------------|--------------|--------------|--------------|-------------|-------|
| | Up to 5 Yrs | Over 5 yrs | Over 10 yrs | Over 15 yrs | Over 20 yrs | |
| | | up to 10 yrs | up to 15 yrs | up to 20 yrs | | |
| Category 1 | 6 | 6 | 7 | 3 | 6 | 28 |
| Category 2 | 8 | 10 | 7 | 4 | 3 | 32 |
| Category 3 | 10 | 1 | 0 | 1 | 0 | 12 |
| | 24 | 17 | 14 | 8 | 9 | |

57 percent of teachers interviewed had an experience of 10 years and below while 43 percent had a teaching experience of more than ten years and above. 10 out of the 24 (42%) of teachers with less than 5 years teaching experience were found in schools in category 3, 25 percent were in

schools in category 1 and 33 percent in schools in category 2. Only one teacher in category 3 school had teaching experience of more than 10 years.

4.6.4 Teachers Workload

The number of lessons a teacher takes per week was reviewed as an indicator of the workload the teacher bears. A majority of teachers 81 percent (58) agreed that they were not overloaded. This optimal workload allows the teachers to give their best effort. However, 19 percent (14) indicated that they were overloaded. Most of the teachers who indicated having a heavy workload were in the school category 3. The overloaded teachers' performance would be adversely affected because they have limited time to prepare for the lessons and review student assignments.

4.7 Learners' Background and Performance of schools

This section presents students background information that can be related with KCSE performance. This includes, type of primary school attended, effect of performance in KCPE on KCSE, family size and social economic status.

4.7.1 Type of Primary School Attended

In Kenya there are more public primary schools relative to private schools. The type of school attended can influence the performance of pupils. In 2002, with the introduction of free primary education, academic performance in public primary schools has been on a declining trend therefore most parents have been moving their students from public to private primary schools. It is important to note that some of the private primary schools, especially in the slum areas do

not have the necessary facilities in terms of physical facilities; learning aids and personnel and therefore cannot provide the required standard of education to pupils. The analysis of the type of school attended is shown in table 4.10.

Table: 4.10 Analysis of Primary School Attended

| | TYPE OF SCHOOL | | | | TOTAL |
|------------|----------------|----|----------------|----|-------|
| | PUBLIC SCHOOL | | PRIVATE SCHOOL | | |
| | No | % | No | % | |
| Category 1 | 14 | 9 | 143 | 91 | 157 |
| Category 2 | 38 | 23 | 126 | 77 | 164 |
| Category 3 | 59 | 47 | 66 | 53 | 125 |
| TOTAL | 111 | 25 | 335 | 75 | 446 |

Out of 446 students interviewed, 75 percent (335) indicated that they were in private schools for their primary education compared to 25 percent (111) that went to public schools. This could be an indicator of fewer public schools in Westlands division or a general preference for private schools after the introduction of free primary schools. It has been observed that the free primary programme tended to lower the performance of public schools due to the large number of admissions that resulted in lowering the teacher to pupil ratio.

4.7.2 Effect of Performance in KCPE on KCSE

The study sought to investigate the influence of KCPE performance in KCSE performance and the results of the analysis have been tabulated in table 4.11.

Table: 4.11 Students KCPE Results Analysis

| KCPE marks | Frequency | As % of total |
|------------|-----------|---------------|
| >200 | 3 | 0.6 |
| 201 – 300 | 81 | 18.3 |
| 301 – 400 | 294 | 66.6 |
| 401 – 500 | 68 | 15.4 |
| TOTAL | 446 | 100 |

As shown in the table, 446 students in the three categories were asked their KCPE results. Their responses showed that 362 of them attained more than 300 marks. It is important to note that, in schools in category 3, the KCPE performance of most of their students' was in the range 201-300. 50 percent of the schools in this category are low cadre private school based in the slums which gives students from poor backgrounds opportunities to proceed with their education.

4.7.3 Family Size

This study sought to understand whether the family size of the students influenced their performance in KCSE. The respondents were asked how many siblings they had. The response has been tabulated in the table 4.12.

Table: 4.12 Number of siblings

| | NUMBER OF SIBLINGS | | | | |
|------------|--------------------|-------|-------|-------------|-------|
| | None | 1 - 2 | 3 - 4 | 5 and above | Total |
| Category 1 | 6 | 81 | 50 | 20 | 157 |
| Category 2 | 9 | 85 | 50 | 20 | 164 |
| Category 3 | 11 | 49 | 47 | 18 | 125 |
| TOTAL | 26 | 215 | 147 | 58 | 446 |

The research findings revealed that 6 percent of students had no siblings. Those with between 1 and 2 were 48 percent, those with five siblings and above were 13 percent. In Westlands division the average number of children per family ranges between 2 and 4.

4.7.4 Social Economic Status

The social economic status can, among other things, be deduced from the frequency and duration of the students' absence from school due to lack of school fees. 24 percent (107) of the students indicated that they missed school on account of lack of school fees. The majority of the students who reported missing school attended the schools located in the slum area were in category 3. On the other hand 76 percent (338) indicated that they did not miss classes / school on account of lack of fees.

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND
RECOMMENDATIONS

5.1 Introduction

The analyses in this study were conducted to gain insight into some of the factors that were deemed to be able to influence student performance in KCSE in private schools in Westlands Division Nairobi. KCSE performance has been used as a criterion because it forms a basis for selection for further studies and/or employment.

5.2 Summary of Findings

The results of the study shows that some of the factors that impact on the KCSE performance of students are school related while others are non-school factors as detailed below.

5.2.1 Objective 1

The first objective of the study was to establish the extent to which the availability of physical and teaching facilities influence the students' performance in KCSE. The findings show that availability and well maintained facilities make learning more comfortable because the environment offers the students and teachers opportunity to concentrate on academic performance. The students from schools which have been consistently been in the top two positions during the period covered by the study (Strathmore and Kianda) recorded a high degree of satisfaction with the availability and condition of physical and teaching facilities.

Good quality materials can motivate interest, maintain concentration and make learning more meaningful. In this age of technology access to information by students is made possible by use of computers therefore the need for instructional materials by the subject teacher in modern day classroom cannot be overemphasized. The traditional method of ‘talk and chalk’ can no longer be depended upon to improve the academic performance of students in secondary schools. Hence, improving school facilities offers a feasible opportunity for improving academic performance as established in this study.

5.2.2 Objective 2

The second objective aimed to establish the extent to which the school leadership and administration influence KCSE performance. The studies of “School Effectiveness” have utilized this concept (Brookover et al, 1979) and have concluded that the role of the principal as a teacher is crucial in creating school conditions that lead to higher student academic performance. Conditions such as setting high standards and goals, planning and coordination, having an orientation towards innovation, frequent monitoring of staff and student performance and involving parents and the immediate local communities have been found to be easier to implement by a “principal teacher”.

The response to the professional qualification and control of resources was the same in all the sub groups implying that they did not have a direct impact on the students’ performance in KCSE. The frequency of meetings in schools did not influence the performance in KCSE.

5.2.3 Objective 3

The third objective in this study was to establish if the professional qualifications, experience and availability of teachers influenced the students' performance in KCSE. From the review of responses of teachers, the study concluded that there was a strong positive relationship between good KCSE results and availability of professionally trained teachers. The researcher concluded that as long as the teachers were well versed and knowledgeable in the subject they were teaching, students would perform well in KCSE. The study also established a positive relationship between the years of teaching experience and KCSE performance.

5.2.4 Objective 4

The fourth objective was to establish the extent to which the learners' background affected their KCSE performance. The students' background was reviewed in terms of the Social Economic Status; family size and the Primary School attended and the grades scored. The researcher established that the Socio Economic Status (SES) as it reflected in absenteeism due to lack of school fees and the primary school attended as reflected in the KCPE results influenced academic performance in KCSE. However, there was no relationship between the size of the family and KCSE performance.

5.3 Discussions

The analyses in this study were conducted, among other things, to gain insight into the role of principal as leader and how leadership impacts on the students' KCSE performance. Pam Sammons et al (1995) concluded that "... no single style of management seems appropriate for all schools. Principals must find the style and the structures most suited to their own local

situation...”. One of the characteristics found to be associated with successful leadership was the involvement of other staff in decision making. This can be achieved during regular meetings.

One objective of this study was to investigate leadership style and administration as a predictor of high or low school performance in KCSE. The study noted different leadership styles employed by the head teachers. It is often assumed that holding few meetings would lead to less coordination of curriculum implementation because there would be less monitoring and reporting of progress of school activities and ultimately culminate in poor performance in National Examination. Some head teachers held regular meetings while others did not have frequent meetings. One of the schools in category 2 that held regular meetings performed averagely while another school in category 1 without regular meetings was a top performing school. Based on the responses it was not clear whether meetings had an impact in the performance in KCSE.

In relation to the literature, Gray (1990) argues that there is no evidence of effective schools with weak leadership that has emerged in review of effectiveness research. However, based on a study by As Bossert et al. (1982) that no simple style of management seems appropriate for all schools, it can be deduced that, holding meetings are but more related to styles of leadership which cannot be can be associated with effective schools or performance.

Based on the findings of this study, there is need for further analysis to understand the role of meetings with respect to performance in KCSE. There is need to establish whether meetings should be schedule or unscheduled. Since unscheduled meetings have the impact of destabilizing the normal school learning programme these should ideally be limited to dealing with emergency situations. The effectiveness of meetings should also be reviewed by assessing

the 'ownership' of the resolutions and the degree of implementation of the resolutions by the stake holders. In terms of leadership, researchers hold that, strength of purpose; involving other staff in decision making and Professional Authority in the process of teaching and learning determines more the performance of schools. Mortimore et al (1988a), in their study of primary schools mentioned, in particular, the involvement of the deputy head in policy decisions and the involvement of teachers in management and curriculum planning and consulting teachers about spending and other policy decisions. A feature of effective head teachers is the sharing of leadership responsibilities with other members of Senior Management team and the involvement more generally of teachers in decision-making.

Effective schools tend to have strong input from staff in the way the school is run. For example, Ruther et al (1979) found that pupil success was greater in schools with a decision making process in which all teachers felt that their views were represented and seriously considered. Martimore et al (1989) also drew attention to the importance of teacher involvement in decision making and development of school guidelines creating a sense of 'ownership'. The contribution to achievement also comes through staff sharing ideas, observing each other and giving feedback, learning from each other and working together to improve the teaching programme (NREL, 1990).

Although there is vast literature on the relationship between family Socio Economic Status (SES) and academic performance of students in KCSE the actual socio economic factors that influence education performance need to be isolated and studied more exhaustively. The Socio Economic Status of a student is commonly determined by combining the parents' educational level;

occupational status and income levels (Jeynes 2002). It is not clear if the students' performance is only influenced by absence from school due to lack of fees or by a combination of factors like low education level of parents; lack of appropriate physical facilities at home or the mental frame of the child which can manifest in the form of resignation, frustration and the desire to escape from poverty.

Finally, does the type of co-curricular activity (sports /clubs) that a student engages in influence performance? It seems reasonable to state that sporting activities enhances students' performance, especially if there is an appropriate balance between academic and sporting activities as evidenced in one top performing school in category 1. However, in the course of gathering and summarizing data, several doubts and questions arose which need to be addressed. There are students who indicated their involvement in more than two activities even in a category 3 school yet their performance was wanting. Juan Moriana et al (2006) confirmed that there were considerable significant differences in performance in favour of students involved in academic type co-curricular activities such as foreign language clubs and science club. Such differences were not apparent for those only involved in sports. The literature explains little, if any, relationship between participation of co-curricular activities and student's performance. Taking this analysis into account it is reasonable to state that there is need to balance academic and co-curricular activities. Therefore, future research could be aimed at analysing activities by the type and by the time devoted to them. What activities are compatible and complementary to school activities but not forgetting aspects of fun and recreation, so important to these ages' (Juan Moriana et al, 2006).

5.4 Conclusion

In an effort to enhanced KCSE performance schools should strive to ensure availability of and well maintained physical and teaching facilities. Inadequate and poorly maintained resources adversely affect student academic performance. The experience the teacher has is a factor to be looked into. The experience gives a teacher an edge in preparing for teaching duties including the ability to evaluate changes in student concentration in academics and set standardized assignments and end period examinations which makes them more suited in handling students preparing for KCSE examinations.

Finally, schools that aim to improve the overall school performance, policies defining the setting of the minimum KCPE grades to be admitted should be in place. This study has established that good KCPE grades positively influence KCSE results.

5.5 Suggestions for Further Research

1. Although there is vast literature on the relationship between family Socio Economic Status (SES) and academic performance of students, the actual factor(s) and the degree to which the factor may influence the academic performance have not been isolated. The SES of a child is mostly determined by combining the parents' educational level, occupational status and income level (Jeynes, 2002). Is the student's performance influenced by the student's absence from school or the low educational level of the parents or the physical facilities available at home or the mental frame of the child (resignation/ frustration / desire to escape from poverty).

2. Does the type of co-curricular activity the student engages in influence performance?
Academic verses sport co-curricular activities' impact on performance may be investigated further.
3. Should participation in competitive co-curricular activities be restricted to top academic performers so as to motivate academic performance?
4. Further study can be undertaken to investigate factors influencing academic performance in Kenya Certificate of Secondary Education Examinations in public schools.
5. Another study can be done to analyse the contribution of pre and post-service teacher training on students' performance in Kenyan secondary schools.

REFERENCES

- Abayi O. & Odipo G. (1997) *Efficiency of primary education in Kenya: Situational Analysis and Implication for education reform*. Nairobi: Institute of Policy Analysis and Research.
- Adeyemo, D. (2005). Parental Involvement Interest in Schooling and School Environment as predictors of Academic self-efficacy among fresh Secondary School students in Oyo State Nigeria. *Electronic Journal of Research in Educational Psychology*, 5-3
- Ainley J., Brian G., Long M. & Batten M. (1995) *Socio-economic status and school education* Canberra: DEET / ACER
- Balunywa, W. (2000) “*A Handbook of Business Management*” Kampala: Uganda Press.
- Barro, R. (1991). Economic Growth in a Cross-section of Countries *Quarterly Journals of Economics*, 106(2), 407-443.
- Battle, Juan & Michael L. (2002). The increasing significance of class: The relative effects of race and socioeconomic status on academic achievement *Journal of Poverty*, 6(2), 21-35.
- Bossert S., Dwyer D., Rowan B. & Lee G. (1982). The Instructional Management Role of the Principal. *Educational Administration Quarterly*, 6, 34 – 64.
- Brookover, W. Beady, C. Flood, P. Schweitzer, J. & Wiosenbacker, J. (1979). *Schools Social systems and student achievements: Schools can make a difference*,. New York.
- Cash, C. (1993). *A study of the relationship between school building condition and student achievement and behaviour*. Virginia Polytechnic Institute and State University: Unpublished Doctoral Dissertation.

- Charles, E. (1995). Toronto: London: Mairill publishing Co.
- Cohen L. & Marion L. (1994). *Research Methods in Education*. New York: Croomhelm Ltd.
- Cole, G. (2000). *The Administrative Theory and Workers Motivation*. Abuja Zaria: Zante Institute of administration Press Ltd.
- Cotton, K. (2001). *New Small Learning Communities: Findings from recent regional education laboratories*.
- Court D .& Ghai. (1978). *Education Society and Development; New perspective from Kenya*. Nairobi.
- Creamer B. (1994). *The Effective Classroom*. London: Cassel.
- Crosnoe, Robert, Monica K.J. & Glen H. (2004). School Size and the Interpersonal Side of Education: An examination of Race / Ethnicity and organizational context. *Social Sciences Quarterly*, 85(5), 1259-1274.
- Eamon, M. K. (2005). Social-Demographic, School, Neighbourhood, and Parenting influences on academic achievement of Latino young adolescents. *Journals of Youth and Adolescence*, 34(2), 163-175.
- Earthman G.I & Lemasters L. . (1996). *Review of Research on the relationship between school buildings, student achievement and student Behaaviour*". Paper presented at the annual meeting of the council of Educational Facility Planners International. Tarpon Springs.
- Economic Survey. (2004). Nairobi: Government Printer.

- Eshiwani, G. (1988). *Education in semi-arid areas: A study of determinants for school achievement in Kajiado District*. Unpublished study, Bureau of Education Research, KU.
- Gakuru, O. (1982). *Analysis of factors that influence the achievement of primary education objectives*. Nairobi: Nairobi Kera Research Report- KU.
- Gay, L. (1981). *Education Research: Competencies for Analysis and Application*.
- Glewwe & Kremer. (2006). Socio-economic factors and child health on students' academic performance". Evidence from Sri lankan Primary Schools. *Journal of the impact of school quality*.
- Harper & Row . (n.d.). *Team work, conditions of service and morale*.
- Harsha A.P, Glewwe P. & Wisniewski S. (2006). *The Impact of School quality, socio-Economic Factors and Child health on students' Academic Performance*. Word Bank.
- Heynmann S. & Loxely W. (1983). The effects of primary school quality on academic achievement across 29 high school and low income countries. *American journal of sociology*, 88.
- Juan A.M. et.al.,. (2006). *Electronic journal of Research in Educational Psychology*, 4(1), 35-46.
- Kevin. (1996). Family learning environment and students' outcomes. *A review journal of comparative family studies*, 27(2), 373 - 394.
- Kinyanjui, K. (1980). Education and Development in Africa. Theories, Strategies and Practical Implication. *U.O.N Institute of Development Studies Working Paper No. 375*.

- Kombo, D. (1988). *Factors influencing student performance in the KCSE examination among Harambee secondary schools in Kathiani Division of Machakos District*. Nairobi: Unpublished MA Thesis, KU.
- Lackney, J. (1999). *Assessing school facilities for learning / assessing the impact of the physical environment on educational process*. Mississippi: Mississippi Design Institute.
- Lemaster L.K. (1997). *A synthesis of studies pertaining to faculties, student achievement and student behaviour* . Virginia Polytechnic and State University: Unpublished doctoral dissertation (ED447687) .
- Levine & Lezotle. (1990). School improvement based on the effective school research. *International journal of educational research*, 13(7), 815 -825.
- Lucas, R. (1998). On the Mechanics of Economic Development. *Journal of Monetary Economics*, 22, 3-42.
- Maicibi N.A. (2003). *Pertinent issues in the Employees Management* . Kampala: M.P.K. Graphics Ltd.
- Manwik, N.G., David R.& David W. (1992). A contribution to the Empirics of Economic Growth. *Quarterly Journal of Economics*, 107(2), 407-437.
- Martimore L., Sammons P., Lewis D. & Ecob R. (1988). *School; years: the junior*. Wells: Open books.
- Morakinyo A. (2003). *Relative Efficiency of Systematic decentralization, Self Statement monitoring and flooding on subjects test anxiety*. University of Iban: Unpublished PhD Thesis.

- Mugenda O.M & Mugenda A.G. (1999). *Research Methods: Quantitative and qualitative Approaches*. Nairobi: ACT Press.
- Mukherjee D. (1995). *The Relationship between socio-economic background and participation in education*. Darlinghurst: ACCE Research monograph .
- Mulusa T. (1990). *Evaluation Research for beginners: A Practical Guide*. German Foundation for International Development.
- Muola J.M. (1990). *The effect of academic achievement, motivation and home environment on academic performance among STD 8 pupils*. Nairobi: Unpublished M.Ed Thesis, KU.
- Mworia R.N. (1993). *Performance in KCPE examinations: A case study of Central Ementi Division in Meru District*. Nairobi: Unpublished M. Ed Thesis, KU.
- Ndiritu W.A. (1999). *A study of factors which influence performance in KCSE in selected public schools in Nairobi and Central Provinces*. Nairobi: Unpublished M. Ed Project U.O.N.
- North West Regional Educational Laboratory (1990). *Onward to excellence: Effective Schooling Practices. A Research Synthesis*. Portland Oregon (NREL).
- Oketch J.G. (1978). *A comparative analysis of mathematical knowledge and mathematical attitude between urban and sub-urban elementary school teachers. Doctoral dissertation*. Texas: Southern University.
- Okoye N.S. (1998). *Factors affecting teaching and learning. The teacher, subject matter and environment dimension in Ughamadu*. KMENSUD Educational Publishers.

- Osman. (1989). *Poor performance in KCPE in North Eastern Province. A case study based on some schools in Wajir and Garissa Districts*. Nairobi: Unpublished PGDE Project, KU.
- Pam Sammon, J Hillman and Peter Martimore (1995). *School Effectiveness & School Improvement journal – Key characteristics of effective schools*.
- Pearson H. (1988). *The teaching of Language skills: listening, reading writing*. Nairobi: Oxford University Press.
- Rutter M. Maughan B. Martimore P. & Oustan J. (1979). *Fifteen thousand hours: Secondary schools and their effect on children, Open books*. London.
- Santor D.A., Deanna M. & Vivek K. (2000). Measuring peer pressure, popularity and conformity in adolescent boys and girls: Predicting school performance, sexual attitudes and substance abuse. *Journal of youth and adolescence*, 29(2), 163.
- Scheerens. (1992). *Effective Schooling; Research, theory and practice*. London : Cassel.
- Schneider M. (2002). *Do school facilities affect academic outcomes? ” National Clearing House for educational facilities* . Washington D.C.
- Simiyu & Simuyu P.C. (2002). *Student’s performance in CRE, KCSE and attitudes towards CRE in Lelan Division, West Pokot District* , Nairobi: Unpublished M.Ed Project U.O.N.
- Sizemore B., Brossard C. & Harrigan B. (1983). *An abashing anomaly; the high achieving predominantly black elementary school*. University of Pittsburg.
- Smith J. & Tomlison A. (1989). *The school effect, Policy Studies Institute*. London: Marston Book Services Ltd Oxford University.

- Southworth G. & Lefthouse B. (1990). *The Study of primary education. A source Book Vol 2, School organization and Management.* . London: The Falmer Press.
- Sparkes J. (1999). *Schools, Education and social exclusion, Case Paper 29, Centre for Analysis of Social Exclusion.* London: London School of Economics.
- UNESCO. (1991). *Strengthening Educational research in Developing countries: Stockholm University.* Paris: Institute of International Education.
- United Nations Development Program. (2003). *Human Development Report 2003: Millennium Development Goals; A compact among Nations to End Poverty.* Oxford University Press.
- Waweru J.M. (1982). *Socio – Economic background as an influence in pupils' achievement in primary schools in Embu District.* Nairobi: Unpublished M.Ed Thesis, U.O.N.
- World Bank. (1987). *School and classroom effects on student learning in Thailand.* Washington DC: World Bank.
- World Bank. (2001). *World Development Report 2000/2001: Attacking Poverty.* Washington, DC: World Bank.

APPENDICES

APPENDIX: I CONSENT LETTER

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471,2241349
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Our Ref:

NCST/RCD/14/012/1466

Date:

31st October 2012

Jacinta Wamulla Odude
University of Nairobi
P.O.Box 30197-00100
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application for authority dated *11th October, 2012* to carry out research on "*Factors influencing academic performance in Kenya Certificate of Secondary Education Examinations in private schools in Westlands Division in Nairobi, Kenya,*" I am pleased to inform you that you have been authorized to undertake research in **Nairobi Province** for a period ending **31st April, 2013**.

You are advised to report to **the Provincial Commissioner and the Provincial Director of Education, Nairobi Province** 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.

A handwritten signature in blue ink, appearing to read 'M. K. Rugutt'.

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

Copy to:

The Provincial Commissioner
The Provincial Director of Education
Nairobi Province.

"The National Council for Science and Technology is Committed to the Promotion of Science and Technology for National Development".

APPENDIX: III Private Secondary Schools (Westlands Division) Mean Scores in KCSE

| SCHOOL | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------------------|------|------|------|------|------|
| Aga Khan High | 6.4 | 6.5 | 7.0 | 7.5 | 7.6 |
| Akiba | 4.9 | 3.1 | 3.9 | 4.2 | 3.4 |
| Ananda Marga | 3.8 | 2.9 | 3.1 | 3.1 | 2.9 |
| Consolata | 7.7 | 7.0 | 8.3 | 8.7 | 9.0 |
| Karura SDA | 6.9 | 5.6 | 5.5 | 6.9 | 8.2 |
| Kianda School | 9.6 | 9.5 | 9.6 | 10.3 | 10.1 |
| Kyuna Academy | 3.5 | 2.3 | 2.8 | 2.5 | NA |
| Loreto Convent Msongari School | 8.0 | 7.4 | 6.5 | 5.8 | 7.1 |
| Loreto Convent Valley Road | 7.4 | 7.3 | 7.1 | 8.0 | 7.4 |
| Makini School | 8.0 | 7.7 | 8.0 | 8.3 | 9.0 |
| St. Martins | 3.8 | 6.9 | 3.1 | 3.1 | 3.4 |
| St. Mary's School, Nairobi | 6.7 | 5.7 | 5.2 | 4.5 | 5.4 |
| Strathmore School | 10.6 | 9.9 | 10.3 | 10.4 | 10.7 |

APPENDIX: IV Performance of Schools

| SCHOOL | 2007 | 2008 | 2009 | 2010 | 2011 | 5YR AVG | CATEG |
|-------------|-------|------|-------|-------|-------|---------|---------|
| STRATHMORE | 10.53 | 9.86 | 10.01 | 10.37 | 10.59 | 10.27 | TOP |
| KIANDA | 9.89 | 8.90 | 9.45 | 10.30 | 10.12 | 9.73 | |
| MAKINI | 7.78 | 7.69 | 7.96 | 8.30 | 9.02 | 8.15 | |
| CONSOLATA | 7.65 | 6.97 | 8.34 | 8.66 | 9.00 | 8.12 | |
| VALLEY RD | 7.29 | 7.28 | 7.03 | 7.83 | 7.29 | 7.35 | AVERAGE |
| KARURA | 6.87 | 6.54 | 6.52 | 7.88 | 8.18 | 7.19 | |
| MSONGARI | 8.52 | 7.38 | 6.50 | 5.79 | 7.11 | 7.06 | |
| AGA KHAN | 6.32 | 6.49 | 6.92 | 7.28 | 7.44 | 6.89 | |
| ST MARTIN'S | 7.02 | 6.90 | 7.02 | 6.50 | 6.21 | 6.73 | |
| ST MARY'S | 6.74 | 5.66 | 6.17 | 5.52 | 5.43 | 5.90 | BELOW |
| AKIBA | 4.60 | 3.10 | 3.90 | 4.20 | 3.40 | 3.84 | AVERAGE |
| ANANDA | 3.84 | 2.92 | 3.05 | 3.05 | 2.87 | 3.15 | |
| KYUNA | 3.46 | 2.33 | 2.75 | 2.50 | NA | 2.76 | |

APPENDIX V: QUESTIONNAIRE FOR PRINCIPAL

This questionnaire is designed to gather general information about you and your school exclusively for use in the student's research work. Your responses to the questionnaire will be treated with the utmost confidence.

SECTION 1

This section requires you to give information concerning yourself. Please place a tick (✓) in the spaces provided to indicate the response that is applicable to you.

1. Gender: Male: Female:
2. In which age category do you belong?

| AGE CATEGORY | |
|---------------------|--|
| 25 years or less | |
| 26-34 years | |
| 35-44 years | |
| 45-54 years | |
| 55 years and Over | |

3. What is the highest level of academic qualification you have attained;

| ACADEMIC QUALIFICATION | |
|-------------------------------|--|
| S.I | |
| Dip Ed | |
| Bachelor's Degree | |
| Master's Degree | |
| PhD | |
| Any other | |

4. I trained as a teacher: Yes: No:

If No, please specify the field of study:

5. How many years have you been a school head teacher?

| DURATION AS HEAD TEACHER | |
|---------------------------------|--|
| 5 years and below | |
| 6-10 years | |
| 11-15 years | |
| 16-20 years | |
| 20 years and above | |

6. How many years have you headed your present school:years?

7. Indicate the average duration teachers remain employed in the school

| AVERAGE EMPLOYMENT DURATION OF TEACHERS IN THE SCHOOL | |
|--|--|
| 0 -2 years | |
| 2 – 5 years | |
| 5-10 years | |
| 10-15 years | |
| 15 years and above | |

SECTION II

The following statements highlight the role of the principal in the running of the school. Please indicate your rating of each question by ticking / marking the appropriate box.

| | Agreed strongly 1 | Agreed 2 | Neutral 3 | Disagreed 4 | Strongly Disagree 5 |
|--|-------------------------|-------------|--------------|----------------|---------------------------|
| 1. Checking teachers lesson notes, Records of work with schemes. | | | | | |
| 2. Evaluate performance of teachers | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 3. Checking teachers punctuality in Classroom | | | | | |
| 4. Encourage teachers to benchmark/ Visit other schools and learn from colleagues | | | | | |
| 5. Review the remuneration and terms of service of Teachers/ technical staff/ support staff | | | | | |
| 6. Holding frequent meetings with teachers In an average week on performance update | | | | | |
| 7. Actively involve parents in decision making P.T.A | | | | | |
| 8. Purchasing and maintaining teaching material | | | | | |
| 9. Makes decision on who to admit in the school (cut off points) | | | | | |
| 10. Makes decisions on staff development activities | | | | | |
| 11. Responsible for appointing teachers | | | | | |

8. The following statements highlight selected items which may impact on K.C.S.E performance in the school, please respond to all the statement by ticking (✓) in the appropriate box.

i. The number of students in a class

50 and above

30-40

29 and below

9. The school has well equipped laboratories

Yes

No

10. Assigns vote heads for repairs , maintenance and purchase of physical facilities and

equipment's Yes

If No, State who is in charge _____

11. State two sporting activities available in the school

i. _____

ii. _____

12. What is the K.C.P.E cut off points in your school

i. 380 and above

ii. 379-300

iii. 299 and below

13. Please state the two most important factors that in your opinion impact on students' performance

i. Positively

ii. Negatively

APPENDIX VI: TEACHER QUESTIONNAIRE

SECTION I

This section contains information on personal data of respondents. Please place a tick (√) in the spaces provided to indicate the response that is applicable to you.

1. Gender: Male: Female:

2. In which age category do you belong

| AGE CATEGORY | |
|---------------------|--|
| 25 years or less | |
| 26-34 years | |
| 35-44 years | |
| 45-54 years | |
| 55 years and Over | |

3. What is the highest level of education you have attained;

| ACADEMIC QUALIFICATION | |
|-------------------------------|--|
| S.I | |
| Dip Ed | |
| Bachelor's Degree | |
| Master's Degree | |
| PhD | |
| Any other | |

4. Did you train as a teacher; Yes: No:

If No, please specify your field of study:

5. How many years have you been a high school teacher

| DURATION AS TEACHER | |
|----------------------------|--|
| 5 years and below | |
| 6-10 years | |
| 11-15 years | |
| 16-20 years | |
| 20 years and above | |

6. Have you participated in a professional workshop/ seminar in service course in the last;

a) 0 – 2 years

b) 3 – 5 years

c) 5 years and above

SECTION II

The following statements highlight the role of the principal in the running of the school. Please indicate your rating of each question by ticking (√) the appropriate box.

| | Strongly Agree 1 | Agree 2 | Neutral 3 | Disagree 4 | Strongly disagree 5 |
|---|------------------------|------------|--------------|---------------|---------------------------|
| 1. Teacher depends exclusively on Textbooks when preparing learning materials | | | | | |
| 2. The student: teacher ratio adversely affects classroom management | | | | | |
| 3. The Student: Teacher ratio is high | | | | | |
| 4. There are adequate textbooks in the school | | | | | |
| 5. There is adequate supervision by the principal | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 6. Teachers have access to school provided computers and internet to prepare learning materials | | | | | |
| 7. The school library provides a wide range of reading material | | | | | |
| 8. Students rarely miss school | | | | | |
| 9. Teacher has acceptable working load | | | | | |
| 10. Teachers were involved in the formulation of the school policies | | | | | |
| 11. Teachers have the ability to address different learning abilities | | | | | |

7. The following statements highlight selected items which may impact on K.C.S.E performance in the school, please respond to all the statement by ticking (✓) in the appropriate box.

The number of students in a class

i. 50 and above

ii. 30-40

iii. 29 and below

8. The school has well equipped laboratories

Yes No

9. The average number of lessons teacher has per week

i. 15 and below

ii. 16 to 25

iii. 26 to 35

iv. 36 and above

If No, State who is in charge _____

10. State two sporting activities available in the school

11. What is the K.C.P.E cut off points in your school

- i. 380 and above
- ii. 379-300
- iii. 299 and below

12. Please state the two most important factors that in your opinion impact on students performance

- i. Positively

- ii. Negatively

APPENDIX VII: STUDENTS' QUESTIONNAIRE

This questionnaire is designed to gather general information about you and your school for use in a research study. The response to the questionnaire will be treated with utmost confidentiality.

SECTION I

The questions in this section are designed to obtain personal information from you. Please answer each question by ticking (✓) in the appropriate box.

1. Gender: Male : Female:

2. Form: Form 3: Form 4:

 Form 2: Form 1:

3. K.C.P.E marks: 200 and less: 201-300:

 301-400: 401-500:

4. Sat KCPE Examination in: Private school:

 Public school:

5. How many brothers and sisters (siblings) do you have:

None:

1- 2:

3- 4:

5 and above:

6. I participate in school sports activities; Yes: No:

If yes, state the games you are involved in:

7. I belong to an educational club; Yes: No:

If yes, please indicate:

SECTION II

| | QUESTION | Yes | No |
|-----|--|-----|----|
| 1. | Teachers regularly assign homework to students | | |
| 2. | Teachers regularly review the assigned work/ assignments | | |
| 3. | My parent/Guardian keep track of my school performance | | |
| 4. | The students have at least three meals a day | | |
| 5. | The students always have the textbooks required | | |
| 6. | The student is always out of school for lack of school fees | | |
| 7. | Students always gets the required books in the library | | |
| 8. | The classrooms, laboratories have adequate equipment and materials | | |
| 9. | The classrooms are well ventilated and always clean | | |
| 10. | The washrooms are always clean and fresh | | |
| 11. | Teachers are rarely absent from the class | | |